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THE
BRITISH MEDICAL
JOURNAL:

BEING THE
JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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EDITED FOR THE ASSOCIATION BY
ERNEST HART, Esq.

VOLUME II FOR 1870.

JULY TO DECEMBER.

London:

PUBLISHED FOR THE ASSOCIATION BY THOMAS RICHARDS, 37, GREAT QUEEN STREET

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JAMES SYME, F.R.S.E., D.C.L., &c.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY JONATHAN HUTCHINSON, F.R.C.S.

LONDON: SATURDAY, JULY 2, 1870.

LUMLEIAN LECTURES

ON THE

NATURAL HISTORY AND DIAGNOSIS OF INTRATHORACIC CANCER.

Delivered before the Royal College of Physicians, 1870.

By JAMES RISDON BENNETT, M.D.,
Fellow of the College.

IV.

THE differential diagnosis between aneurism and malignant tumours is sometimes beset with difficulties. My predecessor, Dr. Sibson, has ably illustrated the principles of diagnosis in the several varieties of intrathoracic aneurism, especially pointing out the definite direction which different aneurismal tumours take in the course of their development. But we have no such aids to guide us in the case of mediastinal tumours; on the contrary, there is the utmost diversity, not only in the original situation of the growths as regards their anatomical relations, but also in the direction which they take in the course of their development. A distended state of the superficial veins is, no doubt, a more frequent attendant on the interrupted circulation through the internal veins, occasioned by cancerous disease. But this is not always present, as several of my cases show; and, when present, it is usually in the later stages, and associated with growths of considerable magnitude. The main difficulties in diagnosis are, however, in the early stages of aneurism, and in cases of small limited cancerous tumours, before they have involved to any important extent surrounding textures. And it is in the early periods that an accurate diagnosis is of most importance as regards treatment; for it is then that we may hope—in the case of aneurism at least—that therapeutic efforts may be of use.

Pain is a very common symptom of intrathoracic cancer in some stage or other of its progress; but it is not usually severe, nor is it of any special character. In at least half of my cases it was an early symptom, and generally had been of a pleuritic, sometimes more of a neuralgic or rheumatic, character. In many of these it had been of very temporary duration. In more than one instance it was sudden, sharp, and transitory, and attendant on physical exertion. Most frequently it was referred to the side, in other instances to the shoulder or the sternum. In two instances it was severe, long continued, and associated with acute sensitiveness of the thoracic parietes. When severe, it is, I believe, the result of extensive pressure and implication of the nervous trunks. But I have seen extensive tumours involving the nervous trunks and large vessels unattended by pain throughout the course of the disease. Speaking generally, I believe that pain is a more prominent and severe symptom in connection with aneurism than with intrathoracic cancer. Pain in parts distant from the thorax is rarely observed; and symptomatic vomiting has been chiefly noticed in cases where the cardiac nerves have been implicated.

Aneurism, however, is not the only disease with which cancer may be confounded. Scrofulous enlargement of the bronchial glands, hydatid disease, disease of the thyroid and thymus glands, and certain rare varieties of limited empyema, have all been mistaken for intrathoracic cancer. And although I have never met with such a case, I believe phthisis has been mistaken for cancer; and it is easy to conceive how this may be. In some instances tubercular disease, in its earlier stages, and when as yet limited, is attended by paroxysmal attacks of dyspnoea of an asthmatic character, and even by tracheal or laryngeal symptoms, which may simulate very closely some of the varieties of intrathoracic tumours.

I recently met with a case which, from its great interest and extreme

rarity, if it be not quite unique, I shall be excused from detailing, as it bears closely on the question of the diagnosis of cancer.

Bronchocele: Acute Hypertrophy of the Thyroid Gland: Tracheal Occlusion: Tracheotomy: Death.—A young gentleman, 19 years of age, who had enjoyed good previous health, but who had latterly grown very rapidly and attained a height of six feet one inch, went up to the University of Oxford in the October term apparently well. Being likely to gain high honours, he worked hard, but took a good deal of active exercise. He soon became subject to paroxysmal attacks of dyspnoea, coming on only during exertion, and having the character of asthmatic paroxysms. His general health, however, remained good, and he had a hearty appetite; he had no cough, nor any affection of his voice. On returning to town at Christmas, he consulted a physician, who examined the larynx by the laryngoscope, but discovered nothing beyond some apparent lividity of the mucous surfaces. Subsequently, the end of the uvula was removed, with, as the patient thought, some benefit. For a few days he appeared better, but the friends noticed some wheezing and whistling in his breathing, when seated at table and when quiet; he, however, remained free from cough or expectoration, and had no dysphagia. The paroxysms of dyspnoea continued to return; and one morning, on going out for his walk, he was seized with an unusually sudden fit of extreme difficulty of breathing, obliging him to seek rest in the first house that he could reach. This was three days before his death, and from this time his paroxysms became more frequent, and in the intervals his breathing was difficult. There was still, however, neither cough, nor dysphagia, nor pain, nor any lividity of countenance. His appetite continued good, so that he ate a couple of chops for dinner the day but one previous to his death; but on the Saturday and Sunday (the day of his death), he became very weak and exhausted, and fainted on getting out of bed after prolonged difficulty of breathing. Antispasmodics and other remedies used gave no relief; but on one occasion, after being sick, he was for a time a good deal relieved.

About eleven o'clock on the Sunday evening I was sent for, and saw him for the first time with his medical attendant, Mr. Jackson. I found him sitting up in bed breathing with extreme effort and difficulty; his face was pale; he was sweating profusely, and his pulse was rapid and full and of good strength. The tongue was somewhat furred and coated. He swallowed without difficulty; was able to speak a little, and had no local pain. There was no laryngeal stridor, nor had his voice any laryngeal character. The heart was beating forcibly and rapidly, and no bruit was detectable. His neck was thick and dilated at the base, apparently from diffused enlargement of the thyroid; but there was no distinct tumour or definite swelling either of the isthmus or lateral lobes of the gland. The enlargement was a general diffused expansion of the base of the neck. This had only been noticed a few days previously; but when questioned with reference to it, it appeared that he had complained of his shirt-collars being too tight, and had had them let out. I made a careful examination of the chest, but could detect nothing beyond evidence that scarcely any air was entering the lungs; and the like negative results had attended previous examinations by Mr. Jackson and others. The breathing all this time was forced and heaving to an extreme degree, beyond anything I had ever before witnessed. The lower end of the sternum and the epigastrium were drawn in so as to create a deep hollow at each inspiration, and every auxiliary muscle was called into the utmost forced action. The jugulars were distended; but there was not the least lividity of countenance, nor any great distress depicted beyond what indicated exhaustion. Although the heart was beating forcibly, and the pulse was of good strength, it was evident that complete exhaustion must soon ensue on such long-continued violent and fruitless efforts to fill the lungs, and that on the cessation of such efforts, asphyxia would rapidly follow. It was therefore determined to send for a surgeon with the view of entering the question of opening the larynx, although everything indicated that the cause of obstruction, whatever it might be, was situated low down, and it did not seem probable that tracheotomy could be of much avail. Mr. Bryant was sent for about midnight, and arrived a little before one o'clock. In the interval, the patient's strength failed him; the frightful efforts to breathe grew fainter, and asphyxia rapidly

set in. He could no longer swallow, and became livid and unconscious. Mr. Bryant, on his arrival, concurred in the opinion that the obstructing cause was probably so low down as to render it very unlikely that tracheotomy could be of any use. But all hope of life having fled, and the friends consenting, the trachea was immediately opened, on the chance of prolonging life by gaining such further insight of the nature of the obstruction as might thus be obtained.

An incision was made in the median line, through the centre of the thyroid, which proved to be much thicker than was anticipated, and the trachea much deeper than natural. The second and third rings of the trachea were divided, and the tube passed in without difficulty or loss of time. No air, however, passed through the tube, and a female catheter was passed down the trachea. This, however, struck against what was imagined to be the bifurcation of the trachea, and no air passed through the catheter either. The aorta could be felt pulsating violently when the finger was passed into the opening of the trachea. No relief was obtained from the operation, and he sank very shortly afterwards.

Post Mortem Examination Thirty-six Hours after Death.—The thyroid gland was found greatly enlarged (when removed it was as big as the two fists), but the enlargement was mainly below the sternum and along the sides of the trachea. Immediately below the orifice made by the surgeon, the trachea became so compressed, as to be completely flattened laterally from that point, to within half an inch of the bifurcation; it was also twisted to the left, and was surrounded by the greatly enlarged and firm lateral lobes of the thyroid. There were no enlarged bronchial glands, nor any pulmonary or cardiac disease. The aorta and large vessels were healthy; the larynx was healthy; the mucous membrane of the trachea was congested; the lungs were pale and collapsed; the upper lobes were a little emphysematous. The structure of the thyroid gland appeared healthy, but very firm, and the enlargement was due solely to hypertrophy, and not to cystic or other disease.

The *osseous parietes* of the thorax are not very frequently invaded by intrathoracic cancer; but occasionally we find, after death, both the ribs and spinal column affected. I have myself met with but two cases where evidence existed, during life, of such complication. In one instance the disease of the spinal column had extended to the theca of the cord, but not through it, and, pressing on the cord itself, induced symptoms of progressive paralysis. In the other, the cord itself showed evidence of inflammatory changes. The true nature of the disease was diagnosed from an early period in the former case, although in certain important respects the symptoms deviated from those which are most characteristic of extensive cancerous disease of the chest, especially in the absence of dyspnoea; and although the earliest symptoms were such as would naturally lead to the suspicion of phthisis; viz., hæmoptysis to the extent of several ounces, cough, and expectoration, with emaciation and night-sweats, the subsequent progress was not that of phthisis. The temperature, also, which was, in this instance, noted from time to time, being below the normal standard, seemed conclusive against progressive tuberculation. A low temperature would usually be considered in favour of cancer; but, from a case which has recently occurred in the London Hospital, it would appear that increase of temperature may attend the rapid growth of cancer diffused through the system. A man with cancerous disease of the testis became the subject of acute symptoms, referable to the lungs, there having been loss of flesh and spitting of blood for three weeks previously. The physical signs showed that mischief was going on, diffused through both lungs. After death, deposits of carcinoma were found in various parts of the brain, liver, lungs, and testis. There was, however, no evidence of acute inflammatory changes in any part of the body; no pneumonia, nephritis, or serous inflammation, and the brain-substance was healthy; but the cancerous deposits were exceedingly vascular, and had the character of having rapidly grown. The high temperature in this case ranging from 100 to 101.4 deg., led to the inference that the changes going on in the lungs were of the class known as tubercle, or broncho-pneumonic phthisis. The body was very carefully examined by Dr. Sutton, who is satisfied that if any inflammatory mischief had been going on it was inappreciable: we therefore can only infer that the high temperature was due to the rapid growth of cancer; i.e., rapid cell-formation.

In the following case, the absence of constitutional disturbance was remarkable, and the disease, though extensive, was of comparatively slow growth.

Intrathoracic Cancer, involving the Bronchial Glands, Spinal Column, etc., occluding the Left Bronchus, and converting the Left Lung into a series of Abscesses.—A. K., aged 23, single, a servant girl, was admitted into the Victoria Park Hospital, under the care of Dr. Risdon Bennett, on the 29th of October, 1867. She was a well-grown girl, rather spare, with brown hair and eyes; and, except that she was rather pale, of a healthy aspect, that did not indicate any very serious disease. She did

not give a very distinct or satisfactory account of any previous illness; but stated that, whilst away for her holiday at Whitsuntide, she had felt very unwell and out of sorts. Previously to that time, her health had been very good. After a month's absence, she returned to town, feeling much better, and went to service. In about a fortnight, however, she broke down; the catamenia became suppressed; she had hæmoptysis to the extent of three or four ounces, with some cough and expectoration; the latter, however, was but scanty. She lost flesh and strength, and had night-sweats.

On her admission, the following were the physical signs that presented themselves on examination. The thorax was well formed. There was absolute dullness over the left anterior region of the chest; absence of respiration, and no increased vocal resonance; nor much, if any, diminution of motion. The heart-sounds were a little ringing in character, and audible throughout the whole of the left side. The pulse was feeble, and under 100; the tongue was clean; the breathing was calm and perfectly easy, and continued so; there was a little occasional cough, with slight, simple, mucous expectoration. She was feeble, and somewhat put out of breath in walking. Her appetite was good, and there was no febrile disturbance.

On the 15th November, she complained, for the first time, of pain between the shoulders, which was relieved by a small blister. On the 22nd November, the following record was made of a very careful physical examination. "Heart-sounds heard more distinctly to the right than to the left of the sternum; very little impulse to be felt or seen; but this is most appreciable by the touch, immediately to the left of the sternum, an inch above the nipple; sounds audible throughout the chest; dullness absolute throughout the left side; respiration altogether inaudible, except it be at the extreme base posteriorly, where faint, questionable, and probably transmitted, breath-sounds may be detected. In the same situation, the dullness is also somewhat less marked; diminished motion; no vocal thrill. On the posterior aspect, the left side appears less prominent than the right; and it is found by measurement to be half an inch less from the sternum to the spinous processes. Anteriorly, the dullness terminates abruptly at the median line of the sternum." On the 6th December, the following note was made. "Within the last fortnight, she has gradually lost power in the lower extremities; this is most marked in the left leg, where it was first noticed. She also complains of numbness, which has gradually extended upwards as far as the epigastrium. There is some difficulty in passing urine, but no incontinence, nor any paralysis of the sphincter ani. There is still some pain, though less than at one time, over the dorsal vertebræ, with tenderness on percussion. Her countenance is placid, and even cheerful in expression; scarcely any cough or expectoration, and the most remarkable absence of dyspnoea, except when moved. The tongue is clean; the appetite fairly good; pulse feeble, usually under 100; temperature in the axilla, 98.5 deg." On the 18th December, the paralytic symptoms were more pronounced, and the belly tympanitic; profuse sweating; some epigastric uneasiness, and diminished appetite; urine 1.022, acid, scanty, and slightly albuminous; temperature, 97 deg.; breathing still quite placid; heart's action more superficial, and attended by a questionable friction-sound. On the 20th, some twitching and starting of the lower limbs; sphincters still good; respiration, 24 per minute; temperature, 97 deg. On the 27th, paralysis had involved the upper extremities, and the urine was passed involuntarily. A large slough had formed on the back. The tongue had become glazed and dry. The heart was displaced upwards, and there was a slight systolic murmur at the apex. On the 3rd January, there was observed, for the first time, a projection of the third lumbar vertebra. Breathing rather short and quick, and pulse rapid and scarcely to be felt. On the 5th, for the first time, there was much dyspnoea, with mucous rhonchi and dusky countenance, and she appeared to be sinking. She, however, rallied; the breathing became comparatively tranquil; and she did not finally sink till the 12th of January, when she died apparently from asthenia.

Post Mortem Examination.—The body was much wasted, well proportioned, and the chest well developed; the lower extremities were œdematous. The heart was displaced, being drawn upwards. On opening the pericardium, the posterior wall was seen to be thrust forward by a greyish-white mass near its base. The left pleura was greatly thickened, and adherent throughout. The right pleura had here and there a few scattered adhesions. The left lung was somewhat, but not greatly, reduced in volume, and converted into a number of small abscesses or cavities, for the most part about the size of a Spanish nut and filled with thick greenish-yellow pus. These cavities showed no lining membrane, their walls being formed by ragged lung-tissue. There was nowhere any healthy lung-tissue detectable. What looked like the remains of lung-tissue was of a greyish colour, dotted with pigment, resembling grey hepatisation, and of that consistence throughout. On

passing the finger down the trachea to the bifurcation, the right bronchus was found to be patent and normal. The left bronchus was completely occluded by the surrounding mass of malignant structure in which the bronchial glands were involved. On laying open the bronchus at the occluded spot, it was found to be pressed on by the malignant growth all round; and below this point the growth had so invaded the walls of the bronchus, that its channel could no farther be traced. The main portion of the growth lay in front of the descending aorta and œsophagus, but did not invade their coats. Below the bifurcation of the trachea it formed a large mass, which completely surrounded the left bronchus, but passed across the right bronchus without either involving or surrounding it, and terminated just before reaching the root of the right lung. It thus lay below the arch of the aorta. Backwards it extended between the left arches of the fourth and fifth dorsal vertebræ and between the roots of the corresponding ribs on both sides. It extended also in some places four or five inches from the bodies of the vertebræ and involved the dorsal muscles. In the vicinity of the fourth and fifth vertebræ it invaded the spinal canal, compressing the cord and its sheath, both of which, however, were healthy. On each side of the body of the third lumbar vertebra, the disease had also invaded the spinal canal. It could be traced likewise along the upper border of the pelvis, a little outside the left iliac vein. The iliac vessels, however, were not involved, nor were the glands on the right side of the chest, except just at the bifurcation of the trachea. The right lung weighed twenty ounces, was somewhat œdematous, and at the base showed a little red hepatitis. The mucous membrane of the bronchial tubes was much congested, but they contained no pus. The heart was healthy, weighing nine ounces and a half. The liver weighed five pounds three ounces, and presented a marked example of the common "nutmeg liver," quite as marked as is seen in connexion with contracted mitral orifice. The gall-bladder was healthy, and also the spleen, which weighed eight ounces. The kidneys weighed seven ounces, and were much congested, being throughout of a dark red colour. The intestines were congested, but otherwise healthy, as were also the mesenteric and lumbar glands; nor was there any malignant deposit in any of the internal organs. The growth everywhere presented the same character, being soft and of a greyish-white or white colour, and yielding, on pressure, an abundance of milky juice. This in many parts was so abundant as to pour out immediately on section of the growth.

The condition of the lung of the affected side is the main point of interest in this case, not only pathologically, but also with reference to diagnosis. The first effect of pressure on the left bronchus was doubtless a certain degree of collapse of the lung, and, as this proceeded, corresponding falling in of the parietes, subsequently increased by the general adhesions of the pleural surfaces. The diminished motion was only marked in the latter stages of the disease, when the adhesions had become firm and general. In proportion as the bronchus became occluded and the tubes became choked, we had absence of respiration and of vocal resonance, and complete dulness from consolidation of the lung. It is, therefore, obvious that we may have all these important physical signs, independent either of fluid effusion or a solid growth filling the chest; for the mediastinal growth in this instance extended but little beyond the sides of the spinal column. Doubtless, the anterior dulness depended on the solid growth; but that of the lateral and more distant parts of the chest must be referred to the collapsed and consolidated lung. The only remaining question would be, might not the consolidation of the lung be the result of pneumonia? It seems very improbable that such an error would be committed, if only the least attention were paid to the history and other features of a similar case. But how, it may be asked, was this consolidation and extensive disintegration of the lung induced? Simple impediment to the entrance of air would not produce it. Dr. Stokes appears to think that, both in aneurism and in the case of cancerous tumours, gangrene of a portion of the lung may ensue from pressure on a main bronchus, owing to the anatomical disposition of the nutritive arteries of the lung, as pointed out by Dr. McDonnell. This seems highly probable, and, *primâ facie*, a sufficient explanation. But I am disposed to think that, where such disintegration as existed in this case occurs, the true explanation is that which has been given by Dr. Gull, who refers the lung-changes to pressure, not so much on the principal arteries or even nerve-trunks, as on the sympathetic plexus at the root of the lung. Certain it is that physiological experiments, especially those of Reid and Pavy, show that division of *one* pneumogastric nerve does not lead to any morbid structural change in the corresponding lung; and there are numerous cases on record, both of aneurism and of cancerous tumours, where the pneumogastric has been involved to the extent of destroying its continuity, without any such structural changes resulting as were seen in the case last detailed. The ordinary result of mere occlusion of a bronchus is

simply collapse of the corresponding lung. If, however, before their occlusion, the bronchi and capillaries become paralysed, owing to such pressure and disease at the root of the lung as deprives it of nervous supply from *all branches* of the pulmonary plexus, whether of the direct or interlacing branches, then we have such paralysis of the tubes as incapacitates them for emptying themselves of their contents; and the exudation from the congested capillaries accumulates, and hepatitis and purulent infiltration follow. And this is precisely what seems to have resulted in the case in question, where the whole lung became converted into an airless solid mass, riddled by cavities. Where a similar condition exists to only a limited degree, involving one lobe or portion of a lobe, we have sometimes complete gangrene. These conditions, Dr. Gull has rightly said, are of considerable importance as aids to diagnosis when the physical signs, apart from the interpretation thus afforded, would be quite insufficient. It is exceedingly difficult to trace with sufficient minuteness the course of the nerves through a cancerous mass and the compact surrounding tissues, so as to ascertain their precise condition; and in any case this requires more time and care than can generally be afforded, so that the *post mortem* records are seldom given with the minuteness and accuracy that are necessary to give us the data requisite for determining the real nature of the changes which the lung has undergone. It is, however, certain that, with complete occlusion of the main bronchus, we find after death very various conditions of the corresponding lung.

There are three very distinct conditions of lung met with in connexion with mediastinal growths.

1. A collapsed state, in which the lung is airless, and diminished greatly in volume by pleuritic effusion, having apparently undergone no other change than that which is frequently seen in ordinary cases of pleurisy with effusion; and a closely analogous condition, where it is spread over and condensed on the surface of the morbid growth.

2. The condition described in the case last related, where the lung retains its volume to a considerable extent, but has become consolidated by inflammation, and then has undergone disintegrating changes, ending in the formation of abscesses or numerous pockets of pus—all communication with the main bronchus being destroyed.

3. An augmentation of volume, with more or less consolidation, either from inflammatory condensation, or from the extension of the cancerous growth into the substance of the lung.

These latter cases are generally associated with enlargement of the affected side, and often with increased vocal fremitus, tubular breathing, etc., according as the main bronchus is or is not occluded.

Although, as I have stated, the destruction of continuity of one pneumogastric nerve does not involve any structural change in the corresponding lung as a necessary consequence, it is certainly somewhat remarkable that we should not more frequently meet with symptomatic vomiting or other disturbance of the stomach. But, except where the cardiac plexus is involved, as in certain cases it is, where the heart becomes implicated, we do not meet with any such symptoms.

An interesting case, however, is recorded by Dr. Quain, in which the function of the stomach was completely suspended, owing to the impossibility of swallowing any food—the patient dying of inanition; and where, after death, both vagi nerves presented a remarkable morbid condition, referred by the narrator to the results of "reflex irritation". In this case, the œsophagus was imbedded in a cancerous growth for nearly four inches of its course; the leading symptoms during life having been a complete inability to swallow, scarcely any food appearing to pass into the stomach, and the patient complaining much of hunger and intense thirst. The right vagus entered the upper part of the tumour, and soon became completely imbedded in it, and throughout its whole course presented a remarkable fusiform enlargement. The left vagus presented a similar condition; its entrance into the tumour, and coincident enlargement, beginning a little below, where the recurrent was given off. Under the microscope, the bulbous enlargement was found to consist of a basis of coarse granular matter, with irregularly scattered fine fibres of fibrous tissue. That this bulbous enlargement of the vagi was not due to pressure, seemed to be shown by the state of other nerves, more deeply pressed on by the tumour, which showed no such enlargement.

LONGEVITY.—The obituary of the *Times* has lately contained some rare illustrations of prolonged existence; especially on Saturday and Tuesday last, when the deaths of ten persons were recorded, whose united ages amounted to 908 years, giving an average of nearly 91 years to each; of these the oldest was a gentleman who had reached the age of 104, the youngest of the same sex being 81. The oldest lady also reached 100 years, and the youngest 83. The ages respectively were 81, 83, 84, two at 89, 90, 91, 97, 100, and 104 years.

CLINICAL NOTES.

(Reported from the Practice of Dr. WILKS, at Guy's Hospital.)

V.—JAUNDICE FROM MENTAL EMOTION.

THE following case is reported by Mr. Blenkarne.

Mary Ann J., aged 23, was admitted under Dr. Wilks on February 8th, 1870. She was a married woman, and had always enjoyed good health until six weeks ago, when, in crossing the street, she was nearly run over by a cab. She was much frightened, and never completely recovered the shock. Four or five days afterwards, she observed her skin becoming yellow. She at the same time had headache, nausea, and slight diarrhoea. She noticed that her urine was of very deep colour, and her motions pale. She had had no pain. On admission, the patient was deeply jaundiced. She made no complaint, except of being weaker than in health. There was no pain or tenderness over the liver; nor, on percussion, was there any perceptible difference in size of the liver. The tongue was clean; pulse 100. The urine was in good quantity, of specific gravity 1023, full of bile, showing abundance of colouring matter by addition of nitric acid, but none of the biliary acids by Pettenkofer's test. The motions were like pipe-clay. She was ordered ten minims of dilute nitric acid in compound infusion of gentian three times a day, and five grains of pill of mercury and rhubarb every night. On February 14th, she was no better. The medicine was changed to three grains of benzoic acid and two grains of extract of conium in a pill every six hours. On the 23rd, she seemed better, and expressed herself as not feeling so ill. The skin was less yellow, and the motions somewhat darker. Hippuric acid was found in the urine. After this, she gradually improved. On March 9th, the yellowness had almost disappeared; and on March 26th she went out well.

CLINICAL REMARKS BY Dr. WILKS.—The term simple jaundice is applied to the case, where the circulation of bile through the system constitutes the only phenomenon of the disease; for, were it not that the bile is coloured and stains all the tissues yellow, it would constantly happen that the liver would never be suspected as being the cause of the patient's illness. In such a case it is that the pathology of the disease is so difficult to discover; for in the more important, and especially in the fatal forms, the explanation is clear. For example, the most evident and effective cause for jaundice is the obstruction of the bile-ducts, whereby the secretion does not flow into the bowel, but is taken up and carried through the system. In most cases which are fatal, an obstruction is found; and likewise, in a very large number of instances in which recovery occurs, we are sure, from the symptoms, that a temporary blockage has occurred. From these striking facts, it would be an easy interpretation of all cases, could it be justly maintained that jaundice was always due to a mechanical impediment to the flow of the bile; and, taking the analogous case of obstruction in the air-passages of the lungs, we might even go so far as to suppose that, besides the more obvious causes of obstruction, there might exist a catarrh of the passages, or even a spasm having its origin in the nerves. If this could be proved to our satisfaction, the dictum might be maintained that, for the production of jaundice, a healthy liver is required, combined with obstruction of the main duct; and this would be supported by the opposite fact, that jaundice is not a symptom of disease of the organ itself. This theory is intimately bound up with the physiological question as to the precise seat of the formation of the bile. If the statement above given were absolutely true, it would afford the best proof that the bile is formed in the liver, and not in the blood; for, if it were not so, jaundice would exist in proportion to the amount of destruction of the true hepatic structure; and it would, in all probability, exist in those cases where the portal vein is occluded. But it is not met with under these circumstances. And, again, in the lower animals, as the frog, the liver has been excised without the production of any jaundice. The only case where jaundice occurs in connexion with any organic disease is in that remarkable affection known as acute atrophy; but here the change in the secreting tissue is so rapid that it is possible the amount of bile which is seen circulating through the system may have been already formed before the destruction begins. It is this disease, however, which has given rise to the opinion that some constituents of the bile may be formed in the liver, and the others in the blood; that the taurocholic and glycocholic acids may be formed by the liver, but that the colouring matter is produced in the blood. Under these circumstances, jaundice might arise either from obstruction of the ducts or from disease of the liver itself; and thus it would be only in the one variety that the biliary acids would be formed, and therefore found in the urine along with the salts. Dr. Wilks stated that these had often been sought for in the urine, but never yet been found in any single

case in the hospital; and that, therefore, on such a doubtful point as to their existence or not, we could not form a diagnosis as to jaundice being a disease of suppression or retention. There is every reason, at present, to believe that none of the biliary ingredients are formed elsewhere than in the liver; and, if so, we have rather a difficult task to undertake in explanation of such a case as the one under discussion, where there is no evidence of obstruction to the passage of bile—the case, for example, where a woman, from a sudden fright, has an attack of jaundice. The only explanation which appears tenable is, that the constituent colouring matter of the hepatic cells is retained and absorbed, instead of being carried out into the ducts. An analogous and opposite instance of this perverted action of the cells may be seen in one of the theories of diabetes, which supposes that the amyloid matter naturally retained in the hepatic cells is taken up into the circulation, and somewhat changed in nature. It is known that, if the fourth ventricle be pricked with a needle, diabetes is produced. Now, if this condition be owing to a changed action wrought on the liver through the nerves supplying it, whereby a material which should be retained passes out, it is no more difficult to understand how a nervous influence exerted on the secreting tissue of the liver should also prevent some of the material which naturally passes out from escaping; and, if this material be the colouring matter of bile, a jaundice results.

Enough has been said to show what a large field of investigation is opened to us by a discussion of the subject of jaundice; since, for its true interpretation, we ought to have a knowledge of the seat of the formation of the bile, and, indeed, of the true function of the liver. It is remarkable that, considering the importance of the largest secreting organ in the body, very little positive knowledge exists of its function, and also of its diseases. Although almost every other patient whom we have to treat is ready to talk about his liver, it may be truly said that its deranged conditions are less recognised than those of all other important organs; and, even in the common affection known as cirrhosis, its existence is never more than conjectured until the blood can no longer pass through it; and, as regards the various conditions which produce jaundice, it is probable that many of them would be wholly unrecognised, were our diagnosis not aided by the bile being of a yellow colour.

As regards treatment, this is for the most part empirical; for it is often merely a conjecture whether the arrest of flow of bile is due to the obstruction of the fluid, to catarrh of the ducts, to spasm, to paralysis, or to an abnormal transfusion of bile, from the regulating nervous influence being suspended or misdirected. In recent forms of jaundice, the old and approved remedies are mercurial purges, with alkalies, etc. In more chronic forms, taraxacum and nitric acid have long been in use. Dr. Wilks considered the former a very harmless remedy, but had a considerable liking for the latter. He also used the nitro-muriatic bath, and had every reason to believe that it was eminently useful. He judged so from recovery having taken place in several cases where all other measures had been unsuccessful. A remedy suggested for theoretic reasons is benzoic acid, it being considered to unite with glycine to form hippuric acid, and thus break up the noxious biliary mass. Dr. Wilks had given it in other cases, and again in the present one. The woman recovered whilst taking it, but whether as a consequence would be too much to assert.

CASES OF THE OCCLUSION OF ARTERIES BY EMBOLI.*

By R. H. MEADE, F.R.C.S.,

Consulting Surgeon to the Bradford Infirmary.

CASE I.—In April 1864, I was sent for one morning in haste, to see a gentleman about 40 years of age, who had been labouring for some time under an aggravated form of heart-disease, accompanied by anasarca; and who also suffered from severe and sudden attacks of dyspnoea and faintness. On the morning in question, he had one of these attacks, of a more perilous character than usual, in which his attendant thought he was dying. Upon my arrival at his house, I found that he had rallied from the attack, but was complaining of the most severe pain in the right leg, particularly in the calf. The pain continued for some hours, though gradually decreasing in intensity, and was followed by coldness of the limb and stoppage of pulsation in the arteries, which was quickly succeeded by gangrene of the whole leg as high as the knee. This patient lived for nearly a month after the attack; and partial separation between the dead and living structures took place before he died. Death occurred from exhaustion; the diseased state of the heart and system, generally, negating any proposal of amputation.

* Read before the Yorkshire Branch, March 15th, 1870.

CASE II.—In February 1868, I saw a stout middle-aged man in consultation with Mr. McLachlan, of Shelf, near Halifax, who had complete mortification of one leg as high as the knee. He had a rather feeble heart, but there were no signs of valvular disease; and he had appeared in good health up to the time of the present attack, which began suddenly, a week before the date of my visit, while he was walking home one evening a short distance, after attending a lecture. It commenced, as in the former case, by severe pain in the calf of the leg, which was succeeded by coldness and rapid death of the limb. When I saw the case, the mortification was apparently extending; so there was nothing to do but to wait, and endeavour to keep up the strength. I said, should the gangrene stop, and the dead parts separate from the healthy structures, it would become a question whether amputation should be performed.

I did not see this patient again, but heard, some weeks afterwards, that the limb had been removed, and that the man had died.

CASE III.—In January 1869, I saw (with Mr. Terry, of Bradford), a delicate lady, about 30 years of age, who was of a very feeble constitution, but had never suffered from any symptoms of heart-disease. This patient had been confined nine weeks before I was called in, and complained, at the time of my visit, of a painful swelling in the right iliac region, which appeared to be owing either to the commencement of a pelvic abscess, or to inflammation of the tissues round the ovary. It was very tender on pressure, both externally and also at the roof of the vagina. She laboured as well under diarrhoea and general debility. By the application of a few leeches, followed by iodine and soothing applications, the tumour became smaller and less tender, and she improved sufficiently in health to be able to travel to the sea-side. While there, she was one day seized with violent pain in the leg, which was rapidly followed by mortification of the limb, under which she quickly sank.

CASE IV.—An old lady, aged 74, whose health was breaking up from old-standing heart-disease, accompanied by anasarca; and who suffered very much at times from congestion of the lungs, with dyspnoea; was seized one morning in May 1869, with excruciating pain in her right shoulder, causing her to scream out loudly. I found her, shortly after the commencement of the attack, with the whole arm wrapped up in hot flannels, and still complaining of severe pain, extending from the shoulder to the fingers. Upon examination, I ascertained that there was complete absence of pulsation in the radial and ulnar arteries, as well as in the brachial; I also found that the right hand and arm were colder than the left, though they had been wrapped up and fomented to relieve the pain. I directed the limb to be covered with cotton-wool, and to be kept warm. By these means, the temperature was preserved, the pain gradually subsided; and I had the satisfaction to feel a slight return of pulsation in the arteries after about two days, which, in the course of a week, regained the same strength as in the opposite limb.

Out of these four cases of embolism, in three mortification occurred, and they were fatal; but one recovered; and I find a somewhat similar case of recovery, after the plugging of the main artery of a limb by an embolus, recorded in the BRITISH MEDICAL JOURNAL for the 5th of February last. It occurred at the Salop Infirmary, into which a man, aged 31, was admitted, who had been seized while walking with pain in the calf of the leg, which was followed by coldness of the leg and foot. There was no pulsation to be felt in either tibial or popliteal arteries; it was lost in the femoral about an inch below Poupert's ligament, at which spot there was pain and swelling. The man had had rheumatic carditis. The leg was wrapped up in cotton-wool, tonics and stimulants were administered, and the patient recovered without the occurrence of mortification; though, at the date of the report, there was no pulsation in the tibial arteries, and the leg was colder than the other.

REMARKS.—1. The sudden obstruction of the main artery of a limb by an embolus, is generally followed by severe pain, which may be referred to a part removed from the seat of obstruction—as the calf of the leg. 2. Mortification does not necessarily follow; but when the death of a limb is caused in this way, there is not much hope of saving life, as the accident mostly occurs in diseased subjects, in whom the heart and arteries are affected, and the constitution enfeebled. 3. What is the nature of the plug or embolus? I believe that in some cases, as in the first which I have related, the blood becomes partially coagulated, and fibrinous deposits take place in the heart itself, during an attack of syncope, or, rather, asphyxia; and portions of the coagulum are then carried, on the revival of the circulation, through the aorta into the vessels of the limbs. In others, and perhaps in most cases, fibrinous vegetations are detached from the valves on the left side of the heart, which had been deposited there at some former period, during an attack of endocarditis. I believe that most cases of senile gangrene are caused in this way; the emboli being small, however, and plugging one of the

lesser arteries of the limb. An old gentleman complained to me, about two years ago, of a pain which he felt in the calf of one leg, particularly in walking. On examination, I could find nothing wrong about the seat of pain; but the inner side of the foot and the great toe were mottled with red patches, and colder than the other foot. I advised him to lay himself up, and keep the foot warmly wrapped in wool. After the lapse of some weeks, superficial gangrene of the skin of the toe took place, which, however, slowly separated; the part healed, and the patient recovered, after a confinement to the house of about six months. 4. In cases that recover after embolism, without gangrene taking place, how is the circulation restored? In the case that occurred in the Salop Infirmary, the life of the limb seemed to have been preserved by means of enlargement of the collateral circulation, in the same way as it is after the ligature of the main vessel of a limb for the cure of aneurism; but, in the case which I met with of plugging of the axillary artery, the circulation in the arteries of the arm was restored so quickly, that I think the embolus must have consisted of a soft clot, which disintegrated so as to allow the vessel to regain its permeability.

A SWELLING SIMULATING AXILLARY ANEURISM.

By C. S. JEAFFRESON, Esq., Newcastle-upon-Tyne.

A GENTLEMAN came to consult me two months ago. He was a tall muscular man, with a muddy complexion and an anxious expression of countenance. He complained of pains in the shoulders and arms, and occasionally in the integuments of the back of the head and scalp; the pains were not always present during the day, but during the night they became very acute and disturbed his rest materially. I requested him to strip, that I might examine his joints and skin, when immediately below the left clavicle was observed a swelling: this swelling was diffused; the skin over it was of normal colour. It was without fluctuation, but distinctly pulsating; the pulsation, as far as the position and depth of the tumour would allow one to judge, being of that expansile character pathognomonic of aneurism. With the stethoscope, a loud murmur was heard over the swelling; this ceased, together with pulsation, when pressure was made upon the subclavian artery. There was no oedema nor numbness of the arm, though the radial pulse was decidedly weaker on the left side than on the right. The pupil of the left eye was markedly more contracted than that of the right. The patient could move his arm freely, and had no pain at the seat of swelling; nor was there tenderness except upon considerable pressure. The lungs and heart, on percussion and auscultation, revealed no morbid sounds; the latter organ was rather rapid in its action, or what is generally called nervous.

The question to be decided was the character of the tumour. Anyone reading the symptoms detailed above would almost certainly come to the conclusion that it was an aneurism of the first part of the axillary artery; and, in point of fact, several medical men had come to that conclusion; but there were some points in the case which tended to throw doubts upon this decision, and to lead one to form a more careful analysis of its history and facts. It was evident that it must be one of three things; either (1) an aneurism; or (2) a pulsating tumour; or (3) a swelling of some kind pressing forward the axillary artery. If it were an aneurism, doubtless we should have had all the symptoms above detailed; but then they would all have been more marked. There would have been pain at the seat of swelling, and almost certainly some numbness in the course of the large nerves, together with more or less oedema, from obstructed circulation, on the affected side. The outline, too, of the swelling was scarcely sufficiently defined; and at its lower and inner portion the pulsation was much less distinct, and the *bruit* much less audible than in other portions of its surface. If it had been a pulsating tumour connected with the ribs, pressure upon the subclavian in the third portion of its course could scarcely have checked its pulsations; and if it sprang from the lung, we could scarcely have failed to get some auscultatory evidence of the fact. These two possible views being thus disposed of, there remained still the question of its being a swelling of some kind projecting the artery before it. What could a swelling be in such a position? Here, again, we must go through a process of negative analysis. It could not be an enlarged gland, for there are none in this situation. Abscess, too, was out of the question; for there was no pain, no rigors, no fluctuation, and any tumour connected with the nerves would certainly have given rise to decided symptoms. But one thing remained which it might probably be, and that was periostitis of the ribs and cartilages. This conclusion was strengthened by a previous history of syphilis; and the pains of which he complained were distinctly referable to that disease.

I believe it to have been utterly impossible for anyone at this period to make a positive and definite diagnosis; but it was clear that a short period of time must elucidate the difficulties of the case, for, if the pains were due to syphilis and the swelling were periostitis from the same cause, all the symptoms would show a decided and rapid amelioration under the influence of iodide of potassium. Therefore, with these assurances I comforted my patient, who, in his own mind, had a rooted conviction that he was suffering from aneurism.

I placed his arm in a sling, and covered the swelling with the ammoniacum and mercury plaster; ordered him, internally, fifteen-grain doses of the iodide of potassium in decoction of bark three times a day; and arranged for him to return in a week's time. When next I saw him, he informed me that the pains left him immediately on taking the medicine, and had never recurred since; but, on examining the swelling, there was a decided increase in size, the pulsation was more forcible, and the *bruit* louder. My patient was in great anxiety; but I persuaded him to continue his treatment for another week. At the end of this period, there were marked signs of improvement, which have continued up to the present time, when I think I may fairly say there is very little, if any, trace of his original disease.

This case was certainly one of unusual interest, and for many reasons worthy of record. The usual text-books on surgery make no mention of cases of this kind, and treat of the diagnosis of axillary aneurism as being a matter of great facility. Thus Erichsen says: "The diagnosis of axillary aneurism is generally readily made, there being but two diseases with which it can well be confounded—viz., chronic enlargement and suppuration of the glands of the axilla, and pulsating tumours of the bones in this region." These remarks are doubtless true as far as the more distal parts of the axillary artery are concerned; but, in point of fact, any tumour or swelling thus connected with the bone or other tissues, is liable to be mistaken for an aneurism, when developing below the axillary artery, immediately beneath the clavicle, as in the case I have above described. The depth of the parts and the thick covering of the pectoral muscle so obscure the contour of the tumour and the character of the pulsation, as to materially increase the difficulties of diagnosis; and this is aided by the facility with which the slightest pressure on the artery produces a *bruit* in this situation. Most of the symptoms which are detailed as those of aneurism are merely referable to the secondary effects of pressure on veins and nerves, and may be produced as well by any other growth as by an aneurism. In this case there was myosis of the left pupil, which, I think, could scarcely be attributed to the pressure of any portion of the swelling which was observable; but doubtless the periostitis extended beyond that, and pressed upon some of the spino-sympathetic nerves at the root of the neck.

I think we learn from the above history how cautious we should be in believing in cases of spontaneous cure of aneurism. Doubtless, if this case had been left to itself, in course of time it would have got well, and might, but for fortuitous circumstances, have been recorded as a case of spontaneously cured aneurism. It shows, too, how the history of a patient's antecedent maladies can throw light upon present disease, and clear up difficulties which at first sight seem insuperable; for in this case, had there not been a clear history of syphilis, diagnosis would have been much more uncertain, and the treatment, which was so successful, would never have been indicated.

SUDDEN AND FATAL ILLNESS WITH ALBUMINURIA.

By JOHN RUSSELL, M.D., Neath.

A. B., aged 29, who one Sunday evening was apparently in unusually good health and spirits, was seized at about three o'clock on the following morning with violent headache and vomiting, attended by relaxation of the bowels. I visited him shortly before eight, when he was much as described above, with a hot burning skin, and his pulse from 140 to 150. Viewing the case as a violent bilious attack, which in some measure had relieved itself, I prescribed accordingly. At 11 A.M., he was thought to be something easier. At 1.30 P.M., he was seized with violent convulsions. I arrived at the house at about 8.30 P.M., when I was told that the patient had had one or more additional convulsions, and had just died. The trunk and extremities were dotted all over with spots of ecchymosis. I am not aware that the patient was supposed to have been labouring under any organic disease. The character of the illness led to the idea of blood-poisoning; and as convulsions and vomiting are acknowledged symptoms of uræmic poisoning, it was thought that the urine might throw some light upon the disease. Anything in the shape of a *post mortem* examination of the body was

positively objected to; but I succeeded in obtaining about three drachms of urine by the catheter. This, upon being boiled, became almost one gelatinous mass, and was unaffected by nitric acid. This appeared to myself satisfactory evidence as to the cause of death: but a medical friend demurred to my conclusion, inasmuch as he thought that, upon the cessation of vital action, endosmosis and exosmosis might become more active, and the urine thereby become albuminous. With the view of clearing up this point, I have since examined upwards of twenty specimens of *post mortem* urine, and in no instance in which it had been ascertained to be non-albuminous recently before death had it become so afterwards; thus proving that urine will not become albuminous as a consequence of death. I beg now to propound the question, "How far might such a condition of *post mortem* urine (as was discovered), coupled with such a train of symptoms, be considered conclusive as to the cause of death?"

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

CASES OF HERNIA.

(Under the care of Mr. SAVORY.)

Strangulated Femoral Hernia in a Woman of 70, complicated with Hypertrophy of Glands concealing the Sac: Operation: Dysenteric Diarrhæa: Recovery.—On Tuesday, the 12th of April, Mr. Savory operated on two very remarkable cases of hernia in St. Bartholomew's Hospital. In the morning, a spare old woman, above 70 years of age, was admitted with a tumour, of the size of an orange, over the right femoral ring, into which it could be traced by a distinct pedicle. The tumour moved freely under the skin, which was loose and natural over it. It was not at all tender, and was resonant on percussion; and immediately below it were two enlarged, but not much hardened, glands, about the size of filberts, close together. No action of the bowels had occurred for a week; for six days she had been very sick, and what she had vomited during the last two days, she said, smelt very badly. Since she had been in the Hospital she had retched repeatedly, but had brought up nothing. Her countenance was natural, the pulse about 90, the abdomen tolerant of pressure. She was rather dull and confused in her answers, but did not complain of feeling ill. She said that she had had a lump there for many years, which would go back when she went to bed, and never gave her any particular trouble. She had never worn a truss.

She was placed under chloroform; and, no impression being made on the tumour by taxis, the skin over its inner surface was divided by a longitudinal incision. After the reflection of the superficial fascia, the whole surface of the tumour was exposed, which now presented itself as a smooth spheroidal mass, with a stalk from its under surface which passed to the femoral ring. The fascia investing this was carefully divided down to what appeared to be sac; and the inner border of the ring itself was notched, but still taxis failed to return any portion of the mass. Then it was determined to open the sac; and a thin layer was accordingly raised from the front aspect of the tumour and divided. This was repeated again and again until a depth of three or four lines had been reached. It was then obvious that the substance which the tumour here presented was something more than thickened sac; but all present were doubtful of its nature. The divided surface was whitish, soft, and uniform; and the rest of the mass was so soft and fluctuating that it gave to those who felt it the impression of a cavity within. Upon now carefully examining the under surface of the tumour, the appearance of the sac, with intestine beneath, was so marked that the first layer was raised and divided, when a knuckle of tolerably healthy intestine came at once into view. Then the incision was carried upwards through the inner portion of the neck of the sac, and the loop of intestine was easily returned. There remained now the empty sac, with this extraordinary mass forming its front wall, and still as large as half an orange; but by carefully dissecting between it and the ring, it was gradually so far isolated that there was at length no hesitation in removing the whole of it, with the enlarged glands attached to it below. Upon section and further examination, it proved to be a lymphatic gland greatly enlarged, but not at all hardened—in fact, with a texture softer than natural; so soft, indeed, as still to give a sense of fluctuation when felt between the fingers. There was not the least evidence of suppuration, or of any morbid fluid or of previous inflammation, but it presented all the characters of simple genuine hypertrophy; and this

unusual condition, with its very soft texture and intimate union with the front of the sac over which it spread, prevented recognition of its nature during the operation.

The subsequent progress of the case is not without interest. Soon after the operation, the bowels acted copiously, with complete relief; and for the next two days all went on well without an unfavourable symptom. Then the bowels began to act too frequently, until there was actual diarrhoea, which soon became dysenteric; mucus, with some blood, being at length passed. This continued two or three days in spite of various remedies, and produced extreme exhaustion; but then injections of ipecacuanha—a scruple of the powder rubbed into two ounces of thick starch, with a few drops of laudanum—were used, and the diarrhoea speedily subsided. From that time, the old woman gradually recovered.

Inguinal Hernia Strangulated Twenty Hours in a Young Man: Operation: Peculiarity of Intestine: Death: No Peritonitis.—The second case was that of a young man who was admitted in the afternoon in great agony. The features were pale and collapsed, the skin bedewed with a clammy moisture, and the pulse very small and frequent. The whole scrotum was enormously swollen, oedematous, and dusky, so as to suggest to some the idea of extravasation of urine; but the perinæum was natural, and on the right side a hard, tense, tender cord, not thicker than a little finger, could be traced up into the inguinal canal. The knees were drawn up, and the abdomen was intolerant of pressure. He said that until late on the previous evening he was quite well, when during exertion he felt something give way, and he found the scrotum much enlarged. Ever since he had been in great suffering, with frequent vomiting, but no action of the bowels. He was at once taken into the theatre and placed under chloroform. An incision was made over the course of the cord, and a few touches of the knife exposed the sac. All the parts were in a state of extreme tension, and it was clear enough that the mass in the scrotum could not be returned as it was, through an unopened sac. The sac was therefore divided downwards towards the scrotum, when the contents came into view. To one they appeared at first sight like a mass of dark blood-clot, to another like a lump of liver; but it proved to be three or four coils of intestine, almost black, and so thickened by congestion and oedema as to feel almost solid; there was also a layer of congested omentum. In order to return this mass, it was necessary to divide the ring freely. The operation relieved the poor fellow of his agony, but he gradually sank and died in the course of the following night. It is interesting, however, to note that his bowels acted spontaneously and freely within a few hours of the operation.

When the abdomen was laid open after death, the portion of intestine which had been so tightly constricted for above twenty hours presented almost the same appearance as at the operation. The dark livid, almost black, and thickened coil contrasted strongly with the rest of the small intestine, which was pale and almost empty, and the lines of demarcation above and below marking the site of constriction were sharp and clear all round. There was no evidence of peritonitis. The scrotum was reduced almost to its natural size, but black as from a bruise.

LONDON HOSPITAL.

PATHOLOGICAL THEATRE.

At a recent visit to this Hospital, we obtained the following facts with reference to some instructive *post mortem* examinations, with the remarks of Dr. Sutton.

A Burn: Death from Profuse Diarrhoea of Three Hours' Duration only.—The patient was a boy aged 12 years, who had been burnt over the greater part of his left thigh, and admitted on the same day into the London Hospital, May 9th, 1870, under the care of Mr. Maunder. On the day of admission, he did not appear to be very ill—in fact, so little so, that no doubt was entertained of his recovery. There was a large superficial burn over the greater part of the thigh, but the patient did not present any well-marked signs of collapse. In the evening, he appeared to be going on very well. Mr. Robinson, the House-Surgeon, under whose care the patient was, stated that there was nothing very noticeable in his condition. On Tuesday morning, he seemed to be progressing favourably; in the afternoon, he was not so well. About 4 P.M., he was seized with sudden and profuse diarrhoea. The evacuations were frequently repeated; and at 7 P.M., he died. About half-an-hour before his death, he was in complete collapse, pulseless, with cold livid skin.

The autopsy showed the lungs of a dark-red colour almost throughout, but paler in the anterior parts. When seen in the thorax, they appeared somewhat shrunken, and lying back towards the spine. They

weighed one pound thirteen ounces. The left ventricle was contracted, but not firmly; and, on cutting across it, some fluid blood escaped. The right side of the heart was distended with blood; in other respects the heart was normal. The liver was pale, homogeneous-looking, as if something had been poured into its substance and obscured the lobular structure. The spleen was normal; the kidneys showed venous congestion, otherwise they were healthy; the intestines were, in the greater part of their course, contracted, and almost empty: these were, mostly, lying back against the spine. The intestines were not, however, packed close together against the spinal column, as is seen in death, in the cold stage of cholera. They contained a little straw-coloured thin fluid matter. Their mucous membrane was congested in parts.

In this case there are several important points. The patient appears to have died in the course of imperfect reaction. The mucous membranes were not pale throughout, nor the left ventricle firmly contracted, as is seen in collapse. The congested appearance of the intestines supports the view that he died in reaction; and the partly contracted state of the left ventricle is such as is seen in imperfect reaction. This remark on collapse appears to hold good, no matter what is its cause. The appearances described are seen in the collapse of cholera and in the collapse from fractured pelvis; in the collapse of hernia, or in the collapse coming on in Bright's disease. In advanced reaction, the left ventricle is usually flaccid, and the patients appear to die of asthenia. More or less diarrhoea is not uncommon in reaction; but a profuse diarrhoea, causing death, is rare. The discharge from the bowel in this case set in suddenly and was repeated very frequently, and in two hours and a half the patient was in collapse. The rapidity with which the system was drained of fluid acted as a shock or surprise to the system; it acted apparently on the nervous centres, and caused collapse in the same way as a severe injury to the pelvis does. This case is, however, especially interesting when we compare it with some cases of cholera. Experience has fully shown that the cases of cholera that pass quickly into deep collapse are not those that are purged the largest number of times, nor those in which the purging continues for many hours or days; but where the purging and vomiting set in suddenly and are rapidly repeated, the patients may pass in the course of two or three hours into profound collapse. It is not the discharge of a quantity of fluid from the body, prolonged over twenty-four hours, that excites the collapse, but the suddenness of the loss of even a small quantity. It is the same with hæmorrhage. Blood may slowly drain away from the patient hour by hour and not cause syncope; but fifteen or twenty ounces caused to flow quickly produces syncope.

In the case of this boy, there was nothing but the intestinal discharge to cause the collapse; no poison in the blood to which we could attribute the condition. The lungs did not weigh much less than normal, as is usually seen in cholera collapse. In one case of cholera in which death took place in the course of a few minutes from so-called "cholera sicca," although there was a large quantity of rice-water in the small intestine, the lungs did not weigh less than normal.

The lungs did not weigh much less than normal in three other patients who had died in collapse, that condition having been produced by profuse and rapidly recurring vomiting. One of them died after operation on the os uteri, and two from profuse vomiting, caused by stricture and diseased kidneys.

Chorea in association with Chronic Rheumatic Arthritis.—We also witnessed the examination of the body of a patient who had died of chorea associated with so-called rheumatic arthritis. The fingers of the left hand were turned inwards, and the metacarpo-phalangeal joints projected very much, as is seen in chronic rheumatic arthritis. One of the joints of this hand was opened; the head of the metacarpal bone was found much enlarged; the cartilage in parts was removed, and presented the appearance of so-called chronic rheumatic arthritis. There were the remains of old endocarditis, the edges of the mitral valve being thickened, and a few very recent vegetations on the aortic valves. It is instructive to notice the association of chronic rheumatic arthritis and chorea.

Caries of the Spine: Cerebro-Spinal Meningitis.—The next autopsy was on the body of a female who had been for many months in the Hospital suffering from psoas abscess. On opening the head, the arachnoid appeared greasy, and a quantity of pus was seen running along the upper part of the hemispheres; and there was a quantity of puriform-looking lymph under the pia mater at the base of the skull between the optic commissure and medulla oblongata. The brain-substance was firm, excepting the parts forming the lateral ventricles, the fornix, the septum lucidum, and the surfaces of the corpora striata and optic thalami, which were softened; and there was an excess of fluid in the lateral ventricles. The softening of these parts, and the quantity of lymph at the base of the brain beneath the pia mater, looked, at first

sight, like tubercular meningitis; but the pus seen running on the lateral parts of the hemispheres was unlike tubercular disease. The membranes were carefully examined, and no tubercle was present. As there was no disease of the brain-substance or tubercle in the membranes to account for the pus being beneath the pia mater, it was suspected that the disease had extended upwards from the spinal canal. On examining the spinal cord, a quantity of puriform lymph was seen extending from the lumbar region to the base of the brain, and the bodies of the lumbar vertebræ were in the condition known as caries, and in the substance of each psoas muscle was a collection of pus.

About two days before this patient died, she complained of great pain across the forehead, and vomited; delirium of a very active kind set in; there was retention of urine; the patient was very restless, and moved her arms and legs about a great deal. Considering the great amount of disease all around the cord, it is interesting to note that there was no marked or complete paralysis: at the same time, it must be remembered that the surface of the cord only was affected, and that its substance was not softened.

Tetanus apparently excited by an Eczematous Eruption on the Head.—The autopsy on this body showed congested lungs and venous congestion of the brain and kidneys, as is commonly seen after death from tetanus. The interesting feature of the case was that there was nothing to account for the tetanic seizures excepting the eruption on the scalp. It is always instructive to notice the various conditions which are associated with tetanus; but it is hardly necessary for us to state that eczema of the scalp must play but a very slight part in the causation of the peculiar state known as tetanus. We may further mention that a few months ago a patient died of tetanus in the Hospital about a week after parturition; and the only cause to account for the disease was the condition of the uterus, the result of child-birth.

LEEDS GENERAL INFIRMARY.

FATAL CASE OF HYDROPERICARDIUM.

(With Clinical Remarks by J. D. HEATON, M.D., F.R.C.P.)

A. B., a man of middle age, medium size, rather emaciated, pale, sallow complexion, was admitted as an in-patient, complaining of general ill-health, and specially of constant dyspnoea. He stated that, some time ago, he had had a severe cough, with some hæmoptysis and pain in the chest, but that these were now abated, and his chief complaints were debility and shortness of breath, both of which were apparent in his manner. Little more than this was elicited in the brief examination at the time of admission.

During the following night, he left his bed to visit the closet; in returning, he was observed to stagger; he was helped to bed, and the night-nurse immediately summoned the house-surgeon, who speedily arrived, but only in time to witness the death of the patient.

The *post mortem* examination was made the following afternoon. The body was rather wasted; there was no superficial oedema. In the chest, the lungs were large, and full of dark blood. As they remained *in situ*, the pericardium was overlapped by the left lung to the customary extent, an area of about an inch and a half in diameter being exposed and in contact with the thoracic walls. There was no fluid in the cavity of the thorax; the upper lobes of the lungs were partially adherent. Small patches of opaque soft tubercular matter were scattered throughout the substance of the lungs, in the lower as well as in the upper lobes. On removing the lungs, the pericardium was exposed distended with fluid; and from an accidental puncture a jet of serum was discharged with some force, due partly to the displaced lung and partly to the elasticity of the sac. It is estimated that eight or ten ounces of fluid were contained in the pericardium, perfectly limpid and almost colourless. There were no adhesions of the heart to the pericardium, nor any lymph or other products of inflammation; the surfaces of the heart and pericardium were smooth, pale, and free from any appearance of inflammatory action. The heart was small, and had a considerable deposit of fat on its surface; it was well contracted. All the valves of the heart were sound and efficient. There was no fluid in the abdominal cavity. The abdominal viscera presented no noteworthy appearances. The kidneys were carefully examined, and found free from disease.

It is evident that the immediate cause of death was the failure of action of a feeble heart, seriously encumbered by the surrounding accumulation of fluid. This dropsy of the pericardium, without any dropsical condition of other parts of the body, and without any of the appearances of inflammatory action, past or present, in the affected part, is sufficiently remarkable. An affection so exclusively local can only be attributed to a local cause; some derangement in the relation of the secretory and absorbent functions of the serous lining of the pericardium,

in which the former action gained a decided advantage over the latter, though we may hesitate to apply the term inflammation in the absence of all other customary products and appearances of inflammatory action. Most probably, also, the disease of the lungs co-operated in developing or maintaining the dropsy of the pericardium. Had the man's life not been so unexpectedly terminated, it is probable that, by careful examination, the presence of fluid in the pericardium would have been diagnosed. But the diagnosis would have been considerably embarrassed by the very unusual extent to which the pericardium, though distended with fluid, was overlapped by the left lung (being to the full as much as when the parts are in their normal condition) interfering with both the extent and the degree of the localised dulness of stroke-sound characteristic of hydropericardium. It should be observed, however, that the inspection of the body was made whilst it was lying on the back. In the upright position, doubtless a larger extent of pericardium would have been brought into contact with the anterior walls of the chest. But, after making every allowance, it is very remarkable, and worthy of especial note in relation to the question of the expediency of the operation of paracentesis of the pericardium, that so small an extent of a pericardium (containing a considerable amount of fluid sufficient to lead to a fatal result) should remain superficial and available for the insertion of a trocar without such injury to the lungs as would have seriously increased the danger of the operation. Dr. Sibson, in his *Medical Anatomy*, gives figures showing the pericardium distended with fluid displacing the left lung, and also encroaching upon the mediastinum and the right lung, and thus becoming superficial throughout a large portion of the front of the chest, so as to remove all danger of injury to the lungs by the operation of paracentesis. But this was not so in our case; the spaces between the cartilages of the fourth and fifth and of the fifth and sixth ribs, close to the margin of the sternum, would alone have afforded the opportunity of tapping the pericardium without injury to the lungs also.

It appears that, inasmuch as there are differences, in the healthy subject, in the extent to which the pericardium is overlapped by the lung, according to the robustness of the individual, the amplitude of the lungs, and the form of the chest, so the pericardium, distended with fluid, may become superficial to an extent varying not merely with the amount of fluid present, but also in relation to individual peculiarities of conformation.

In deciding whether paracentesis is a desirable treatment of a case of hydropericardium, we have to consider not merely the possibility of performing the operation with safety to the patient, but the probability of his relief, or cure, as the ultimate result. In our case, the habitual condition of the patient was not one of severe distress or of immediate danger to life; he was not confined to bed; he had walked to the Infirmary; and the dyspnoea, which was habitual, though distressing, was by no means urgent. The fatal syncope could hardly have been anticipated, so as to justify the operation to ward off its occurrence; and the attack, when it occurred, was too sudden and too rapid in its results to allow time for the operation. Supposing, however, that the patient's life had been prolonged, but that all other means had failed to effect the removal of the effusion and improve health, would the operation of tapping the pericardium have been expedient with the object of securing these results?

We must consider that the operation is never free from danger. One case in this Infirmary, under the care of Dr. Allbutt, was operated upon by our colleague, Mr. Wheelhouse, with permanent success; but in the majority of cases, I believe, the result has been unfavourable. Before deciding on the operation, the diagnosis should be very certain, both as to the nature of the affection and the possibility of operating safely for its relief. In the hands of men of the highest intelligence and of large experience, mistakes have been made. Trousseau mentions a case in which the operation was commenced, but discontinued before the pericardium was punctured, there being no fluid secretion, but a largely dilated heart. Even in respect of cases in which a successful result has been reported, more than once, a *post mortem* examination has subsequently declared that the fluid had been withdrawn from the pleural cavity and not from the pericardium—a mistake involving no danger to the patient, but illustrating the difficulty of diagnosis in some cases, and tending, if uncorrected, to lead to fallacious conclusions as to the results of operating on the pericardium. We have seen that in the case under consideration there would have been some peculiar difficulty of diagnosis, which on that ground alone might have caused hesitation as to the expediency of the operation. But, supposing all doubts of diagnosis and of the possibility of performing the operation without immediate danger to the patient to have been set aside, would it have been likely to effect a permanent removal of the fluid from the pericardium and improvement of the health and prolongation of the life of the patient? We must bear in mind that his constitution was seriously

damaged, and that there was evidence of incurable disease of the lungs in a state of progress.

Considering, then, that our patient's habitual condition was not one of immediate danger or of urgent distress; that the operation is one not free from danger; that there might have been special difficulty in this case in arriving at a satisfactory diagnosis; and that unfavourable complications, general and local, would have been adverse to any permanent benefit, I think it most probable that, had the case progressed as might have been anticipated, our treatment would have been confined to the use of medicinal remedies to promote absorption and improve the general health.

PROFESSOR FLOWER'S HUNTERIAN LECTURES ON THE COMPARATIVE ANATOMY OF THE MAMMALIA.

Delivered at the Royal College of Surgeons of England.

LECTURE XVI.—Monday, March 21st.

INSECTIVORA all have, with one exception, complete clavicles; in this respect differing from Carnivora. The exception is an animal of aquatic habits, belonging to the West Coast of Africa, in which the clavicle is absent. The clavicle in this class varies in character. In most, as the Hedgehog and Shrew, it is long and slender. In the Shrew, there is a distinct ossification between the clavicle and the acromion at the outer end; there is also a large piece of cartilage between the bone and the sternum. In the Moles and their allies, the shoulder-girdle is much modified. The scapula is long and slender, rod-like, with rudiments only of the three plates, and no trace of the acromion. The clavicle is very short, and thicker than it is long; its outer end is very broad, and articulates with the humerus, which has two articulating surfaces at the top. The manubrium sterni is greatly elongated. According to Parker, the clavicle in the Mole is nearly all formed of cartilage. Perhaps, therefore, it is a representative of the coracoid bone; or it may be a combination of the two bones, the external part being formed from membrane, and representing the clavicle.

Among the Edentata, the Great Anteater and the Manis have no clavicles; this is extraordinary, as their fore limbs are powerful. All other Edentata have well developed clavicles. In the Great Anteater, the scapula is very broad, and the coracoid process turns up and bridges over the suprascapular notch; the acromion is of moderate size. In the postspinous fossa is a ridge like a second spine; this is found in most Edentata. In the Armadillo, the scapula is powerful; the acromion is largely developed, and articulates with the head of the humerus. The clavicle is long and slender. The Manis has both the coracoid and the acromion very rudimentary. In the Cape Anteater, the scapula is nearly equally developed; and there is a strong metacromion process. In the Sloths, the coraco-scapular notch is generally bridged over. In the Two-toed Sloth the coracoid and acromion are joined at the outer end: the clavicle is long, and at its outer end is connected with the conjoined coracoid and acromion. In the Three-toed Sloth, the shoulder-girdle undergoes some curious changes. In an early stage of the animal's life, there are a long narrow acromion and a long coracoid, which meet at the extremity. As the animal grows, the long acromion shrinks, while the coracoid grows, and the clavicle is left attached to it. Afterwards, the acromion is still further reduced, and the sternal end of the clavicle becomes rudimentary.

The shoulder-girdle presents no remarkable characters in the Marsupialia. The scapula is generally of the normal form, the acromion mostly long, and the coracoid process short and hooked. Nearly all the Marsupialia have more or less well developed clavicles.

The Monotremata, in the structure of the shoulder-girdle, approach Reptiles rather than Mammalia. In the Echidna, the scapula is much curved backwards and compressed; and the division into three ridges is not at first recognisable. The spine and acromion are indistinct, and at first sight there would seem to be no suprascapular fossa; but a ridge along the outer side, to the lower part of which the triceps is attached, represents the posterior border of the mammalian scapula; the part to the outer side of this represents the infrascapular fossa, and that to the inner side the suprascapular. The subscapular fossa appears to be placed on the outside. The coracoid is large, and joins the sternum; it is also completely fused with the scapula, and the glenoid cavity is partly formed from both. To the upper border of the inner end of the coracoid bone is attached a large flat plate, projecting upwards and overlapping it on each side; this has been called the epicoracoid. In front of the epicoracoid is a T-shaped bone, formed from membrane; it is rather broad below; and on the top of this on each side lie the

clavicles, in the form of splint-shaped bones. The T-shaped bone does not quite reach the acromion processes. It has been named the interclavicle by Parker. The structure of the shoulder-girdle in the Ornithorhynchus is essentially the same; but the epicoracoids overlap in different directions.

The *Arm* consists of three principal segments: the arm or brachium; the forearm or antibrachium (consisting of two bones); and the hand. The modifications of the arm and forearm are not great. The humerus is more or less elongated, and has a rounded end for articulation with the glenoid fossa, and, in the complete form, two roughened tuberosities for the attachment of muscles. These are generally called the greater and the smaller tuberosities; but their relative proportion is not constant. The shaft has generally on one side a rough surface, sometimes very conspicuous, for the insertion of the deltoid. The lower end is more or less flattened, and expanded laterally, and has on each side processes varying in their degree of development. The terms inner and outer condyles, applied to these, are not very convenient. It is of more consequence to remember that this end of the bone supports the radius and the ulna; and its sides may be called hence radial and ulnar. The projection at the radial side is generally smaller than on the other; and a prominent ridge—sometimes named supinator or ecto-condylar—often proceeds from this to the side of the bone. The ulnar condyle is generally round, and in many animals there is a foramen above it, formed by a ridge of bone which bridges over the brachial artery and median nerve. No trace of this is, as a rule, found in Man. The part between the condyles is very thin, being hollowed out to receive the olecranon; and sometimes there is even a perforation at this spot. In Man, the ulnar articulating surface is the larger of the two, the radial being small and rounded. The relative size of these surfaces, however, varies in different Mammals. The ulna in Man is largest at the upper end, and the radius at the lower, where it is expanded and articulates with the wrist.

In Primates, the radius and ulna have much the same characters as in Man.

In Carnivora, taking the Dog as an example, the round head of the humerus is not distinct; and the deltoid ridge is large. The radius lies more in front than in Man and the Primates; and the radius and ulna are nearly fixed in the prone position, and form a hinge with the humerus. The lower end of the ulna forms part of the articulation of the wrist; the radius is of more equal size throughout than in Man.

In Ungulata, the radius is much enlarged at the upper end, and occupies the whole trochlear surface in front, the ulna lying at the back. In some, as the Horse, the ulna is quite rudimentary. There is no power of pronation or supination.

In the Elephant, the ulna is very large. This is almost the only Mammal which has the ulna larger than the radius.

The Cetacea have the humerus very short. The tuberosities are blended together; and the elbow-joint is formed of flat surfaces, allowing no motion, and sometimes, in old animals, ankylosed together.

In the Sirenia, the radius and ulna are ankylosed; and the elbow-joint somewhat resembles that of the Ungulata.

In some Moles and in the Ornithorhynchus—a burrowing animal—there is a great outgrowth of processes for the attachment of muscles.

The *Hand* commonly consists of three parts—carpus, metacarpus, and phalanges. According to Gegenbaur, the most typical form of the hand is met with in the Chelydra or Water-Tortoise. The carpus is divided into two rows of three and five bones respectively, with a central bone. These, with the bones to which they correspond in mammalian osteology, are thus arranged.

Radiale	}	First row	{	Scaphoid
Intermedium				Lunar
Ulnare				Cuneiform
Centrale	.	.	.	Central
Carpale 1	}	Second row	{	Trapezium
" 2				Trapezoid
" 3				Magnum
" 4				Unciform
" 5				(Wanting)

The unciform is perhaps a compound bone. Between the two rows in the lower vertebrata is the "os centrale" or central bone; it is found also in many Mammalia, and has been considered to be a dismembered portion of the scaphoid. In many Mammals there is almost always a small sesamoid bone, the pisiform, on the ulnar side; and sometimes also one on the other side. Frequently, also, other sesamoid bones are present in the tendons.

The number of digits never exceeds five; they consist of metacarpal bones and phalanges. Sometimes the number is reduced to two or three. The number of phalanges is never more than three, except in

the Cetacea, where they are almost indefinitely increased. The metacarpal bones (from the second to the fifth) have epiphyses at the distal end, and the phalanges and the first metacarpal bone (regarding the true nature of which there is a difference of opinion) at the proximal end. In Cetacea and some Seals, there sometimes are epiphyses at both ends of the phalanges.

In the hand of Man, the os centrale is wanting; and there is no sesamoid bone on the radial side. The structure is the same in the Gorilla and Chimpanzee; but in the Orang there is a central bone, and the radial sesamoid is present. Nearly all Simiina have a distinct central bone; but it disappears in some Lemurs. In the Climbing Monkeys, the hand is drawn out and curved, and the thumb is much reduced. The hand is more like that of Man in the lower Monkeys. In the Spider Monkeys and the Colobus, the thumb is much reduced in size. One animal of this order, a native of Madagascar, has the phalanges of very unequal size; the purpose of this, however, is not known.

DEATHS FROM CHLOROFORM.

THE table given below includes all the deaths from chloroform (with two from bichloride of methylene) which were recorded in the leading medical journals during last year and the early part of the present one. It will be seen that the number of cases (10) occurring last year is nearly

the same as the annual average (9.5) for the six preceding years: this, however, is probably a mere coincidence, for the numbers vary in the different years from 5 in 1866 to 14 in 1868.

It will be observed that the number of deaths in each year is very unequal; and especially that a very small number of cases was registered during the five years ending 1856, viz., 13 in all, while 43 deaths were registered in the five years ending 1867. Referring to this difference, the Registrar-General writes that "perhaps the cause of death in the former period may not have been so well recorded as in later years." We may add, that perhaps the number of administrations has been larger in recent years than it was soon after chloroform had been brought into use. It is, moreover, not unlikely that its extensive use in comparatively slight operations may have a good deal to do with the number of fatal cases, since, as is well known, deaths from chloroform have not unfrequently occurred in connection with minor procedures. This is well shown in the list of cases given below, where, out of a total of 17 deaths, 8 occurred from anæsthesia produced for somewhat slight, though often painful, operations. Want of care in the administration probably accounts for some of these cases. Slight operations are, more often than capital ones, performed by young surgeons, and with unskilled assistants, and there is perhaps something in the very insignificance of an occasion likely to induce false security. After all, however, it is not improbable the large mass of the number of slight operations explains the matter.

Table of Deaths from Chloroform in the United Kingdom during the last Eighteen Months.

Sex and Age.	State of General Health.	Reason for administration of chloroform.	(a) Stage at which death occurred. (b) Stage of the operation. (c) Time from commencement of inhalation.	Total Quantity of chloroform used.	Mode of administration.	Signs of death.	Means employed for restoration.	Post mortem appearances.	Date.	Place.	Authority.
..	..	....	....	..	..	....	....	"Diseased state of the heart."	Jan. 23, 1869.	St. Bartholomew's Hospital.	BRIT. MED. JOURN., 1869: Jan. 30, p. 105.
..	..	Removal of eyeball.	....	..	..	....	....	"Heart in a diseased condition."	End of Jan., 1869.	Leeds Infirmary.	BRIT. MED. JOURNAL, 1869: Jan. 30, p. 105; <i>Lancet</i> , 1, p. 177.
M. Adult.	..	Removal of dead bone from leg.	(c) Less than 3 minutes.	Quantity was "exceptionally small."	..	Pulse stopped.	....	(Death attributed to fear in great measure.)	About Feb. 20, 1869.	Sheffield: In private practice.	BRIT. MED. JOURN., 1869: Feb. 20, p. 170.
M. 50	Good health, History of previous attack of melancholia.	Castration.	(c) As the second dose was about to be applied.	20 to 30 minims in 1 dose.	Cone of lint folded once.	Pulse ceased.	Ammonia; electricity; artificial respiration (Silvester), for 1 hour.	Heart flabby and rather enlarged and covered with more fat than usual. Little seropurulent fluid in subarachnoid space	Sept. 11, 1869.	North Staffordshire Infirmary.	<i>Med. Times and Gaz.</i> , 1869: vol. II, p. 624.
M. 30	..	Case of threatened death	....	..	..	....	....	....	Sept. 4, 1869.	King's College Hospital.	BRIT. MED. JOURN., 1869: Sept. 11, p. 315.
F. 52	Weak from loss of blood some days before the operation.	Application of nitric acid.	(a) Immediately after muscular action. (c) 6 or 7 minutes.	2 drachms.	Skinner's inhaler and drop-bottle.	....	Artificial respiration (M. Hall and Silvester); "galvanism."	....	Sept. 15, 1869.	Croydon General Hospital.	BRIT. MED. JOURN., 1869: Oct. 2, p. 381.
M. 12	..	For reduction of dislocation of hip of several weeks' standing.	(b) Operation in progress (ropes used). (c) 20 minutes.	2 drachms in doses of 20-30 drops.	Handkerchief employed.	Failure of pulse.	....	....	Oct., 1869.	Near Cwm Neol, Wales: Private practice.	BRIT. MED. JOURN., 1869: Oct. 16, p. 424.
M. 19	(Had taken chloroform before.)	For a slight but painful operation.	(a) Complete insensibility. (b) Operation almost completed.	2 drachms.	Wool and a handkerchief.	Failure of pulse. Extreme pallor. (He was "reclining" in a chair, and not recumbent.)	Sherry and "other means".	Weak heart, loaded with fat; right side filled with blood.	Nov. 9, 1869.	Oxford: Private practice.	BRIT. MED. JOURN., 1869: Nov. 13, p. 542.
F. 39	Anæmic.	For removal of malignant growths from lower jaw.	(a) "Very moderately" under influence of chloroform. (b) 3d application of the galvanic cautery wire. (c) 13 minutes.	..	Skinner's inhaler.	"Instantaneously expired."	Electricity; mouth-to-mouth insufflation; Silvester's method of artificial respiration.	Heart empty; lungs emphysematous; a large goitre.	? Early in Nov., 1869.	West Kent General Hospital.	BRIT. MED. JOURN., 1869: Dec. 11, p. 643.
M. 14	(Had taken chloroform before.)	For removal of necrosed bone from tibia.	(a) Had become insensible. (b) Operation had been commenced.	..	..	Vomited for one or two min.; became livid; breathing ceased; pulse stopped.	"The usual measures."	No "peculiarity, excepting enlargement of the liver".	Dec. 23, 1869.	Lincoln County Hospital.	BRIT. MED. JOURN., 1870: Jan. 8, p. 39.
M. 26	"Apparently in good general health." (Had taken chloroform before.)	For exploration of sinus in thigh leading to carious bone (from injury 7 years before).	(a) "Not quite insensible; muttering and struggling." (b) Operation in progress.	1 drachm.	A piece of lint.	Respiration ceased; face became livid. (Nothing said about pulse.)	Artificial respiration (Silvester's); "galvanic battery"; tongue pulled forward; venesection.	Heart hypertrophied, and its fibres in state of granular degeneration.	Dec. 29, 1869.	Middlesex Hospital.	BRIT. MED. JOURN., 1870: Jan. 1, p. 33.

Table of Deaths from Chloroform in the United Kingdom (concluded).

Sex and Age.	State of General Health.	Reason for administration of chloroform.	(a) Stage of anæsthesia at which death occurred. (b) Stage of operation. (c) Time from commencement of inhalation.	Total quantity of chloroform used.	Mode of administration.	Sign of death.	Means of restoration employed.	Post mortem appearances.	Date.	Place.	Authority.
M. 68	..	Amputation of foot; for diseased bone.	(a) Became suddenly rigid just before death.	Scarcely one drachm.	..	Pulse stopped.	"Every exertion", artificial respiration for nearly an hour.	....	Jan. 11, 1870.	York County Hospital.	BRIT. MED. JOURN., 1870: Jan. 22, p. 89.
F. 22	Thin and emaciated.	Ovariectomy.	(a) Probably almost comatose. (b) Hand being introduced into abdomen.	..	Dropped on a single layer of towel laid over nose & mouth.	Vomiting, dilatation of pupils, pallor, stoppage of respiration.	Artificial respiration; tongue pulled forward.	"No disease could be found in the head or chest or elsewhere."	Feb. 5, 1870.	Alloa Village Hospital. (Sir J. Simpson administered chloroform.)	BRIT. MED. JOURN., 1870: Feb. 26, p. 199.
F. 30	(Had had chloroform a week before, but it did not take effect.)	Extraction of Teeth.	(b) The third tooth was being extracted.	..	..	....	....	....	March 19, 1870.	Accrington: In private practice.	BRIT. MED. JOURN., 1870: April 2, p. 340.
M. Elderly.	(Had taken chloroform not long before.)	..	(a) Had been struggling just before. Inhaler was not on his face at the moment.	"Very little."	..	Pulse stopped (respiration continued for several breaths).	"All the usual means."	Heart thin, empty, and flaccid on left side; loaded with adipose tissue and in state of fatty degeneration.	April 12, 1870.	Ophthalmic Hospital, Moorfields.	BRIT. MED. JOURN., 1870: April 30, p. 441.
A 'lad.'	Strumous and very anæmic (stimulants given before).	Amputation at Thigh.	(a) Operation just completed. (c) Inhaler had been removed 2 minutes.	..	Clover's apparatus.	Faintness and sickness and stoppage of pulse.	....	....	April 13, 1870.	University College Hospital.	BRIT. MED. JOURN., 1870: April 30, p. 442.
M. 42	Good muscular development, but weak from pain and sleeplessness.	Soundings for Stone.	(a) Complete anæsthesia: stertor had passed off. (b) Sound being introduced. (c) Seven or eight minutes (chloroform had been removed for about 2 minutes).	Only at rate of 30 min. to 1000 cubic feet of air.	Clover's apparatus.	Stoppage of respiration and pulse at same time. Livid pallor.	Artificial respiration (Silvester) for 20 minutes; electricity.	Heart "relaxed, but not distended"; loaded with adipose tissue and in state of fatty degeneration. Lungs normal.	May 3, 1870.	University College Hospital.	BRIT. MED. JOURN., 1870: May 14, p. 493.

Deaths from Bichloride of Methylene.

M. 40	"A healthy-looking man."	Double Iridectomy.	(b) Operation completed 3 minutes before. (c) About 5 minutes.	1 drachm.	Methylene inhaler.	Respiration shallow; then pulse stopped. Had been very livid.	Turned on the left side; electricity; artificial respiration (Silvester) for 1 hour.	Left ventricle empty and contracted. Lungs congested.	April 25, 1870.	Guy's Hospital.	BRIT. MED. JOURN., 1870: May 7, p. 460.
M. 39	Very weak, anæmic.	Excision of Upper Jaw.	(c) About 4 minutes.	1½ drachm.	Methylene inhaler.	Countenance changed; pulse stopped.	Horizontal position; artificial respiration; "galvanism."	....	Oct. 16, 1869.	Charing Cross Hospital.	BRIT. MED. JOURN., 1869: Oct. 23, p. 436.

In three severe operations (operation on lower jaw, ovariectomy, amputation at thigh), the patients were previously very weak and emaciated, and were in a bad condition for undergoing any shock either with or without chloroform. In none of these did death occur until an advanced period of the operation; and in one not until it was "just completed", while all of them had been under the influence of chloroform for a good many minutes.

It is, we believe, somewhat commonly suspected that a high temperature has some influence in the production of chloroform-syncope. From the above table of cases, we should be inclined to say that mere high temperature has not necessarily any prejudicial effect, since no deaths from chloroform were recorded in the leading medical journals during the hottest period of the year, from February to September. It is just possible that the continuation of unusual heat with a very high or a very low degree of atmospheric moisture may have some influence. Nothing less than a laborious comparison of temperature with degree of moisture in a very large number of cases would furnish any reliable evidence in this direction. It is however certain, whatever may be the explanation, that batches of chloroform deaths do sometimes occur during the prevalence of a temperature higher than usual at that time of the year. For instance, no less than three deaths and one *threatened* death were recorded last September, when the weather was very hot indeed; and two deaths occurred on consecutive days in April this year. None have, we believe, occurred during the last two months.

We are indebted to the courtesy of the Registrar-General for the following tables, shewing the mortality from chloroform (registered as such) during the past six years and also during a five-years' period, 1852-6. It must be observed that the interval between 1856 and 1863 is not included, the data not being forthcoming. (See next column.)

ENGLAND.—Deaths Registered at different Ages from Chloroform in the Years 1852-56, and 1863-68.

Years.	All Ages.	AGES AT DEATH.—Males.										
		Under 5 Years.	5	10	15	25	35	45	55	65	75	85
5 years, 1852-56	8	1	..	..	2	..	2	3	..	..	..	..
1863	5	..	..	..	..	2	3	..	..	..	..	..
1864	8	..	..	..	3	2	1	..	1	..	..	..
1865	12	1	..	3	..	3	3	2	..	..	..	..
1866	4	..	..	1	..	..	1	2	..	..	..	..
1867	6	..	1	..	3	1	1	..	..	..	..	..
1868	12	..	..	..	2	2	4	4	..	..	..	..
Totals	55	2	1	4	10	10	15	11	1	1	..	..

Years.	All Ages.	AGES AT DEATH.—Females.										
		Under 5 Years.	5	10	15	25	35	45	55	65	75	85
5 years, 1852-56	5	..	..	..	1	2	1	1	..	..	..	..
1863	5	1	..	..	3	1	..	..	..	..	..	..
1864	1	..	..	..	..	..	1	..	..	..	..	..
1865	..	..	..	..	..	..	..	..	..	..	..	..
1866	1	..	..	..	1	..	..	..	..	..	..	..
1867	1	..	1	..	..	..	..	..	..	..	..	..
1868	2	..	..	..	..	2	..	..	..	..	..	..
Totals	15	1	1	..	5	5	2	1	..	..	..	..
Total M. & F.	70	3	2	4	15	15	17	12	1	1	..	..

Annual Average from 1863 to 1868—Males and Females (all ages), 9.5.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 2ND, 1870.

THE GOVERNMENT BILL AS IT WAS AND AS IT IS.

THE great aspiration of medical reformers for the last thirty years or more has been, that there shall be one portal of entrance to the profession; or, at least, that there shall be one portal in each of the three kingdoms, in place of the many now existing. When the Lord President of the Privy Council introduced the Medical Bill at present before the House of Lords, there was a general feeling of satisfaction that what had been so long desired was at last likely to be attained—that for each division of the kingdom there would be one Examining Board, and that none of the Universities or Medical Corporations would be allowed to confer their diplomas or degrees in medicine except on those who had passed the examination of one of the Central Boards. At any rate, if the proposal to form three Boards did not altogether come up to the ideas of those earnest reformers who regard a single Board for the whole United Kingdom as the only reform worth having, we believe that the Government plan, as developed in the original Bill, was regarded as a great step in advance, in so far as it reduced the multiplicity of sources of licence to practise.

Since, however, the second reading of the Bill, and the introduction into it of certain “amendments,” there has been a change of opinion as to its merits in respect to the important point to which we have referred. It is now said, that by one of these amendments the Bill has been deprived of its most important feature—that it has been emasculated. Let us see how the matter stands.

In the Bill as originally introduced, one of the clauses—the eighteenth—was as follows.

“After the date fixed for the commencement of the examinations by any Medical Examining Board under this Act, none of the medical authorities shall grant any of the qualifications mentioned in Schedule (A) to the principal Act as amended by this Act or by any of the Acts mentioned in the first schedule to this Act, *except to persons registered or qualified to be registered under this Act.*”

That is to say, no College of Physicians or Surgeons was to be allowed to give a diploma, no University to give a degree, in medicine or surgery, unless the candidate had passed the examinations of one of the Boards provided for in the Bill. This clause is omitted in the Bill as “amended on report”. How this has been brought about, we do not care to inquire very minutely. We know that the Medical Council, in its discussion on the Bill, passed by a majority a vote in favour of allowing the Universities to retain the privilege of giving degrees in medicine to those who might wish to possess them for merely ornamental purposes; negating at the same time a proposal that the Medical Corporations should be included in the same category. The Lord President has, however, gone further than the Council intended, and has—under the influence of some of the Universities, it is said—removed the clause altogether, so that there is no prohibition against any of the Universi-

ties or Medical Corporations granting their degrees or diplomas altogether irrespectively of the Central Examination.

Against this alteration of the Bill the Colleges of Physicians and Surgeons in Edinburgh, and the Glasgow Faculty of Physicians and Surgeons, have energetically protested; and, at a meeting of Fellows and Members of the Royal College of Surgeons of England, convened by the President and held in the theatre of the College on Tuesday last, it was unanimously resolved to petition Parliament for the restoration of the eighteenth clause.

Is the matter really of such importance as to call for energetic remonstrance, or for active opposition to the passing of the Bill, unless the change objected to be not persisted in? In answering this question, there is one special aspect in which medical legislation must be regarded; and that is, as it affects the interests of the public.

Is it for the public good, or at least not likely to be detrimental to the public interest, that the Universities should be allowed to grant their degrees in medicine, and the Medical Corporations their diplomas and licences, to persons whose fitness to practise medicine has not been approved by the Central Boards?

Let us first take the Universities. Those who would retain for the Universities the privilege of granting degrees without reference to licence to practise, may argue that it would be an undue interference with the rights of Universities to deprive them of the power of granting degrees in any branch of science, theoretical or practical, that they may think proper; that the possession of a degree is a mere honorary distinction; and that a degree of M.B. or M.D. would no more give a title to practise medicine, and would be no more likely to be used for this purpose, than a degree in laws of the University of London would entitle its holder to practise as a barrister in our courts of law, or lead to his being regarded as qualified to plead. It is also openly argued that there are, now and then, men who desire degrees as mere titles, and who intend to make no use whatever of them as medical practitioners. Of such, we have familiar examples in Dr. Sharpey, Dr. Miller, the Reverend Dr. Haughton, and, we believe, Dr. Allen Thomson and Dr. Redfern—men whom the medical profession delights to recognise as belonging to it, both for their high character and for what they have done towards promoting the knowledge of the sciences accessory to medicine. It would be, it is argued, a great pity that such men should be debarred from taking degrees submitted to a statutory proof of their fitness to do that which they had no intention of doing.

Now these are very plausible arguments; and they would be quite valid if we could be sure that the idea of a degree in medicine as a mere mark of scientific attainment would be thoroughly dissevered from the idea of the same degree indicating a qualification to practise. Here lies the danger; which perhaps is greater in Scotland and Ireland, where the ideas of University degrees and of qualification to practise are very intimately and extensively connected, than in England, where comparatively few of our practitioners take degrees. The public will not make the distinction. A man with M.D. after his name will, in accordance with the traditional feeling which has become part of the nature of the British public, be looked on as a “doctor” and called on to treat disease; and although we willingly admit that a large proportion of those holding the mere scientific degree would not hesitate to disclaim any pretensions to be recognised as practitioners of medicine, there would be no guarantee that all would follow that honourable course.

As for the Corporations, the danger with regard to them is perhaps even greater: for their special traditional attribute is the function of furnishing a supply of persons qualified to practise medicine and surgery. “Mr. A. is a Member of the College of Surgeons”; “Mr. B. is a Licentiate of the College of Physicians”; says the undiscerning public, and takes it for granted that they are qualified to practise medicine and surgery. The number of those who would take a diploma from one of our Colleges for the mere sake of the title must, we think, be very small; the great danger is that, unless some such restriction be

imposed as existed in the eighteenth clause, more than a few may content themselves with the diplomas and licences of the Colleges, and practise with them irrespectively of the Central Boards and of the Medical Council.

If, then, the Bill be allowed to pass without the eighteenth clause, or one equivalent to it; if the Universities and Corporations be allowed to go on giving their degrees and diplomas as now; the evil which the Bill is intended to remedy will be perpetuated, and even aggravated. There will be three additional entrances to the profession—twenty-two in all—and the difficulty will be even greater than it is now, in deciding on their relative merits. There will be, it is to be feared, a multiplication of gates like those of Hades, as described by the ancient poets.

“Sleep gives his name to portals twain;
One all of horn, they say,
Through which authentic spectres gain
Quick exit into day,
And one which bright with ivory gleams,
Whence Pluto sends delusive dreams.”

The public will not always perceive the difference between the “authentic spectres” coming from the dull horny portal of the Central Board, and the “delusive dreams” issuing from the “bright ivory gates” of some College or University.

But, it may be said, the examinations of the Universities and Colleges will be as good tests of qualification to practise as those of the Central Boards. This is beside the question. What is wanted is, that there shall be *one way*—or, at least, one way in each division of the kingdom—by which candidates shall enter the medical profession. If the examination of the Colleges or Universities be as good as or better than those of the Central Boards, well: but if they are to be recognised as giving *per se* titles to practise, the addition of three new boards, in place of being a boon, would be an evil. We want to get rid of the multiplicity of portals, and of the attendant scandal which we hear now and then, as to their allowing men to pass with imperfect professional knowledge for the sake of the fees. The object is, to insure to the public a supply of properly qualified practitioners, of none of whom it shall be said that they have entered by one gate because it is easier of access than another; and if Government be not prepared to carry out the plan of single portals, it would do better to leave medical legislation alone altogether. We are glad to see the Medical Corporations coming forward in support of the great principle of medical reform which we have striven to advocate; and would hope that the Universities will be sufficiently patriotic to forego, for the sake of removing a notorious evil, a cherished right which every one would willingly allow them to retain if it were not attended with danger to the public good.

THE ASSOCIATION ANNUAL MUSEUM.

We have a few words to say about the annual exhibition of instruments, drawings, specimens, etc., which will take place at Newcastle during the meetings of the Association. Excellent arrangements for its success have been made by those already on the spot, and no pains will be spared to make it highly instructive and useful. We have to urge upon intending exhibitors that they will kindly do their share by sending in their subjects, etc., *early*, and by furnishing with them good, concise descriptions. The usefulness of a museum is more than doubled, if the specimens are made easily comprehensible by appended descriptions. Our Annual Museum has now reached its third year; and, although both the previous ones gave, we believe, considerable satisfaction, both were capable of great improvement. Especially was the want of descriptions and of a descriptive catalogue much felt. We purpose this year to mention in the JOURNAL beforehand some of the more important subjects likely to be exhibited. In doing this, we have the double object of giving information to intending visitors as to what they should look out for, and not improbably of inducing others to bring forward parallel subjects for contrast or comparison. A specimen, which isolated is of but little value, may become of great worth when seen with other more or less similar ones.

The following is an enumeration of the principal classes of objects contemplated.

1. New Instruments and Appliances in Medicine, Surgery, and Midwifery.
2. New Drugs and Preparations.
3. New Books, English and Foreign.
4. Pathological, Physiological, Anatomical, and Microscopical Specimens.
5. Photographs, Drawings, Casts, and Models of Pathological Specimens.
6. Models of New Inventions relating to Public Health, etc.
7. New Preparations of Food, etc.

Although the Museum is annual, it is by no means intended to exclude from it all objects which are not novelties of the year. On the contrary, anything which has not been shown before, and which is likely to present features of interest to visitors, will be admissible.

In reference to pathological specimens, the experience of past years was not very favourable to the sending of wet preparations, which often carry badly, and are sometimes difficult of demonstration. Casts, drawings, and photographs are more suitable. Respecting photographs and casts, the hint may be permitted, that the Museum offers an excellent opportunity for exchange, if duplicates are brought.

The rooms provided are, we understand, ample. Dr. Banning of Gateshead has kindly undertaken the duties of Secretary to the “Sub-committee in charge of the Museum”, and to him all communications may be addressed. We may add, for the convenience of London exhibitors, that we shall be glad to take charge of any *small* packages at the office of the JOURNAL. Large ones must be sent direct to the Newcastle Infirmary.

The following are amongst some of the objects of special interest which, with many others, have already been promised.

A specimen of a Transverse Fracture of the Patella united by Bone; with history of the accident, symptoms, and mode of treatment.*

The last Fasciculus of Hebra's Atlas of Portraits of Skin-Diseases (described in this JOURNAL two months ago).

Some original drawings of various skin-diseases, in preparation for the Atlas of the New Sydenham Society.

A wax cast by Tuson, illustrating the disease described by M. Bazin under the name of Hydroa.

Illustrations of Contagious Porrigo after Vaccination.

A series of original drawings from the Ophthalmoscope, illustrating Neuritis from various causes, Choroiditis, and other diseases.

Wax Cast by Tuson, showing extreme Cystic Disease of the Kidney.

Photographs of Leucoderma.

Portraits showing various forms of Xanthelasma.

Numerous drawings by Burgess, illustrating various diseases of the skin.

We shall make further announcements next week, and shall be glad to receive any suggestions.

PROFESSOR ROKITANSKY of Vienna has been elected a Corresponding Member of the Academy of Sciences in Paris.

THE memorial stone of the new Infirmary at Kidderminster was laid by the Countess of Dudley on Tuesday.

THE authorities at the War Department intend to break up the military lunatic hospital at Fort Pitt, Chatham; the patients being transferred to Netley Hospital.

PROFESSOR GIUSEPPE BARUFFI, municipal councillor in Turin, has offered a prize, consisting of a gold medal of the value of £20, to the author of the treatise on popular hygiene which shall best fulfil the conditions laid down. The work is not to exceed in size 200 or 300 small octavo pages.

* It would be of great interest if all the specimens of bony union after transverse fracture of this bone could be collected together for comparison.

THE Riberi Prize of 1000 *lire* (£40) for 1871, will be awarded for the best essay on Vaccination and Revaccination, with special reference to the question whether, in the present state of science and in view of the results of observation, the present ordinary method of vaccination ought to be abandoned altogether in favour of that from the animal.

DR. MARION SIMS.

THIS distinguished obstetrician, who is now practising in Paris, shortly returns for good to New York.

THE MEDICAL OFFICERS' SUPERANNUATION BILL.

THIS Bill was read a third time in the House of Commons on Wednesday last.

APOTHECARIES' HALL.

AT the competitive examination held on June 15th, for the prizes in Botany annually given to medical students by the Society of Apothecaries, the successful candidates were: 1. Gerald Bomford of King's College, a gold medal; 2. Andrew Duncan of King's College, a silver medal and a book.

AMUSEMENTS FOR CHILDREN IN HOSPITALS.

AN appeal to the old and young ladies and gentlemen of Wolverhampton, for toys, books, etc., for the inmates of the Children's Hospital, appears in the *Wolverhampton Chronicle* in the fanciful guise of a petition from the children. We have no doubt it will be responded to; and we should like to see the principle extended to other kindred institutions. The curative influence of amusements for children has hitherto been too much neglected.

WESTERN MEDICAL AND SURGICAL SOCIETY.

AT the annual meeting held on June 3rd, the following gentlemen were elected officers for the ensuing session. *President*: G. T. Fincham, M.D. *Vice-Presidents*: C. Hunter, Esq.; T. Holmes, Esq.; J. Rouse, Esq.; J. T. Mould, Esq.; *Council*: E. L. Webb, Esq.; G. Pollock, Esq.; C. St. John, Esq.; H. Mackintosh, M.D.; A. G. Elkington, Esq.; F. Hatchard, Esq.; F. Egan, L.K.Q.C.P.; T. Godrich, L.R.C.P.; W. Martyn, M.D.; R. B. Painter, M.D.; Foxon Foxon, Esq.; T. Keen, Esq. *Treasurer*: M. Baines, M.D. *Honorary Librarian*: A. Godwin, M.D. *Honorary Secretaries*: W. Milner, Esq.; A. Fyfe, M.D. *Auditors*: R. Risdon, Esq.; and J. Colebrooke, Esq.

THE PHARMACEUTICAL JOURNAL.

WE understand that several candidates have been selected by the Council of the Pharmaceutical Society out of the numerous applicants for the Editorship of the new Journal. The names of the selected candidates are Dr. Paul, Mr. Watt, Mr. Redwood, Mr. Edwards of Montreal, and Dr. Thompson Dickson. We understand that the choice will fall on either Dr. Paul, whose contributions to scientific literature are so well known, or on Mr. Redwood.

ALLEGED DEATH FROM VACCINATION.

A CASE has occurred at Leeds in which a young child died about three weeks after it had been vaccinated. A Mr. Payne, who was called in to attend it a few days before death, certified that the child had died "from impure vaccine matter, abscess, and convulsions." In consequence of this certificate, the Registrar-General ordered the body to be exhumed and a *post mortem* examination to be made. Messrs. Scattergood and Wheelhouse, who made the examination, found that death had not in any way proceeded from the vaccination, but that abscess in the right breast had been caused by necrosis of the clavicle. This case is important, for the case would, if the erroneous certificate had been allowed to pass unchallenged, have furnished material for much blustering on the part of the anti-vaccinators. Mr. Payne is, we are happy to say, not on the *Medical Register*, having, as he cheerfully informed the coroner, been "struck off" the list about ten years ago; but then "it was no benefit to him"! We should think not. Mr. Payne has two American qualifications; but in this country "they would call

him a herbalist". The coroner was of opinion that Mr. Payne was not authorised to give such a certificate as he had done; if so, can he be made to feel that he has exceeded the law?

THE MOTION OF THE WINGS OF BIRDS.

THE remarkable discovery made by Dr. Pettigrew in 1867, that the wings of all animals are twisted upon themselves and that they twist and untwist during their action, has quite recently been confirmed by Professor Marey of the College of France. This gentleman has experimentally demonstrated the character of the air-path of the vibrating wing, and has shown, as Dr. Pettigrew had already proved, that the wing during its oscillations describes a figure of 8 track, which, in horizontal motion becomes converted into a wave-track. Dr. Pettigrew's discovery and Professor Marey's demonstration are of great interest to aeronauts.

POOR LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual meeting of this important Association will be held at the Freemasons' Tavern, Great Queen Street, on Wednesday, July 13th, at 5 P.M. After the completion of the necessary business, the President will deliver his address, which, it is expected, will be of much public interest. As considerable success has attended the spirited and energetic course of action which this Association has pursued (of which the recent interesting debate and division in the House of Commons on the Superannuation Bill is a signal proof), it is earnestly hoped that Poor-law medical officers generally will make an effort to attend the meeting. We also trust that members of the profession, not connected with the Poor-law Service, will attend the meeting, and thereby aid the President and Council in their desire to treat with becoming consideration and respect those members of the legislature who have signified their intention to be present, and to dine with the Association. Gentlemen who intend to be present are requested to apply, on or before Saturday, July 9th, to J. Norton, Esq., 38, John Street, Bedford Row; or to Benson Baker, Esq., 42, Grove Road, Regent's Park, Honorary Secretaries of the Dinner Committee.

ORGANIC MATTER IN AERATED WATERS.

SOME time ago (BRITISH MEDICAL JOURNAL, No. 412, p. 552, November, 1868) when reporting on the condition of the different kinds of aerated waters to be met with in commerce, we called attention to the necessity of employing "water extremely free from organic matter." We are glad to find that manufacturers are beginning to appreciate the importance of this, for we learn that at the last meeting of the Chemical Society Professor Heisch mentioned the case of a manufacturer of lemonade "who suddenly found it impossible to make lemonade that would keep," and whose water was found to be organically impure. In our report, just referred to, we not only showed that water giving slight indications of organic impurity, when tested by Wanklyn's method, becomes *very* impure on aëration, but we also described the mode of treatment by which impure water may be so far deprived of organic impurity as to become available for this branch of manufacture. Of course the prejudicial influence of organic impurity in water would be more serious in the case of aerated water like lemonade, in the manufacture of which sugar is employed; for, if the organic impurity in the water originates from sewage pollution or some similar contamination, there may be reason to suspect the presence of germs capable of acting the part of a ferment. It would be sufficiently mischievous if this action were exercised upon the sugar in lemonade, but it would be infinitely more mischievous if it were exercised upon the stomachs of those who consume aerated waters. It is singular that so long after this matter has been insisted upon in the pages of this JOURNAL it should now be reproduced at the Chemical Society as the result of an investigation and treated as an apparent novelty. Nevertheless we are glad to perceive that the results confirm those we had already made known, and add additional weight to the advice we gave to makers of aerated waters.

THE GERM-THEORY OF DISEASE.

Nature of this week contains an article by Dr. H. Charlton Bastian, F.R.S., entitled "Facts and Reasonings concerning the Heterogeneous Evolution of Living Things". This is, we believe, in substance the paper which was to have been read before the Royal Society during its last session, had time allowed; and contains the experimental evidence, in addition to details of microscopical observation, to which Dr. Bastian referred, in his late controversy with Professor Tyndall, as supporting the heterogeneous theory of evolution, and attacking the present aspect of the germ-theory of disease. The paper is one of great interest to medical readers.

CRUELTY TO THE LOWER ANIMALS.

Dr. T. SPENCER COBBOLD, F.R.S., delivered a lecture on this subject on Sunday evening, at the St. George's Hall, London. It was part of the series to which Mr. Moody contributed recently his address on the Prevention of Infectious Diseases, illustrated by the sanitary measures enforced in the city of Bristol. Mr. Glaisher, Professors Forbes and Blackie, and others, have taken part in the series of them delivered during the last three months. Dr. Cobbold demanded for the higher sentient forms of organic life a regard and consideration second only to that which should be extended to man himself. He undertook to demonstrate that the capacity for realising pain and pleasure is in strict accordance with the degree of development of the nervous system. This law he believed to have operated through all past ages. He would limit prosecutions to cases of sheer brutality or of malicious motive, but lamented the moral and intellectual degradation implied in the hideous prevalence of cruelty.

THE RAILWAY ACCIDENT AT NEWARK.

WE have been kindly favoured by Mr. Appleby, the Resident Medical Officer to the Hospital, with the following details of the injuries received at the Newark railway accident. In all, twenty-seven persons were taken to the Hospital, fourteen of whom were found to be already dead. These were not minutely examined, the attention of the medical staff being wholly taken up by the necessities of the living; but many of them were so frightfully smashed that it was impossible to undress them; and several appeared to have died from the results of severe scalds. The engine-driver was most mutilated, the top part of the cranium being completely carried away, and his body reduced to a state of jelly. The following are details of the injuries received by those still living when admitted into the Hospital. Walter Haddock: Partially insensible; symptoms of concussion; pain in the back; the body very tender on pressure; injury to the knee; etc. Thomas Marshall: Severe bruises on the head and body; serious scalp-wound dividing the temporal artery; fracture of the right tibia; compound dislocation of the left knee; amputation; never rallied; died the same day at 11.30 P.M. John Cook: Dislocation of the femur upon the dorsum ilii; bruised about head and body; doing well. Christopher Halford: Severely bruised about the head, body, and legs, fracture of left radius, and lacerated wound of left ankle. Joseph Watson: Left leg torn off at the middle of thigh; amputated, but sank a few hours afterwards. Hannah Haddock: Very severe lacerated wounds of scalp and face; periosteum removed in several places, and wounds filled with gravel, etc.; compound fracture of left femur, with extensive injury to soft parts; much wounded by glass and splinters of wood about the body; died the same day at 3 P.M. William Hilton: Severe bruises in different parts of the body; shock to nervous system. Thomas Groves: Severe contused wound below the knee. William Shuttleworth: Injury to both legs; no wound; sensation and motion partially gone in one leg. Mary Ann Anderton: Severe contused wound on left eye and ear; much bruised about the arms, body, and back; only able to move legs very slightly. Emily Grove: Severe lacerated wound of the right leg; the calf nearly stripped off. Jane Brown: Injury to the back and pelvis; no fracture; only slightly able to use her legs. Ann Burnett: Bruises about the arms, chest, and legs.

THE HEALTH OF THE ARMY.

THE annual departmental report of the medical condition of the army for the year 1868, indicates that the admissions into hospital of the troops serving in the United Kingdom were in the ratio of 894, the deaths of 10.90, and the mean daily sick of 43.33 per 1000 of mean strength. The admissions into hospital have been 69 per 1000 below, and the deaths 1.56 per 1000 above, the average of the preceding eight years. The reduction in the former has been owing chiefly to diminution in "contagious" or enthetic diseases, and in those of the respiratory system. The slight increase of deaths is due to diseases of the circulation, and digestion, and to accidents.

DEATH OF SIR JAMES CLARK, BART.

THE profession will hear with regret that this distinguished physician died at his residence at Bagshot Park, Surrey, on Wednesday, at the advanced age of eighty-two. Sir James had been failing in health for some time. The deceased baronet was born at Cullen, Banffshire, in December 1788, and was educated for the profession at the Universities of Aberdeen and Edinburgh, and graduated at the latter University. He first entered the navy as assistant-surgeon, but left the service a few years afterwards. He then settled in Rome as a physician, where he practised for some years, and from which he dates his *Medical Notes on Climate*. He was afterwards appointed Physician to the Princess Victoria, and to Prince Leopold of Saxe Coburg, when that prince came to England. In 1829, he published his work *On the Influence of Climate in the Prevention and Cure of Chronic Diseases*, and was then living in London. In 1835, he published a *Treatise on Pulmonary Consumption, comprehending an Inquiry into the Causes, Nature, Prevention, and Treatment of Tuberculous and Scrofulous Diseases in General*. He wrote the article "Climate" in the *Cyclopædia of Practical Medicine*, and those on "Change of Air" and "Tubercular Phthisis". We shall defer a more detailed notice until next week, when we hope at the same time to present our readers with a portrait of the late baronet.

BABY-FARMING.

BABY-FARMING may for the moment, so far as we are concerned, be advantageously left in the hands of the police. They are always well disposed to follow up a case such as they have now in hand, in which the details are of a character to attract attention; and to win laudatory notice of their activity. When the full results of their investigation are worked out, it will be within our province to fall back upon the information which we collected two years since, with the assistance of Dr. Wiltshire, Mr. Curgenvin, Mr. Benson Baker, and others; and point out the remedies. But for political changes, the Duke of Richmond was prepared to have then acted upon our information, and adopted the proposed remedies of registration of baby-farmers and supervision of the farms. We are glad to see that the principal journals, in writing of this subject recently, advocate these measures; and, although nothing can be done this year, there is little doubt but that the forthcoming session will see appropriate legislative action taken in that direction.

PROTECTION FROM SMALL-POX.

THE published returns of vaccination cannot be read without some perplexity. It appears from a return issued by the Poor-law Board, that, in the parochial year 1868-69, 529,568 persons were vaccinated by the public vaccinators in England and Wales, 524,143 successfully. In 1859-60, the number successfully vaccinated was equal to 70.5 per cent. of the number of registered births in the year; in 1860-61, it was 62.1 per cent.; in 1861-62, 62.3 per cent.; in 1862-63, 89.7 per cent.; in 1863-64, 71.6 per cent.; in 1864-65, 77.9 per cent.; in 1865-66, 61.9 per cent.; in 1866-67, 64 per cent.; in 1867-68, 66.5 per cent.; in 1868-69, 63.7 per cent. These statements do not include vaccinations in private practice. Now, it will be observed that not only is there no improvement here, but an absolute falling off; and, as this proportion of vaccinations has not proved sufficient heretofore to protect us from

local epidemics of small-pox, causing an annual mortality rising as high as 4,000 persons, we must conclude that the protection of the metropolis during 1868-69 was imperfect. This period, however, not only included the results of persevering efforts of the Privy Council inspectors, but it was over a part of the period of action of the Compulsory Vaccination Act. It is probable that, when this Act comes more fully into operation, we shall see better results. The difficulties as to changes of district have interfered to prevent its being brought at once into work. We have good hopes for the future.

HOSPITAL FOR DISEASES OF THE THROAT.

THE biennial festival of this Hospital was held on Monday evening at the Freemasons' Tavern; the Right Hon. the Earl of Powis presiding. The subscriptions announced amounted to upwards of one thousand guineas.

SMALL-POX IN FRANCE.

THE epidemic of small-pox appears to have lately been on the increase in various parts of France. At Strasbourg, on May 1st, there were 9 small-pox patients in the hospital; 63 were admitted during the month. Of the 72, 27 were discharged and 10 died. On the 1st June, there were 35 patients in hospital; and on the 7th, 32; 18 having been admitted during the week. The *Gazette Médicale de Strasbourg* says that vaccination has been greatly neglected there for many years. At Bordeaux, there were 193 deaths from small-pox during May, being an increase of 105 over the preceding month. Revaccination has, in consequence, been extensively practised there.

BENEVOLENT ACTS OF THE KING OF ITALY.

WE learn from *l'Imparziale* that His Majesty the King of Italy has expressed his intention of devoting the sum of 45,000 *lire* (£18,000), collected for the purpose of offering him a national crown, to the foundation of a hospital for the blind in Florence—an institution of which the want has long been felt. King Victor Emmanuel has also presented 5000 *lire* (£200) to the Ophthalmic and Children's Hospital founded in Turin by Professor Sperino, and 3000 *lire* (£120) for the use of children in the elementary schools in Florence whom it may be necessary to send to the marine hospital at Viareggio.

THE ALEXANDER MEMORIAL PRIZE.

IT will be remembered that the labours of Maclean and Parkes have shown that there is an excess of heart-disease in the army, and that it is due in large measure to preventable causes. The Alexander Memorial Prize has just been awarded to Assistant-Surgeon H. B. R. Myers, Coldstream Guards, for the best essay on this subject. Mr. Myers himself has previously made some valuable contributions to our knowledge on this subject. His remarks on the prevalence of aortic aneurism in the army before the Pathological Society in February 1867, which are printed in the last volume of the *Transactions*, indicate a great excess of such affections among soldiers, both as compared with the civil population and with the sailors. He specially attributed this result to the close-fitting tunic fastening so tightly round the neck as to obstruct the circulation, and proposed an alteration in the tunic for the purpose of removing this objection.

CRUELTY.

THE definition of cruelty is one which notoriously admits of considerable latitude. Lord Penzance sometimes finds so much difficulty in deciding what acts come under that heading, that perhaps some allowance may be made for the aberrations of Mr. Coroner Carter. But with the fullest appreciation of the doubts which Mr. Carter might have as to what constitutes cruelty from a military commander to a common soldier—a question at least as complex as that which affects matrimonial relations—we find it hard to acquit him of a great defect of judgment or a serious want of moral courage in not holding an inquest in the case of Malone. There are many circumstances surrounding this death which made an inquest highly important to the public interests. The one

death is only the culminating point of a vast deal of suffering. It is no doubt true that every thing was done in legal form; but so was the famous flogging case at Hounslow: but if Mr. Wakley had not held an inquest on that man, it is possible that that barbarous practice would have prevailed in the army unchecked to this day. Man's inhumanity to man takes more often in this day the form of carelessness than of deliberate malice, and it hides itself commonly under legal forms. There are the strongest public reasons for desiring exhumation and an inquest.

SCOTLAND.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.

DR. JOHN WYLLIE is, we believe, the only candidate for the vacant Lectureship on Pathology at the College of Surgeons.

THE LATE SIR J. Y. SIMPSON.

AT a meeting of medical men held lately at Washington, the following resolution was passed: "That in Dr. Simpson American physicians recognise not only an eminent and learned Scottish practitioner, but a philanthropist whose love encircled the world; a discoverer who sought and found for suffering humanity, in its sorest need, a foretaste of the peace of heaven; and a devoted disciple of the only true physician, our Saviour Jesus Christ."

ARGYLE AND BUTE DISTRICT ASYLUM.

DR. JAMES RUTHERFORD, of the Burgh Lunatic Asylum, Birmingham, has been unanimously elected Medical Superintendent of the Asylum at Lochgilphead, in the room of Dr. Sibbald, who has been appointed a Deputy-Commissioner in Lunacy for Scotland.

FUNERAL OF MR. SYME.

THE remains of the late Mr. Syme were interred on Thursday last in the family vault adjoining St. John's Episcopal Church. The day was very wet. The funeral was of a private character. The shops in the line of route of the procession were closed. No *post mortem* examination of the body was made.

EDINBURGH UNIVERSITY ATHLETIC CLUB SPORTS.

THE fifth anniversary of this Club's sports passed off with marked success on June 23rd, at Greenhill Park, Morningside. The number of entries was very large, and the prizes well contested. The weather was fine and the attendance large and fashionable. The band of the 13th Hussars was present during the sports. Professor Turner distributed the prizes after the termination of the games.

ANDERSON'S INSTITUTION, GLASGOW.

THE annual meeting of the trustees of this Institution was held last week. The annual report stated that the number of students attending the classes during the past year had been 2541, as against 2550 during the previous session. The report also mentioned that in terms of a previous intimation to the President of the Institution, Mr. Young of Kelly had laid on the table of the Trust the draft of a deed by which he proposed to set aside 10,000 guineas for the endowment of a Chair of Technical Chemistry in connection with the Institution. While duly appreciating this munificent offer, the trustees had felt a difficulty in agreeing to some of the conditions of the deed, and had instructed the managers to put themselves in communication with Mr. Young, in the hope that he would submit a new proposal. Mr. Young had since intimated that he had no new proposal to make, and that it seemed to him the trustees should say what alterations on the deed of trust they desired. The report further referred to the severe loss which the University had sustained through the death of Dr. Penney, and recommended that a successor to him should be advertised for. A committee was appointed to consider certain proposed alterations on the trust-deed of the endowment of a chair of technical chemistry, and to report to a future meeting.

EDITORSHIP OF THE BRITISH MEDICAL JOURNAL.

THE office of Editor of the BRITISH MEDICAL JOURNAL is about to become vacant. Gentlemen desirous of being appointed to the same, are requested to forward their applications to the President of the Council, W. D. HUSBAND, Esq., York, on or before the 30th day of July, 1870.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary.*

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
ANNUAL MEETING.

THE Thirty-eighth Annual Meeting of the British Medical Association will be held in Newcastle-upon-Tyne, on Tuesday, Wednesday, Thursday, and Friday, the 9th, 10th, 11th, and 12th of August next.

President—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

President-elect—EDWARD CHARLTON, M.D., Senior Physician to the Newcastle-upon-Tyne Infirmary.

An *Address in Medicine* will be delivered by FRANCIS SIBSON, M.D., F.R.S., F.R.C.P., Physician to St. Mary's Hospital.

An *Address in Surgery* will be delivered by G. Y. HEATH, M.B., M.R.C.S., Surgeon to the Newcastle-upon-Tyne Infirmary.

The business of the meeting will be conducted under six Sections:

Section A. *MEDICINE*.—*President*: Dr. Embleton. *Vice-Presidents*: Dr. Simpson and Dr. Lyons. *Secretaries*: Dr. H. Barnes, Carlisle, and Dr. Morell Mackenzie, 13, Weymouth Street, London.

Section B. *SURGERY*.—*President*: Professor Lister. *Vice-Presidents*: Charles Trotter, Esq., and Timothy Holmes, Esq. *Secretaries*: Dr. Arnison, Newcastle-upon-Tyne, and W. H. Favell, Esq., Sheffield.

Section C. *PHYSIOLOGY*.—*President*: Dr. A. Clark. *Vice-Presidents*: Dr. Sanderson and Dr. Hayden. *Secretaries*: T. C. Nesham, M.D., Newcastle-upon-Tyne, and J. G. McKendrick, M.D., 29, Castle Terrace, Edinburgh.

Section D. *MIDWIFERY*.—*President*: Dr. Robert Barnes. *Vice-Presidents*: Dr. Gibson and Dr. G. Hewitt. *Secretaries*: Luke Armstrong, Esq., Newcastle-upon-Tyne, and J. H. Aveling, M.D., Rochester.

Section E. *PUBLIC MEDICINE*.—*President*: Dr. Rumsey. *Vice-Presidents*: Dr. Druitt and Dr. Morgan. *Secretaries*: Anthony Bell, Esq., Newcastle-upon-Tyne, and Dr. A. Ransome, Bowden, Cheshire.

Section F. *PSYCHOLOGY*.—*President*: Professor Laycock, M.D. *Vice-Presidents*: Dr. Sankey and Dr. Maudsley. *Secretaries*: Grainger Stewart, M.D., Borough Asylum, Newcastle-upon-Tyne, and T. Harrington Tuke, M.D., 37, Albemarle Street, London.

Notices of Motion.—The following notice has been given.

The Rev. Dr. BELL: That a Committee be appointed for the purpose of inquiring into the present constitution and operation of the Committee of Council; and whether it might not be better to have only one well constituted Council, consisting of a limited number—say fifty—to be elected by the general body of members through the medium of voting-papers: and that the Committee report to an ordinary general meeting, or to a special general meeting convened according to law.

Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary, at their earliest convenience.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary.*
13, Newhall Street, Birmingham, June 6th, 1870.

BATH AND BRISTOL BRANCH.

THE annual meeting of the above Branch will be held on Thursday, July 14th, 1870, at the Mineral Water Hospital, Bath, at 4.30 P.M., when C. H. COLLINS, Esq., will resign the Chair to C. BLEECK, Esq., *President-elect*, who will deliver an address.

Members having any communications for the meeting, are requested to give notice of them to the Secretaries.

The following resolutions will be moved:

Mr. BARTRUM and Dr. SPENDER—"That it is desirable that the number of ordinary meetings be reduced to four."

Mr. TIBBITS and Dr. BRITTAN—"That any gentleman who has been black-balled by this Branch of this Association, shall not be admitted to the meetings."

The dinner will be held at the York House, Bath, at 6.30 P.M. Tickets, including ice and dessert, 7s. 6d. each. Wines at moderate charges.

The Bath Secretary particularly requests that those members who intend to be present at the dinner, will send him their names before Monday, July 11th, in order that the necessary arrangements may be completed.

R. S. FOWLER, Bath, } *Honorary Secretaries.*
CHARLES STEELE, Clifton }

NORTH WALES BRANCH.

THE annual meeting of the above Branch will be held at the Crown Hotel, Denbigh, on Tuesday, July 5th, at 12 o'clock noon, under the presidency of T. FRANCIS EDWARDS, Esq.

Dinner at 4 P.M. Tickets, including wine, etc., 12s. each. To be had at the bar of the above hotel.

Gentlemen who purpose reading or communicating papers and cases, and who intend dining, will please to give an early intimation to Beaumaris, June 1870.

D. KENT JONES, *Hon. Sec.*

WEST SOMERSET BRANCH.

THE annual meeting of the above Branch will be held at the York Hotel, Weston-super-Mare, on Tuesday, July 12th, at 12.30 P.M.; H. J. ALFORD, M.B., Taunton, *President*; J. CORNWALL, Esq., Ashcott, *President-elect*.

The members of this Branch and of the Central Somerset Medical Society are kindly invited to lunch at the West of England Sanatorium or Convalescent Home, by the medical staff of that institution, at 2 P.M.

It is proposed during the course of the afternoon to visit the Weston-super-Mare Hospital and Fever Wards, and other objects of interest.

At 4 P.M., a general meeting for papers or cases and discussion will take place at the York Hotel.

The dinner will be at the York Hotel at 6.30 P.M. A special late down train will kindly be arranged by the Bristol and Exeter Railway Company on the night of the meeting.

Gentlemen intending to be present, or wishing to read papers, are requested to communicate as early as possible with the Secretary.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, June 21st, 1870.

METROPOLITAN COUNTIES BRANCH.

THE eighteenth annual meeting of this Branch will be held at the Castle Hotel, Richmond, on Friday, July 22nd, at 3 P.M. *President* for 1869-70, GEORGE JOHNSON, M.D.; *President-elect* for 1870-71, T. HECKSTALL SMITH, Esq.

Dinner at the Hotel at 5.30 P.M. Tickets (exclusive of wine) 10s. 6d. each.

A. P. STEWART, M.D. } *Honorary Secretaries.*
ALEXANDER HENRY, M.D. }

75, Grosvenor Street, June 22nd, 1870.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in London, June 28th, 1870.

PRESENT:—W. D. Husband, Esq. (in the Chair); Dr. Chadwick; Dr. Charlton; Dr. Falconer; Dr. Bryan; Mr. Clayton; Dr. Latham; Dr. Philipson; Dr. Sibson, F.R.S.; Mr. H. Smith; Dr. Stewart; Dr. E. Waters; Mr. Wheelhouse; Mr. White; and Mr. Williams (General Secretary).

The following resolutions were agreed to:

1. That new members be admitted after the 1st of July upon payment of half-a-guinea *in advance*, to receive the JOURNAL only for the half-year; and it being clearly understood that they shall continue members for at least one year after the expiration of the half-year.

2. That the Secretary acknowledge the receipt of the communication of Dr. Littleton of Plymouth, and the cordial invitation from the profession of that district to meet in Plymouth in 1871.

3. The Committee desire to record their deep sympathy with the widow and family of the late Mr. Nunneley of Leeds, and the deep regret which the members feel individually for the loss of their able, indefatigable, and highly esteemed colleague.

4. That Mr. Richards be appointed publisher of the JOURNAL.

5. That the Direct Representation Committee be empowered to confer with members of the Legislature, with the view of securing the rect representation of the registered members of the profession, in

proportion of one-fourth of the members of the General Medical Council; and also of obtaining the re-introduction of Clause XVIII of the Medical Act (1858) Amendment Bill.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.
13, Newhall Street, Birmingham, June 29th, 1870.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ANNUAL MEETING.

THE sixteenth annual meeting of this Branch was held at the Great Western Hotel, Birmingham, on Friday, June 17th, at 3 P.M. There were present, THOMAS UNDERHILL, Esq., President, in the Chair, and sixty members and visitors.

In delivering up his office to Mr. Underhill, Mr. SOLOMON remarked that the past session had been a most brilliant one. Discussions had been more vigorous and more general than in any previous year; and the tendency to isolation, to which the medical profession were liable, had been prevented by the social spirit and brotherly regard which had pervaded the Society's scientific gatherings.

Vote of Thanks.—It was resolved unanimously, "That the best thanks of this meeting be given to James Vose Solomon, Esq., for the ability and courtesy with which he has filled the office of President of the Branch during the year."

Report of the Council.—Mr. T. H. BARTLEET, Honorary Secretary, read the following Report.

"Another year of active and successful work in this Branch affords little subject for comment to your Council. They have, however, to record that thirty new members have joined the Branch; that fifteen members have left it, through removal to a distance, resignation, or erasure for non-payment of subscriptions to the Association and Branch; and that two members, Mr. Dehane and Dr. Jeaffreson, have died during the year.

"Mr. Dehane was well known and much respected in Wolverhampton, where he practised with much success; and he was one of the first surgeons to, and for several years connected with, the South Staffordshire Hospital.

"Dr. Jeaffreson's somewhat early death abroad was a source of deep regret to his friends, and, among them, to many members of this Branch. Dr. Jeaffreson was present at the first meeting which inaugurated the commencement of the Branch, and was its second President. He was President of the British Medical Association in the year 1865, when the annual meeting was held at Leamington; on which occasion his courtesy and hospitality to the members gave him a great claim to their consideration and regard.

"The Birmingham and Midland Counties Branch now consists of 247 members—a larger number than at any previous period in its history.

"During the past session, the six ordinary monthly meetings of the Branch have been held; and two extra meetings—one for the discussion of Dr. Percy Leslie's paper on the Relations of the Profession to the Medical Charities, and of the Charities one to another. At this meeting, a Committee was nominated to inquire into the abuses alleged to exist in the administration of hospital relief. This Committee has already commenced its work; and your Council hope that it will report early in the coming session.

"A special meeting was also held, at the request of the Committee of Council of the British Medical Association, to consider the relations of the profession to the new Medical Bill now before Parliament. At this meeting, a resolution was passed authorising the President and Honorary Secretary of the Branch to sign a petition to the Houses of Parliament, praying them to grant some modification in the constitution of the General Medical Council, especially with regard to the direct representation upon it of the members of our profession. This petition was handed to the General Secretary, who has forwarded it to Lord Cairns for presentation to the House of Lords.

"The attendance at the Branch meetings has been large; and the animated discussions upon the cases, specimens, and papers, have evidenced an interest in the proceedings greater than usual. Your Council are anxious that the debates upon papers should be encouraged, as they consider that discussion cannot fail to increase medical knowledge, and also to deepen the interest of the members in the work of the Branch."

[Here was given a list of the papers read and specimens exhibited at the meetings of the Branch.]

"The Honorary Secretaries of the Pathological and Clinical Section will present to you a report; but your Council cannot forbear referring with much satisfaction to the interest which has been displayed at the meetings of the Section, and to the valuable discussions which have been called forth by the cases and specimens presented to the members.

Moreover, they feel constrained to notice the active interest displayed by the first Chairman of the Section, Dr. Heslop, since its formation; and the active and energetic services of the Honorary Secretaries, Dr. Balthazar Foster and Mr. Vincent Jackson.

"As directed at the last annual meeting, the laws, as amended by your Subcommittee, have been printed. The funds of the Branch did not justify your Council in forwarding a copy to each member, as they would have wished. They have, therefore, been supplied at a small cost to members applying for them.

"Several of the students have availed themselves of the privilege of attendance at your meetings; and your Council believe that their attendance would have been more general, if better accommodation for seeing and hearing had been provided. To this point your Council desire to direct the attention of their official successors, as they feel that the members of the Branch are greatly inconvenienced by the limited, unsuitable, and inconvenient accommodation in the room in which the meetings are held.

"Several papers of great scientific and practical interest have already been promised for next session; and your Council anticipate a year of interesting and energetic work, equal to that of any preceding one.

"In conclusion, your Council would urge upon the members the importance of increasing the numbers of the Association and of our Branch, reminding them that our influence depends upon the number as well as upon the work of the members; and your Council hope that the day is not far distant when we shall include in our list every honourable physician and surgeon in the neighbourhood."

It was resolved, "That the Report be received, adopted, and entered on the minutes."

Mr. T. WATKIN WILLIAMS, the Treasurer, read the Treasurer's Report, which showed a balance in hand.

Pathological and Clinical Section.—Dr. BALTHAZAR FOSTER, one of the Honorary Secretaries, read the following Report.

"In the beginning of the year 1869, the Council of the Birmingham and Midland Counties Branch of the British Medical Association determined to form a section in connexion with the Branch. The indefatigable Secretary of the Branch, Mr. Bartleet, lost no time, but summoned a meeting for January 28th, at which the Pathological and Clinical Section was established, its officers appointed, and the names of seventy members announced.

"In forming the Section, it was the intention of the Council to offer the members of the Branch a series of meetings at which the discussions would be rigorously confined to scientific subjects. For some time previously, the number of pathological specimens presented at the ordinary Branch meetings had encroached on the time allotted to the reading of papers; and it was felt that these specimens might with great advantage be transferred to a special Section devoted to the investigation of morbid anatomy. In order that the meetings of the Section might have a practical as well as scientific interest, it was decided at the first meeting to make it also of a clinical character, and to encourage the presentation of living examples of interesting diseases and short practical communications. That the Section has hitherto been successful in carrying out its programme, is shown by the very large amount of work done at each of its meetings, of which a very large proportion has been communicated by members residing at a distance. In this respect, as well as by the large number of specimens and interesting cases of disease which have been presented from private as well as from hospital practice, it is hoped that a very important impulse has been given to the study of disease in all its aspects. Not only has the Section collected together for the profession nearly all the interesting subjects of study which the hospitals of Birmingham and the adjoining towns have afforded, but the results of private observation have equally enriched its meetings.

"As opportunity has offered, a special character has been given to the proceedings by the grouping of cases; and in this way very interesting discussions have from time to time been obtained. The discussions on excision of the knee, and on the question of operation in mammary cancer, may be particularly mentioned. Through the kindness of Dr. Braxton Hicks of Guy's Hospital, the third meeting of the Section was rendered very attractive by a communication on the Cephalotribe, and a demonstration of its action, by Dr. Hicks.

"By the appointment of a Subcommittee to examine and report on any specimens referred to them, the Section has endeavoured to utilise the special abilities of some of its members for the general good, and has indicated the machinery by which in future any special questions of interest may be taken up and investigated.

"Up to the present time, ten meetings have been held; and on nearly every occasion time has been wanting to enable all the materials brought to be presented. The discussions have been well sustained, and almost every specimen presented has called forth comments

from several members. The attendance has been, on the average, over thirty-six members at each meeting. The largest attendance reached sixty-one; the smallest was twenty-five.

"The Section started with seventy-members. At the end of its first three months' work, there were eighty-four; and the members now number 115."

Votes of Thanks were given to the Chairman and Officers of the Pathological Section, to the Council of the Branch, and to the representatives of the Branch in the General Council, for their services during the past year.

The following were elected to the various offices for the ensuing year:—*President-elect*: Oliver Pemberton, Esq. *Country Members of Council*: G. Fowler Bodington, M.D. (Sutton Coldfield); F. I. Bennett, L.R.C.P.Ed. (Droitwich); R. Farquharson, M.D. (Rugby); W. C. Garman, Esq. (Wednesbury); Vincent Jackson, Esq. (Wolverhampton); J. Manley, Esq. (West Bromwich); Herbert Morgan, Esq. (Lichfield); C. A. Newnham, Esq. (Wolverhampton). *Town Members of Council*: A. Fleming, M.D.; B. W. Foster, M.D.; J. Harman, Esq.; J. Hickenbotham, L.R.C.P.Ed.; T. P. Heslop, M.D.; R. Norris, M.D.; A. Oakes, Esq.; E. Robinson, M.D. *Representatives of the Branch in the Council of the Association*: Alfred Baker, Esq.; S. Berry, Esq.; M. H. Clayton, Esq.; A. Fleming, M.D.; J. S. Gamgee, Esq.; J. Manley, Esq.; J. Russell, M.D.; R. M. Miller, M.D.; J. Vose Solomon, Esq.; F. Turton, Esq.; W. L. Underhill, Esq.; Thomas Underhill, Esq.; T. H. Bartleet, Esq., *ex officio*.

Dr. JOHNSTON gave notice that, at the next meeting, he would move that it would be for the interest of the Association that the Council should be elected by open voting.

President's Address.—The PRESIDENT delivered his inaugural address, which embraced a number of subjects, including that of hospital reform. Mr. Underhill advocated the reduction of the present size of hospitals, an increase in the number of the institutions, and the division of the medical staff to be controlled by a central or district board. He contended that one abuse of hospital administration was to be found in the admission of cases which would be better treated at the patients' homes.

A *Vote of Thanks* was passed by acclamation to the President for his interesting and able address.

The *Annual Dinner* was held after the meeting, at the Great Western Hotel, forty-five members and visitors being present. Mr. Thomas Underhill, the President of the Branch, was prevented from attending by domestic affliction. The chair was therefore taken by the President-elect, Mr. Oliver Pemberton; and the vice-chair was filled by the ex-President, Mr. Solomon.

NORTHERN BRANCH: ANNUAL MEETING.

THE sixth annual meeting of this Branch was held in the Athenæum, Sunderland, on Tuesday, June 14th. Dr. EMBLETON, the retiring President, resigned his office, and called upon E. H. MALING, Esq., to take the Chair, in the absence of the President-elect, GEORGE WELFORD, Esq., who was unable to attend in consequence of ill-health. There were also present thirty-two members and two visitors.

Vote of Thanks.—Mr. JOBSON proposed—"That the best thanks of this meeting be awarded to the retiring President (Dr. Embleton), the Council of Management, and the other officers, for their services during the past year." This was seconded by Dr. MOORE, and carried by acclamation.

Officers for 1870-71.—On the motion of Dr. COSSAR, seconded by Mr. J. W. BROADBENT, it was unanimously resolved—"That the next annual meeting be held at Tynemouth; that Dr. J. B. Bramwell be President-elect; Dr. Philipson, Honorary Secretary and Treasurer; E. Charlton, M.D., D. Embleton, M.D., Leonard Armstrong, Esq., and W. H. Dixon, M.D., the Council of Management."

New Members.—The SECRETARY announced that, since the last annual meeting, eighty-seven gentlemen had been elected members of the Branch.

Representatives to the General Council.—On the motion of Dr. YELD, seconded by Dr. W. H. DIXON, the following members were elected to represent the Branch in the General Council of the Association: D. Embleton, M.D.; G. Y. Heath, M.B.; Charles Gibson, M.D.; J. B. Bramwell, M.D.; Martin Burnup, M.D.; R. J. Peart, M.D.; John Jobson, Esq.; George Welford, Esq.; J. W. Broadbent, Esq.; H. G. Hardy, Esq.; Benjamin Barkus, M.D.; W. H. Dixon, M.D.; and G. H. Philipson, M.D., *ex officio*.

Treasurer's Report.—Dr. PHILIPSON read the Treasurer's statement, which showed that the balance in hand, at the commencement of 1869, was £2:1:4, and the amount received in annual subscriptions was

£16:5—total, £18:6:4. The expenses during the year amounted to £17:4:3, leaving, in Dec. 31st, 1869, a balance of 12s. 1d.

Quarterly Meetings.—Dr. EASTWOOD moved the following resolution—"That, owing to the large increase of members of the Northern Branch of the British Medical Association, it is highly desirable that meetings be held quarterly."

Mr. H. G. HARDY seconded the resolution.

Mr. GIBSON thought that three meetings would be sufficient.

Dr. CHARLTON (President-elect of the British Medical Association) suggested that steps should be taken to amalgamate the Northern Branch of the British Medical Association and the Northumberland and Durham Medical Society.—Dr. BRAMWELL and Dr. YELD agreed with Dr. Charlton.

Dr. CHARLTON moved, as an amendment—"That a committee be formed to confer with the officers of the Northumberland and Durham Medical Society, and endeavour to bring about an amalgamation between the Northern Branch of the British Medical Association and the Northumberland and Durham Medical Society; and that the following gentlemen form the Committee, with power to add to their number: E. H. Maling, Esq.; J. W. Eastwood, M.D.; George Moore, M.D.; Charles Nattrass, M.D.; W. H. Dixon, M.D.; James Mackie, Esq.; and J. E. Piper, Esq."

Dr. EASTWOOD withdrew his resolution, and the amendment of Dr. Charlton was agreed to unanimously.

Specimens.—Dr. Dixon, in the absence of Mr. G. B. Morgan, presented for that gentleman two urinary calculi.

Papers.—Dr. YELD read a paper on a case of Convulsions successfully treated with Hydrate of Chloral.

Dr. PHILIPSON read a paper on the Pathology of Carbonaceous Bronchitis.

On the motion of Dr. CHARLTON, a hearty vote of thanks was accorded to E. H. Maling, Esq., for his kindness in taking the chair.

Dinner.—The members and their friends afterwards dined together at the Queen's Hotel; E. H. Maling, Esq., in the Chair, supported by the Mayor of Sunderland (Alderman Thompson) and the Rector of Bishop Wearmouth (Rev. Canon Cockin).

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Monday, 27th June, 1870.

1. *Last Week's Mortality and Sickness from Small-pox and other Diseases*.—2. *Knocking up Doctors at Night*.—3. *Maritime Hospitals at Berck for Scrofulous Children*.—4. *Vaccination Conferences*.

LAST WEEK'S MORTALITY AND SICKNESS FROM SMALL-POX AND OTHER DISEASES.—In the week ending Friday, 24th June, according to "Bulletin Hebdomadaire des décès" issued for the "ville de Paris" by the Préfecture of the Seine, the total number of deaths from all causes was 1149, being 5 more than occurred during the previous week. It is remarkable that the deaths from small-pox are exactly the same in the week which ended on the 24th as in that which preceded it, the number in each of these weeks being 238—the maximum small-pox mortality attained during the present epidemic.

Subjoined, in tabular form, is a condensed view of the mortuary statistics of Paris and London for the latest weeks. Without the addition of note or comment, it is full of interest.

Cause of Death.	Paris : Week ending 24th June.	London : Week from 5th to 11th June.	London : Week from 12th to 18th June.
Small-pox	238	8	7
Scarlatina	23	103	100
Measles	16	53	36
Typhoid Fever ...	22	8	16
Typhus	—	4	16
Erysipelas	9	9	10
Bronchitis	64	75	80
Pneumonia	93	61	50
Diarrhoea	30	34	56
Dysentery	1	2	1
Cholera	1	1	—
Memb. Sore-throat	3	4	7
Croup	8	8	6
Puerperal Affecs..	7	3	6
Other causes	634	900	901
Total	1149	1273	1292

Seeing that during every week, for some considerable time past, there has been an appalling mortality in the hospitals generally (particularly in certain surgical wards) from pyæmia, why are not the deaths from that cause indicated in the weekly official statements? I have been told that, in the adjustment of statistics, deaths from pyæmia are often distributed on the same principle that we hear of "yellow fever" deaths being distributed by an accommodating doctor when a ship is about to pass through the critical ordeal of quarantine or no quarantine, on coming into a health-guarded port. Under such circumstances, the ugly name of "yellow fever" can sometimes be semi-conscientiously suppressed by substituting the name of a secondary cause of death, such for example as "hæmorrhage." In the same way, it is averred that in Paris deaths from purulent infection are often distributed to the credit of "pneumonia", or some other disease. Be that as it may, we have no note of deaths from pyæmia in the weekly bulletins. Perhaps they are comprised in the deaths from "other causes", which were no less than 634 out of 1149 in last week's bulletin. But it is still an open question to what extent the hospital deaths are included in the weekly mortuary returns for Paris. Till this matter is thoroughly explained, we may be excused for asking, with the *Santé Publique*, "Que valent les bulletins de décès?"

The mortuary tables do not give much idea as to the nature of the diseases which at present constitute the chief part of the ordinary physician's work. In my own practice, and in that of numerous medical friends with whom I have conversed, the frequency of various disorders accompanied by cutaneous eruptions is quite remarkable. I have recently seen many cases of mild scarlatina, rubeola, and roseola, and also many cases of anomalous transitory eruptions, which had created panic in consequence of the existing tendency among timid people to see small-pox in every pimple. The remark which I have now made on non-mortal sickness is peculiarly applicable to last week; but it is also applicable to several preceding weeks. It is a great pity that there is no way of having constantly before us the statistics of the rise and fall of sickness, irrespective of mortality, and in relation to special diseases and groups of diseases. If such information on a large scale could be collected, we should be able to understand better the natural history of great epidemics, particularly the circumstances of their rise and decline.

KNOCKING UP DOCTORS AT NIGHT.—In Paris, as elsewhere, the question of how to get and how to pay for medical aid required, or supposed to be required, at unseasonable hours, is frequently discussed. In cases of accident or sudden illness, it often happens that two, three, or four messengers will start for as many doctors. The first who arrives is usually accepted, but is very seldom paid for his services. The gentlemen who come subsequently are dismissed without ceremony in nine cases out of ten, or even perhaps abused for having so tardily responded to the summons.

Dr. Amenille, a member of the Conseil d'Hygiène of Paris, has recently proposed a plan which, if carried out, would satisfy the requirements both of humanity and of medical finance. He suggests that the physicians of the Bureaux de Bienfaisance who are willing to be called up at night should intimate this fact and their addresses at the different police stations. A person who has no medical attendant, or who for any cause requires sudden medical aid, will apply at a station, and a policeman will accompany the applicant to the house of an inscribed emergency doctor. The "Assistance Publique" will pay the doctor his fee if the patient cannot do so; and if the patient can, but will not, the "Assistance Publique" will prosecute for the fee, in the meantime feeing the doctor for services rendered. In this way physicians will be protected from being unnecessarily disturbed, and will be remunerated for being knocked up at night.

MARITIME HOSPITAL AT BERCK FOR SCROFULOUS CHILDREN.—The "Assistance Publique" has established an Hospital at Berck-sur-Mer, in the department of Pas-de-Calais, for the treatment of poor Parisian children suffering from scrofula. Since 1861 there has been in operation at that place an experimental hospital containing 100 beds: the results were so unequivocally good that it was resolved to erect a building on the beach of Berck, to contain 500 beds. This institution was inaugurated in July last by the Empress, and is now in full working order. With the view of affording the advantages of maritime treatment to a class above the very poorest, the old smaller hospital has been retained for the use of children whose parents can afford to pay for them at the rate of 1 fr. 80 c. (1s. 6d.) a day. Eighty beds are allocated on these terms to Parisian patients; and the remaining twenty are reserved for scrofulous children belonging to the northern departments of France.

VACCINATION CONFERENCES.—The last Conference will be held on Wednesday evening next at the gymnasium in the rue des Martyrs. I

defer my account of the proceedings till I can give a condensed summary of the whole results. In the meantime, it is only fair to say that the meetings have been interesting, and the turbulent and charlatanic elements have been kept admirably in check by the good sense, firmness, and dignified bearing of Dr. Caffé the chairman.

CORRESPONDENCE.

ELECTION OF COUNCIL AT THE COLLEGE OF SURGEONS.

SIR,—You have made known that I am a candidate for one of the two vacant seats at the Council of the College of Surgeons, and that the election takes place next week. I shall, therefore, be obliged if you will allow me, through your columns, to make known to those Fellows of the College who are members of our Association, what are the general principles which will guide me if the honourable distinction of a seat at the Council should be conferred upon me.

For many years past, I have felt that progressive changes are necessary in the constitution of the College, and various reforms in the administration of its affairs; and I am prepared to support the following propositions.

1. The re-election of retiring members of Council, as a matter of course, is injurious to the College and to British surgery; and re-election should be only a rare reward of acknowledged merit.

2. The Council should be equally open to provincial and metropolitan Fellows.

3. I think that the charter of the College gives too much power to the Council, and leaves too little to the Fellows. I do not see how this evil can be corrected without a new charter; and I would gladly assist in obtaining such a revision of the charter as would place the government of the College absolutely in the hands of the whole body of the Fellows, providing for quarterly or periodical meetings of the Fellows, when the proceedings of the Council should be made known, and either confirmed, modified, or rejected after a full opportunity for free discussion. I have no fear that, if such meetings were open to the whole College, Fellows and Members, any unwise interference in the administration of the College affairs would ensue. On the contrary, they would probably lead to a much closer attachment of all surgeons to their College, to a more direct interest in its welfare, and to a better and more general knowledge of its laws and government.

4. Year after year I become more and more strongly convinced that the Court of Examiners should consist of Fellows who are not members of the Council, that they should be subject to annual or triennial re-election, and should be remunerated by annual salary, and not according to the number of students examined.

5. The representative of the College in the General Medical Council should be elected by the whole College, not by the Council only. It would probably be a good plan to submit a recommendation by the Council to one of the periodical meetings of Fellows.

6. Pending the consideration of the provisions of a new charter, the proceedings of the Council should be fully made known to the Fellows.

7. In such cases as voting for members of Council, or members of the Court of Examiners, or on any question where a very definite resolution could be submitted to consideration, I think Fellows residing beyond the metropolitan postal district, who desire it, might be allowed to vote by proxy papers. But a more general establishment of vote by proxy would probably be injurious, by encouraging electioneering tactics, and by discouraging open discussion at the meetings of the Fellows.

With regard to my own standing in the College, I may explain that I was elected an Honorary Fellow in 1844, before the examination was instituted. When the Fellowship was created by the new charter, the heads of the Army and Navy Medical Departments were requested to send in lists of medical officers thought to be deserving of the honour of the Fellowship. I was then an assistant-surgeon in the Navy, and I believe I was the only assistant-surgeon whose name was sent in by Sir William Burnett. Mr. Bransby Cooper told me afterwards that Sir William was asked why he had sent in the name of an assistant-surgeon of only three years' standing, and his answer satisfied the ruling powers of the College that I had worked hard and deserved the distinction. I am far from insisting on any right of mere seniority. Mr. Holden, Mr. Erichsen, and Mr. Humphry were all junior Fellows to me; yet I did not come forward as I should have done if I had maintained any such supposed right. I maintain, on the contrary, that the freest possible choice should be accorded to the Fellows, and that any Fellow in actual practice should be eligible for election to the Council. But it is

manifestly unjust to ignore seniority altogether, and still more so for the Fellows by examination to oppose me or any other Honorary Fellow because we are not also Fellows by examination; the fact being that, having been elected before the examination was instituted, it was impossible to present myself for examination.

As many of the Fellows have been canvassed for their votes, though not by me nor by any friend of mine, it is needful for me to explain that no one has been, nor will be, asked personally or by letter to support me. I am compelled, by the very objectionable mode of election prescribed by the laws, to obtain the signatures of six Fellows, certifying that I am a fit and proper person to obtain a seat at the Council, and of three other Fellows that I do not practise as an apothecary. This I have done, and I now endeavour to inform the Fellows what measures they may assist in carrying by supporting me. I may add, without impropriety, that I regard election by his brother Fellows, as their representative, as a distinction of which any man ought to be proud; but that will be the beginning and the end of any "canvassing" on my behalf. I am, etc., T. SPENCER WELLS.

Upper Grosvenor Street, June 28th, 1870.

SPRAY-PRODUCERS.

SIR,—The value of sprays in the treatment of affections of the throat and windpipe and other maladies, is much hindered by the inconvenience attending the use of the apparatus. Richardson's is an useful instrument when well made, but it requires two hands to work and hold it. Clarke's produces a fine spray, but it spills the liquid and requires two hands. Dervais' produces a smaller spray; it also spills the liquid and requires two hands. Siegle's mixes the fluid with steam; and, although it requires only one hand, is yet not so portable as such an instrument should be, and it requires a lamp. The newly patented vaporiser of Messrs. Savory and Moore seems to be designed only to diffuse vapours through an aperture.

Requiring a portable and convenient apparatus that can readily be worked by one hand, I have tried every sort of instrument. I get the best result by using a Richardson's instrument, placing the solution in a common test-tube of a size to take the cork of the apparatus. One hand suffices to hold the tube and work the distal bulb vigorously at the same time: this arrangement enables the operator to direct and work the spray with the greatest ease with either hand, while with the other the tongue can be held down or any instrument can be used. The tube holds enough for three or four applications, and can be refilled with the greatest ease. I am, etc., WALTER FERGUS, M.D.

Marlborough College, June 1870.

DOCTORS AND WATER-DRINKERS.

SIR,—In your article on "Doctors and Water-Drinkers", which appeared in your number for June 4th, in which you have discussed the question of the wisdom of setting aside alcohol as an unnecessary article of food—in contrast with the advantages derived from its use, to a temperate extent, for that purpose—you have made certain allusions to statistics derived from the mortality that has occurred in the United Kingdom Temperance and General Provident Insurance Company, shewing that among the insurers in the abstaining section it was far less than among those insured in the general or non-abstaining Department. This certainly is the case; but you go on further to say, in order to account for this disparity, that "the Insurance Society contrast is clearly between a group of abstainers and another group—not of temperate men, but of those mixed habits, probably with a fair sprinkling of drunkards." In this you are, to a very great extent, in error, as the occurrence of such a case has been most carefully guarded against by the wise decision of the Directors, come to from the first day when non-abstainers were admitted to the benefits of the institution, which has been strictly kept to the present time; for they have adopted the greatest vigilance in preventing any candidate from being admitted into the office whose habits were not most strictly temperate. Among other careful decisions, one has been most strictly acted upon—that no publican or innkeeper should be eligible for admission as a member; although some such are insured in the office, they have become so occupied after they were admitted, and the institution has no power to remove such when once admitted. And now, after thirty years' establishment, very few of the general section of insurers have died from the direct effects of free living—as from delirium tremens, indurated liver, Bright's disease, or other affection the direct consequence of intemperance—whilst still the mortality has been greatly against the insurers in the general section when compared with that of the abstaining department. Indeed, no insurance company makes more minute inquisitorial inquiry into the habits of candidates than the United Kingdom Temperance Provident Office in the questions put to

medical as well as lay priests, so that scarcely any deaths occur amongst its members as the direct result of illnesses arising from intemperate lives. The medical direction of this most successful office was entrusted to me at the time of its institution; and I have held it throughout its entire career. I am, therefore, well-qualified with confidence to set forth the above particulars. I am, etc.,

J. T. MITCHELL, F.R.C.S. Eng.

1, Adelaide Place, London Bridge, E.C., June 9, 1870.

OBITUARY.

JAMES SYME, F.R.S.E., D.C.L., ETC.

It is little more than twelve months since Mr. Syme, at the age of seventy, was still in vigorous health. He was able to make frequent journeys between Edinburgh and London; and such was his energy, and such his clearness of intellect, that his colleagues in the Medical Council wished that he should succeed Dr. Burrows as their President. Then occurred a warning attack of paralysis, which, whilst it did not affect his intellect in the least, left one side weak, and gave notice of what might be feared. From this he recovered, and became able again to take part both in private and in public duties. A year later, in April last, another attack occurred, more severe than the first, but still leaving his faculties untouched. From this time he was confined to his house; and, on May 24th, symptoms of aggressive cerebral disease showed themselves, and he lost both the power of speech and the ability to swallow. Even now his intellect was unclouded, and for a while he seemed to improve somewhat. The inability to take food, however, rendered necessary resort to artificial means of sustaining strength, which could not prove sufficient for long; and in about another month he sank. His death took place on Sunday evening last, at 6 P.M.

Mr. Syme was born on the 7th of November 1799, and had, therefore, more than half completed his seventy-first year.

For the reader's convenience, we have attempted to condense into the subjoined chronicle some of the chief events of the half century of active life which he devoted to surgical pursuits.

CHRONICLE OF MR. SYME'S LIFE AND CHIEF WORKS.

DATE. AGE.

First and Second Decades.

1799. Born at *Edinburgh Nov. 7th, but spent most of his boyhood at his father's country-house in Fifeshire. The younger of two children, both sons. His father in good circumstances. Educated chiefly at the High School at Edinburgh, but had the advantage of a private tutor as well. Had few boy-friends. Took much interest in working out his own ideas, and was especially fond of chemical experiments, and of anatomy.

1817...18 Became a pupil of Dr. Barclay.

1818...19 Discovered a new solvent for caoutchouc, obtained by distillation from coal-tar. On March 5th, he wrote a letter, describing the substance and his process for obtaining it, to Dr. Thomson, editor of the *Annals of Philosophy*; this letter was published in August, and is republished in Mr. Syme's *Contributions to the Pathology and Practice of Surgery*. By means of this solvent, Mr. Syme waterproofed a silk cloak, so that it "afforded complete protection from the heaviest rain, and could be employed as a pitcher by turning up its skirt." He had also "constructed flexible tubes of the same substance." He adds: "My friends talked of a patent; but, being then about to commence the study of a profession, with which considerations of trade in those days did not seem consistent," the above letter was written instead. We are told that, "not long afterwards, a patent for applying the solution to making waterproof cloth was taken out by a manufacturer in Glasgow, Mr. Mackintosh." Mr. Syme had been working at the subject for two years.

In the Entered at a new dissecting-room opened by his third cousin, Spring Mr. Liston, who was then just beginning practice.

Winter Became Demonstrator in Mr. Liston's dissecting-room.

* There seems to be differences of opinion as to where Mr. Syme was born. One account (the fullest and apparently best informed) gives Edinburgh; another says Fifeshire; while a third mentions Kinross-shire.

Third Decade.

- 1820...21 Made Medical Superintendent of the Fever Hospital, and himself suffered severely from an attack of fever.
- 1821...22 Elected House-Surgeon of the Royal Infirmary, Edinburgh.
- 1822...23 Took the *Membership of the College of Surgeons of London*. About the same time, took Mr. Liston's place as private lecturer on Anatomy. This year, or in 1823, he became a *Fellow of College of Surgeons of Edinburgh*.
- Sept. 2 Performed Amputation at the Hip-joint. This was the first time the operation had been done in Scotland. The patient lived into the eighth week, and died of ascites.
- Wrote a paper on his case of Amputation at the Hip-joint in *Edinburgh Medical and Surgical Journal*, vol. xxi, 1824, p. 19.—About this time, Mr. Syme entered into partnership with Liston; they soon quarrelled, however, and the partnership was dissolved. Mr. Liston got into some discredit for professional reasons; and Mr. Syme, on account of the previous connexion between the two, suffered some unpleasantness in consequence. Mr. Syme, however, entered into arrangements with Dr. Mackintosh, and they set up a Medical School.
- 1824...25 Anatomical Remarks on the Fasciæ of the Groin (*Edinburgh Medical and Surgical Journal*, vol. xxii, 1824, p. 295).
- 1825...26 Began to lecture on Anatomy and Surgery at his new school, where Dr. Mackintosh took some other subjects. Soon, however, gave up Anatomy, partly on account of the difficulty of obtaining subjects, and confined himself to Surgery.—Published Remarks on the Treatment of Incised Wounds (*Edinburgh Medical and Surgical Journal*, vol. xxiv, 1825, p. 52).—Description of an Instrument for Dilating the Female Urethra (*Ib.*, p. 71).
- 1826...27 Case of Fractured Femur, with Inversion of the Toes (*Edinburgh Medical and Surgical Journal*, vol. xxv, 1826, p. 308). Case of Recovery after Extensive Exfoliation of the Vertebra Dentata (*Ib.*, p. 311).
- Excision of Head of Humerus for Disease: Recovery, with good Use of Arm (*Edinburgh Medical and Surgical Journal*, vol. xxvi, 1826, p. 49).
- 1827...28 First Operation for Excision of the Elbow.
- 1828...29 Case of Obstruction in the Arteries from an Internal Cause (*Edinburgh Medical and Surgical Journal*, vol. xxix, 1828, p. 291).—Moveable Cartilages in the Burso of the Sartorius (*Ib.*, vol. xxx, 1828, p. 104).—Excision of Lower Jaw for immense Osteosarcoma, weight 4½ lbs.: Recovery (*Ib.*, October 1828, p. 286).—On the Nature of Inflammation (*Ib.*, p. 316).
- 1829...30 Had a class of 250 men for Surgery. This remarkable success was in spite of the competition of several other now celebrated surgeons, some still living, who at that time were beginning work. He soon afterwards established a private Clinical Surgical Hospital, which was recognised by the College of Surgeons of London; and he there delivered a number of courses of lectures to full classes of students. This hospital was founded in consequence of his endeavours to get an appointment on the staff of the Royal Infirmary being discouraged so long as Liston also held office there.
- May 15 Superior Maxillary Bone Excised. Case related in *Edinburgh Medical and Surgical Journal*, vol. xxxii (1829), p. 218.
- Published Case of Aneurismal Condition of the Posterior Auricular and Temporal Arteries (*Edinburgh Medical and Surgical Journal*, vol. xxxi, 1829, p. 66).—On Exfoliations from the Bones of the Pelvis as causing the Obstinacy of Sinuses in this Situation (*Ib.*, p. 251).—Three Cases in which the Elbow-joint was successfully excised; with some General Observations on the Treatment of Caries (*Ibid.*, p. 256).—Quarterly Report of the Edinburgh Surgical Hospital from May to August, 1829 (*Edinburgh Medical and Surgical Journal*, vol. xxxii, 1829, p. 231).

Fourth Decade.

- 1830...31 The following publications:—Quarterly Report of the Edinburgh Surgical Hospital from August to November, 1829 (*Edinburgh Medical and Surgical Journal*, 1830, vol. xxxiii, p. 20; Ditto, from November 1829 to February 1830 (*Ibid.*, p. 229); Ditto, from March to June, 1830 (*Ibid.*, 1830, vol. xxxiv, p. 1); Ditto, from April 8th to August 8th, 1830 (*Ibid.*, p. 221).
- 1831...32 Published a *Treatise on Excision of Diseased Joints*. This was his first book.—Quarterly Report (as usual) from August 1830 to February 1831 (*Edinburgh Medical and Surgical Journal*, 1831, vol. xxxv, p. 233); Ditto, from February

- to August, 1831 (*Ibid.*, 1831, vol. xxxvi, p. 233).—Case of Spontaneous Varicose Aneurism (*Ibid.*, p. 104.) This is the first recorded case in which the vessels affected were the abdominal aorta and inferior vena cava.—Published his work entitled *The Principles of Surgery*, pp. 347. At this time, Mr. Syme was a Fellow of the Royal Society of Edinburgh.
- 1832...33 Report from August 8th, 1831, to February 8th, 1832 (*Edinburgh Medical and Surgical Journal*, 1832, vol. xxxvii, p. 325).
- 1833...34 Appointed Professor of Clinical Surgery in the University of Edinburgh, in place of Mr. Russell, who retired. Mr. Syme was allowed to arrange a payment to Mr. Russell of £300 a year during life. Such arrangements seem to have been common at this time, and were not looked upon as objectionable.—Report of Surgical Hospital from August 1832 to February 1833 (*Edinburgh Medical and Surgical Journal*, 1833, vol. xxxix, p. 313).—Clinical Report of Surgical Cases in the Royal Infirmary from February to August 1833 (*Ibid.*, vol. xl, p. 321).
- 1834...35 Appointed Surgeon to the Royal Infirmary in room of Mr. Liston, who had left for London.
- 1835...36 Clinical Report for the Winter Session 1834-35. (*Edinburgh Medical and Surgical Journal*, 1835, vol. xlv, p. 1.)—Ditto for the Summer Session, 1835. (*Ibid.*, 1836, vol. xlv, p. 1.)
- 1836...37 Fibrocartilaginous Tumour of the Humerus: Removal together with the arm and part of the scapula and clavicle: Recovery. This case is published in Mr. Syme's Fourteenth Report of Surgical Cases (*Edinburgh Medical and Surgical Journal*, 1836, vol. xlvi p. 249).
- 1838...39 Book "On Diseases of the Rectum", pp. 138.—Published Surgical Cases in *Edinburgh Medical and Surgical Journal*, 1838, vol. 1, p. 369.—Mr. Syme was at this time Surgeon in Ordinary to the Queen.
- 1839...40 On the power of Periosteum to form New Bone (*Trans. Roy. Soc. Edin.*, 1839, vol. xiv, Part I.)

Fifth Decade.

- 1840...41 Reconciliation with Mr. Liston. The overture of friendship on this occasion, as at another time when there had been a temporary rupture of friendship, came from Mr. Liston.
- 1841...42 Subcutaneous operation for removal of loose cartilage from knee-joint. The cartilage was dislodged without any difficulty, and conveyed about an inch towards the patella. An abscess formed over it afterwards; a slight rigor occurred, followed by inflammation of lymphatics to the groin. The cartilage was extracted from the abscess on the eleventh day. The man was going on well in March. Mr. Syme considered at that time that the danger of direct incision into the joint was *not the entrance of air*, but risk of non-union of wound by first intention, and extension of inflammation from it into joint.—Published Surgical Cases and Observations in *London and Edin. Monthly Journal of Medical Science*.
- 1842...43 Brought out a third edition of his *Principles of Surgery*, pp. 508.—Performed a new operation for cure of stricture of the urethra by external incision. The operation consisted in cutting on to a small grooved staff previously passed *through the stricture into the bladder*. The patient recovered. Mr. Syme had treated him previously by catheterisation, and twice by internal incision. (*London and Edin. Monthly Journal of Medical Science*, October 1844.)
- Sep. 8. Devised and performed his operation of amputation at the ankle-joint, which has ever since been known as "Syme's Amputation". The patient was a boy aged 16.
- Nov. "Surgical Cases and Observations." (*Monthly Journal of Medical Science*.)
- An account of his first case of amputation at the ankle (*supra*) in *London and Edinburgh Monthly Journal of Medical Science* (February 1843).—Surgical Cases and Observations in several numbers of same periodical; especially one in November, on Disarticulation of the Lower Jaw without opening the cavity of the Mouth.
- 1843...44 Was made a Fellow of the Royal College of Surgeons of England; his name being in the first list of three hundred nominated by the Council of the College under the new charter.
- 1844...45 Surgical Cases and Observations in several numbers of *London and Edinburgh Monthly Journal of Medical Science*, containing further Cases of, and Observations on, his Amputation at the Ankle.

- 1844...46 Further Surgical Cases and Observations on the same subject; and on other subjects (*London and Edinburgh Monthly Journal*).—Letter on the appointment to the Chair of Clinical Surgery, implicating Mr. Liston as one who (it had been said) had offered to pay for the appointment. Mr. Liston had denied it, and did so again.—Letter to the Right Honourable Sir James Graham, Bart., Principal Secretary of State for the Home Department (*London and Edinburgh Monthly Journal*, November 1845).
- 1846...47 Further Surgical Cases and Observations (*Monthly Journal of Medical Science*), especially on Amputation of the Thigh, in which he advocates the circular amputation for operations at the lower third.—Correspondence concerning remarks made by Dr. Simpson on some of Mr. Syme's cases.
- 1847...48 Further communications on Amputation at the Ankle-joint (*Monthly Journal of Medical Science*). Also articles in same journal on Amputation at the Thigh; Amputation at the Shoulder-joint for Axillary Aneurism; on the Treatment of Popliteal Aneurism; on the Restoration of the Upper and Lower Lip.
- July 29. Performed ligature of the subclavian artery for axillary aneurism; the patient recovered.
- August. Paper on the Use of Ether in the Performance of Surgical Operations.—Remarks at discussion on the question of Etherisation diminishing the Mortality after Surgical Operations, (the paper was by Professor Simpson).—During this year, Mr. Syme did the first operation in Great Britain for removal of the clavicle.
- 1848...49 Published a book entitled *Contributions to the Pathology and Practice of Surgery*, pp. 332, consisting of a selection of the most important of Mr. Syme's previously published papers, with some remarks, etc. It contains a case of Rupture of the Urinary Bladder terminating in the recovery of the patient. It contains, also, an important article on Excision of the Elbow-joint; the following extracts from which serve to show Mr. Syme's opinion on the subject of excision. "Of all the articulations in the body, there are only two which admit of being cut out with advantage for the removal of carious bone. These are the shoulder and elbow joints." Of excision of the knee, he says: "The knee may be excised, but not with the effect of preserving a limb so useful as an artificial substitute after amputation of the thigh. I tried the operation, nearly twenty years ago, on a boy, who recovered perfectly from it, and seemed at first to possess a limb little inferior to its fellow, except in so far as it was stiff at the knee;" but he adds that the operated limb did not grow in proportion to the other, and at last was several inches shorter than its fellow. "The ankle-joint, according to M. Moreau's experience, may be cut out, but requires a very long and tedious process of recovery;" and he adds, that when healed, such a foot is not so good a support as the stump after amputation at the ankle. "The wrist-joint, from its complex carpal articulations, with the numerous tendons, nerves, and bloodvessels passing over it, could hardly admit of caries being extirpated from it by excision, and certainly not so as to procure a hand of the smallest use." He considers, with reference to the shoulder, that amputation is "almost always preferable to excision," "so that the field for excision would seem nearly limited to the elbow."
- Feb. 13 Went to University College Hospital, London, as Surgeon and Professor of Clinical Surgery, in room of the late Mr. Liston.
- March Received congratulatory address from upwards of 180 medical students of University College.
- May 10 Resigned his appointment at University College Hospital in consequence of being required to lecture on systematic as well as on clinical surgery.
- May 15 The students requested him to recall his resignation.
- July 3 Returned to Edinburgh, and was soon afterwards reappointed Professor of Clinical Surgery there.
- 1849...50 Elected President of the Medico-Chirurgical Society of Edinburgh.—Gave an address.—During the year, exhibited various specimens at meetings of the Society.
- Jan. 3
- Feb. 17 Clinical Remarks in Surgery (*Lancet*); viz., On Stricture of the Urethra, Morbus Coxarius, or Hip-Disease; Amputation below the Knee.—Correspondence in the *Lancet* on the definition of caries, especially for the information of certain surgeons in London.—Published his book *On Stricture of the Urethra and Fistula in Perinco* (pp. 72); advo-

cating external incision for cure of strictures admitting only very small instruments, or requiring the very frequent use of bougies; and treatment of fistula in perineo by dilating the stricture; or when mere dilatation of the stricture will not effect cure of fistula, then making a free median incision into the urethra, in the hope that the tortuous fistulous canal may heal.

Sixth Decade.

- 1850? Probably about this date Mr. Syme published a pamphlet entitled "Statement by Mr. Syme relative to his Connection with University College." The date of publication is not given.—Remarks on Chloroform in Surgery at a meeting of the Royal Medical and Chirurgical Society.—The following articles, etc., in various numbers of the *Monthly Journal of Medical Science* for 1850: Various Cases in Surgery; Letters between Benjamin Bell and John Pearson on the Treatment of Urethral Stricture; Comparative expediency of Lithotomy and Lithotripsy with reference to the use of Chloroform.—Early in this year also he framed the Heads of a Bill for Medical Reform; Letters from Mr. Syme to Editor of *Lancet* with reference to his operation for stricture; Letters and Documents from Mr. Syme relating to Mr. Lizars (*Lancet*).
- 1851...52 Introductory Lecture to the course on Clinical Surgery (*Edinburgh Monthly Journal of Medical Science*, 1851); several Clinical Lectures and Reports; further cases and Correspondence about his operation for stricture of urethra; published *Supplement to Principles of Surgery*, pp. 43.
- 1852...53 Correspondence as to whether Mr. Miller, Professor of Systematic Surgery, should have any beds in the Royal Infirmary. Mr. Syme opposed the concession, which was however made to Professor Miller.
- 1854...55 "Letter to Lord Viscount Palmerston on Medical Reform", Mar. 20 pp. 11. Mr. Syme advocates the appointment of a medical Board, by the Queen, "for regulating education and practice in Great Britain and Ireland." The duties of the "Board" should be to determine the "minimum of education" necessary for a licence; to visit such of the licensing bodies as adopt this standard, and thus ensure "the due performance of the obligations thus undertaken"; to publish a register of qualified persons; to punish those who assume false titles.
- 1855...56 Trial of "Glover v. Syme" for libellous statements made Jan. 10 by the latter against Mr. Glover in reference to the examination and 11 of and granting a certificate for a patient suffering from compound fracture under Mr. Syme's care: damages for Mr. Glover, £250 and costs, the jury finding for the "pursuer on all issues." Mr. Syme afterwards published a pamphlet called "Illustrations of Medical Evidence and Trial by Jury in Scotland."—Second edition of "Stricture of the Urethra and Fistula in Perinco", with Appendix, entitled "Reclamation addressed by Mr. Syme to the Imperial Academy of Medicine of Paris, relative to the Remarks of that Body on the mode of Treating Obstinate Strictures of the Urethra." Mr. Syme considered that his operation had been erroneously judged and described by a committee of the Academy when deciding the claims of candidates for a certain prize for improvements in the treatment of urethral disease.
- 1856...57 Letter on the Edinburgh Chair of Military Surgery to Lord Panmure, Secretary of State for the War Department, advocating adaptation to modern wants of armysurgeons.—Articles: Cases and Observations in Surgery (*Edinburgh Medical and Surgical Journal*, 1856); Gunshot Wounds and Hæmorrhage; Prolapsus Ani; Ununited Fracture Remedied by Operation.
- 1857...58 Second Letter to Lord Palmerston, suggesting that "each Aug. of the ten Universities and each of the nine Medical Corporations, together with the Association of Provincial Practitioners in England, elect a representative; and to these twenty, let the Government add ten, which might be named the General Council; and then let it elect ten of its members to be the Executive Council."—Portrait of Mr. Syme executed by Holl during this year.—Further Cases and Observations in *Edinburgh Medical Journal*; viz., On the Remedy of Stricture by External Incision; Traumatic Aneurism of the Common Carotid, successfully treated by incision and a ligature above and below the aneurism; Excision of the Clavicle; Fracture through the Trochanters of the Thigh-bone; The Escharotic Treatment of Cancer.—Papers on Disarticulation of the Scapula, and on a new method of Operating for Impermeable Hernia, read before the Royal Medical and Chirurgical Society.

1859...60 Correspondence between Mr. Syme and the Editor of the Jan. *Medical Times and Gazette* (Mr. Spencer Wells) with reference to statements published in latter journal about Mr. Syme's private practice, and alleged by Mr. Syme to be untrue and injurious.

Feb. 19 Another Letter to *Lancet* on same subject.

Seventh Decade.

1860...61 On the Radical Cure of Reducible Hernia (*Edinburgh Medical Journal*, 1860, vol. 6, pt. II).—On the Treatment of Axillary Aneurism (Royal Medical and Chirurgical Society).

1861...62 Letter to Editor of BRITISH MEDICAL JOURNAL on Consultation with Homœopaths (short and characteristic).—Work entitled *Observations in Clinical Surgery*.

May 29 Operation for Ligature of Internal Iliac Artery on account of Aneurism of the Gluteal.

June 14 A second and most formidable operation for Gluteal Aneurism by opening the Sac (account of operation in the *Lancet*). Was in this year made Surgeon in ordinary to the Queen for Scotland, a Knight of the Danish Order of Dannebrog, and a chevalier of the Legion of Honour.

1862...63 Operation on Iliac Aneurism by opening the sac and tying Apr. 20 the afferent and efferent vessels. (Case related at meeting of Royal Medical and Chirurgical Society).—Mr. Syme was Chairman of the Jury on "Surgical Instruments and Appliances" at the International Exhibition.

1863...64 Dinner to Mr. Syme at the Salt Hill Marine Hotel, near Dublin.

July 11 Letter from Mr. Syme to *Lancet* on Medical Fees.

Oct. and Letters in BRITISH MEDICAL JOURNAL, expressing disap-
Nov. proval of iridectomy

1864...65 "Observations on the Present State of Medical Education, with suggestions for its improvement," pp. 24. (Partly delivered as an address at conversazione of Royal College of Surgeons of Edinburgh).—Correspondence with Editor of *Lancet* on his opinions relative to Medical Education, etc.

Nov. 29 Operation for Excision of Tongue: recovery with speech. Published Monograph on "Excision of the Scapula," containing two cases of excision and one of amputation of the whole extremity including the scapula. Pp. 35. By James Syme, F.R.S.E. The following is the list of titles appended to his name in this book: Surgeon in Ordinary to the Queen in Scotland; Professor of Clinical Surgery in the University of Edinburgh; Member of the General Medical Council for the Universities of Aberdeen and Edinburgh; Knight of the Danish Order of Dannebrog; Hon. Member of the Royal Belgian Academy of Medicine; Hon. Member of the Russian University of Cracow; Foreign Associate of the Surgical Society of Paris; Hon. Member of the Medical Society of Hamburg; Hon. Member of the Medical Society of Stockholm; Hon. Member of the Medical Society of Bombay; Hon. Member of the Medical Society of Athens; Hon. Member of the Medical Institute of Egypt; Hon. Member of the Royal Medical Society of Edinburgh, etc.

1865...66 Mr. Syme "expressed his disapprobation" of acupressure Feb. "in a very emphatic manner" at a clinical lecture.—An (about) abstract of the clinical lecture and a letter on same subject in *Lancet*, Aug. 1, 1865. After stating that he had not interfered in what he considered useless innovations in obstetric practice, he says "It appears that my example in this respect has not been followed, and that, in a pamphlet recently published, I have been charged, not only with ignorance of my profession, but with want of good faith in teaching it. Such vulgar insolence I treat with the contempt it deserves."—Another letter on same subject.

Aug. 3 Delivered the "Address in Surgery" at the Meeting of the British Medical Association at Leamington.

1866...67 Further particulars (in *Lancet*) of his case of Excision of Jan. the Tongue.

Nov. 17 Introductory Lecture (*Lancet*); Article: On Amputation at the Knee by Mr. Carden's Method; and on Ligature of the Femoral Artery for the thirty-fifth time, with remarks on the treatment of Aneurism (*Edinburgh Medical and Surgical Journal*, 1866, vol. 11, part II).

1867...68 Article in *Lancet* on Compensation for Railway Injuries.

Jan. 5

Feb. 2 Letter on same subject.

July 6 Article in same Journal On the Treatment of Incised Wounds with a view to Union by the First Intention.

Aug. 4 Made an honorary M.D. of the University of Dublin.

Oct. 19 Letter to *Lancet* on matter connected with Edinburgh University.

1868...69 Illustrations of the Antiseptic Principle of Treatment in Jan. Surgery (BRIT. MED. JOURNAL, 1868, Vol. 1, p. 1).

April Concluding Lecture of a Winter Course on Clinical Surgery (BRIT. MED. JOURNAL, 1868, Vol. 1, p. 371). Mr. Syme passes in review the antiseptic principle and the question of torsion; he concludes with some remarks on medical education.—Various letters between Mr. Syme and Dr. Hughes Bennett with reference to the clinical teaching of the former. This correspondence began with Dr. Bennett, who commented on certain parts of the clinical lecture abovementioned (BRIT. MED. JOURNAL, 1868).

June Professor Syme moved the following resolution on Medical Education, at the Eleventh Session of the General Medical Council:—"That a committee be appointed to consider and report how the various subjects of Medical Education, which have been deemed requisite by the Council, may be taught with most advantage; in what order they should be studied; and how the examinations on them ought to be arranged."

Nov. 23 Letter on Torsion *versus* Ligature (*Lancet*).

Aug....69 Mr. Syme made an honorary M.D. of the University of Bonn. —Made a D.C.L. of the University of Oxford.—Published "The History of Anæsthetics from an American Point of View." Pamphlet, pp. 14. Short Preface by Mr. Syme, the pamphlet itself being an extract from Dr. J. Mason Warren's "Surgical Observations, with Cases and Operations." In the preface Mr. Syme says "as there appears to be prevalent a very erroneous understanding with regard to the history of this subject, I deem it right, in justice to my transatlantic brethren, that the following extract should be rendered more accessible to British readers, by being published in a separate form."

1869...70 Proposed as President of Medical Council in room of Dr. Jan. Burrows (BRITISH MEDICAL JOURNAL, January 23rd, 1869, (about) and the other medical journals).

Feb. Letter to BRIT. MED. JOURNAL in reply to Dr. Hughes Bennett's communication in a previous number. Dr. Bennett's letter had reference to Mr. Syme's fitness for the Presidency of the Medical Council. Dr. Bennett, after specifying certain particulars, goes on to say that "in Edinburgh he (Mr. Syme) must be recognised by all earnest investigators and teachers of medicine as one of the most determined and influential obstructors to its progress. This is much to be regretted, as there can be no doubt that his long standing in the profession, his reputation as a surgeon, his tact, ability, terseness, and, let me add, unscrupulousness in argument, give him very great influence in public assemblies."

April 6 Mr. Syme had an attack of partial paralysis.

July (about) Resigned the Chair of Clinical Surgery.

Sept. Resigned the post of Acting Surgeon to the Royal In- (about) firmary.

1870...71 } Died.

June 26 } Interred.

There can be no hesitation in placing Mr. Syme in the first rank amongst our modern surgeons. He was, indeed, by emphasis a Surgeon. He possessed by natural endowment, in a remarkable degree, the qualities which render a man successful in that branch of our art; and he had cultivated them most carefully. He was fond of using his hands; and, if not brilliant in their employment, was sufficiently dexterous to ensure more than average success. He was cool in danger to a really remarkable degree, and had a sound and clear judgment. He was accustomed to think for himself and to entertain no slavish reverence for authority. His originality was great, but it was tempered by rare sagacity. To this latter faculty we must attribute the circumstance that he always knew where his strength lay, and rarely ventured into subjects outside his own walk. He cultivated clinical surgery; he practised and he taught it. For theories he cared but little; nor would it appear that he devoted any special attention to physiology, pathology, or medicine. Anatomy was essential to his rôle; and he was a good anatomist, but even here no pedant. His anatomy never went beyond the occasion, though it was always up to it. Of almost every word that Mr. Syme wrote, it may be asserted that it had reference to the nature and treatment of such diseases as are curable by operations or by external measures. Here was his *forte*, and to this he wisely kept himself. If from this for a moment he diverged into other

domains such as that of medical education, he still looked at everything from the standpoint of a hospital surgeon, and made it evident that he held all else except the knowledge of practical surgery remarkably cheap. We connect Mr. Syme's name with various improvements in operations, with modified instruments, and with plans of treatment, but not with any special gains in our knowledge of disease. Mr. Pott was successful in attaching his name to three conditions of disease or injury which he had the good fortune to be the first to describe correctly. Mr. Syme's trophies in this line all concern the operation-table. The genius of the latter was, indeed, rather for invention than discovery; and it may perhaps be doubted whether he had that *grande aptitude de patience* which is essential to the investigator. He could devise a plan to perfection, and his mind evidently luxuriated in such work. The intrepidity with which he executed novel and most formidable operations could have proceeded but from one source—a previous mental preparation of the most thorough kind. The thing which looked new and appalling to bystanders was not so to him, for he saw only that which he had foreseen.

As an operator, Mr. Syme was not showy. His honesty led him to pay no regard to appearances, and to keep the patient's safety solely in view. His procedures were, however, always characterised by quiet decision. He knew exactly what he intended to do, and did it without hurry, and at the same time without needless delay. Although a prolific inventor of new procedures, and fearless as to what he undertook when there seemed good reason, yet he never got the repute of being "fond of the knife". His friends, indeed, took pride in describing him as the man who never said an useless word, or spilt a drop of blood without necessity. His experience was large in many of the major operations. In the ligation of the femoral artery for aneurism he had had such remarkable success, that he considered himself entitled to decline to try the compression plan. As a lithotomist, he had, we believe, very good success; and some of the operations, in which, during the last ten years he revived the *præ-Hunterian* method of laying open aneurismal sacs and tying the diseased artery above and below the mouth of the sac, are amongst the boldest achievements of modern surgery.

It was as a bedside teacher that Mr. Syme was most especially in his vocation. His diagnostic power was admirable, and his explanations were graphic and to the point. His pupils always learned to reverence him; and many, who were privileged to know him well, became greatly attached to him. His influence in training others for surgical pursuits must have been very great indeed. Many of the best operators of the day have been his pupils, and acknowledge in him an instructor who was invaluable. He had the art of teaching quite as much by example as by speech. He let his pupils see how things should be done; and many learnt to emulate his caution, his scrupulous care, and his love for simple expressions and direct measures. They never found their master tripping; there was nothing for them to criticise—rarely anything which could possibly have been bettered. Although we have said that he excelled at the bedside, we believe he rarely met his class in the ward itself. His instruction was usually given in the theatre, where a selected group of patients were examined and prescribed for. Both teacher and class were in this way, he thought, spared the tedium of seeing the same case over and over again with but little change. It is possible that one of the attractions of his *clinique* was, that the greater part of what you saw there were new cases. A disadvantage of the plan was, that students could not follow up the cases. They saw operations performed, and never knew the result, unless the case were deemed sufficiently interesting to be again specially brought forward. So infrequent were the formal visits to the wards, and to such an extent were the resident medical officers left in sole charge of the in-patients, that it is reported that a zealous house-surgeon once went so far as to amputate a thigh, in confidence that his chief would never find it out. The deed came to light; but it was so precisely in conformity with the whole tenor of the master's own life, that it was impossible to say much. It was this infrequency of ward-visits which gave a basis of truth to the assertions of one of Mr. Syme's colleagues as to his neglect of clinical teaching, and which permitted of statements and counter-statements which, to those not in the secret, seemed irreconcilable.

Mr. Syme was a "student's friend." In all controversies with the authorities he took the popular side, and his caustic speeches in opposition to what he thought pedantry gained him much applause. Nor was his reputation with the pupils lessened by the fact that he was well known to regard some of the subjects taught, and many of the methods adopted for teaching them, with sentiments of contempt, and that his notions of medical education left the student a large amount of individual liberty, and required of him little more than that he should master "practical surgery". The sources of his popularity did not, however, end here. He was a man whom all could trust implicitly, who made no professions beyond what he purposed to perform, and who

took a warm interest in the welfare of his friends. Those who secured his good opinion during student-life were not forgotten afterwards, and, under whatever difficulties might occur, always felt that they had in Syme one whom they might consult with the most implicit confidence, and whose friendly offices were certain.

There were a few special epochs in Mr. Syme's life to which we must advert. As a whole, it was characterised, as we have said, by the steady determination to succeed as a practical surgeon, and was consequently remarkably uniform. Nor are the events to which we allude any exceptions to its general tenor, but illustrate his firmness in the pursuit of that one object. In 1829 we find him founding his own hospital. He could not wait for the chance of a vacancy at the Infirmary, and he knew that a man can become a surgeon by practice only. In 1833 he took another bold step in the same direction, and one which has sometimes been criticised. He actually pensioned off the man who stood in his way, and by this means secured the object of his ambition, possession of the chair of Clinical Surgery. The bribe for resignation was an annuity of £300 for life. Such a transaction might be blameable or otherwise, according to the special circumstances of the case. If there were competitors, it was clearly unfair to them, since it might involve the direct purchase of interest which ought to have been left dependent upon other motives. If, however, there was no probable competition, and the question was simply one of waiting, then all honour to the decision of character which recognised that money was valueless in comparison with a suitable field for work. We believe, however, that the truth is that such arrangements were not very uncommon at that time, and that it was by no means rare for the senile holders of office to expect a consideration for willingness to get out of the way of their successors. Thanks to the retirement-laws now in fashion, no such manoeuvres can in the future be necessary, nor, if they were, would public opinion tolerate them. If, however, we refuse to Mr. Syme the meed of originality in reference to the manner adopted to obtain his post in the Infirmary none can refuse it to him in respect to the next event which we have to mention. In this he did, perhaps, what had never been done before, and what will probably have few imitators in the future. In 1849 he migrated to London, and, after a short stay, *went back again*. Liston was dead, his cousin, compatriot and quondam colleague. By this event, sudden and unexpected, the chair of clinical surgery at University College Hospital, then in very high repute, was left vacant. As an operator, Liston had enjoyed a pre-eminent reputation, and his death left, not only a vacant post in a school of good position, but a perceptible gap in the ranks of the London profession. Mr. Syme accepted the offer of the chair and of the appointment as surgeon to the hospital, and, greatly to the regret of his Edinburgh friends, came to London. Within three months he had determined to act on the precept "the better end of purposes mistook is to mistake again," and he bravely went back and resumed his old work. Probably no single act in his life so well exemplifies his character and motives. He knew no false shame, no unreasoning ambition; he could retrace his steps without any sense of disappointment, and without the slightest loss of dignity. He had acquired fresh experience, and by its light he formed a new judgment. He had done the same thing repeatedly in reference to lesser matters; for it is a distinguishing feature in his surgical career that he introduced several bold operative procedures, and after careful trial laid them aside. It was thus in reference to excision of the knee-joint and removal of the entire tongue. In both of these instances he abandoned his *protégé* somewhat prematurely, but he did so from conscientious motives, which, it is to be wished, had more frequent exercise in the conduct of originators, who but too often defend through thick and thin that which they have once adopted. Mr. Syme said, in a straightforward manner, I thought it would succeed; I tried it; it has not pleased me; I lay it aside. It is just possible that he might, if he had remained in London, have lived through what he disliked; but it is perhaps more probable that he consulted his happiness and his reputation in taking the step which he did. What the motives were which led to his decision, will probably never be wholly known. The ostensible one was that the authorities of University College wished to impose upon him the systematic course of surgery as well as clinical teaching; but it is not unlikely that there were others also. Mr. Syme was then fifty years of age; he had been for long a surgical autocrat in Edinburgh, enjoying the idolisation of his many friends, and perhaps not less keenly the vituperation of his few enemies. The dead level of London life must have looked depressing. He would miss the exhilaration of Scotch air, and the sight of familiar faces. The Hospital in Gower Street possibly seemed small, and the sphere, as compared with that of Edinburgh, limited. No friendly relations had as yet been established with his class, and in some instances not improbably criticism took the place of reverence. In this way, by various little influences, the feel-

ings may have been brought into accord with the judgment; and a man who was wholly independent, and had but to please himself, may, we can easily conceive, have found his spirit longing to return to the haunts he had loved and the throne he had too hastily vacated. The post at Edinburgh was still vacant, and the professor was eagerly welcomed back.*

[To be concluded.]

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.

THE GOVERNMENT MEDICAL BILL.

A MEETING of Fellows and Members of the Royal College of Surgeons was held in the Theatre of the College on Tuesday last, to discuss the advisability of petitioning Parliament in favour of the restoration to the Medical Act Amendment Bill of Clause 18 of the Bill. The President, EDWARD COCK, Esq., took the Chair at 3 p.m. There were also present, among others, Sir W. Fergusson, Bart., Mr. Solly (the Vice-President), Mr. Birkett, Mr. Busk, Mr. Spencer Wells, Mr. Erasmus Wilson, Mr. Partridge, Mr. J. F. Clarke, Mr. C. Heath, Dr. Domett Stone, Mr. Brookes, Mr. George Cooper, Dr. F. C. Webb, Dr. Semple, Mr. Spencer Smith, Mr. Heckstall Smith, Dr. Henry, Mr. Rogers Harrison, Dr. Prosser James, Mr. Gant, Mr. Wheelhouse (Leeds), Mr. Gamgee (Birmingham), etc.

THE PRESIDENT, on taking the chair, said that, as the object of the meeting had been made known in the advertisement and circulars, it was scarcely necessary for him to make any explanatory remarks. It was right to say, however, that he was responsible for calling the meeting. Believing that the matter to be brought under discussion was very urgent, and that there was not time for taking the ordinary steps of consulting the Council, he had, with the sanction of the Vice-Presidents, summoned the meeting. The Medical Bill at present before the House of Lords was not the same as that which was before the Fellows and Members of the College at their last meeting. The eighteenth clause, which provided that no honours or degrees in medicine should be granted except to those who had first been examined by the conjoint boards, had been suppressed. He considered that this omission emasculated the Bill; and he had thought it right to give the Fellows and Members of the College an opportunity of expressing their opinion.

Mr. BUSK said that it was quite clear that the omission of Clause xviii, instead of rendering the mode of entrance to the profession more simple and uniform, would only make it more complicated; for it would allow twenty-two portals instead of nineteen. In England alone, instead of three, there would be four, without reckoning the Universities, in whose interest, it was said, the clause had been omitted. However distinguished our Universities in England were, they could scarcely be called medical authorities; very few practitioners of medicine gained admission to the profession through them, the great mass consisting of members of the College, and of licentiates of the Apothecaries' Hall and of the Royal College of Physicians. His own opinion was, that the Bill was not required for England, where, in effect, there was but one portal. The case was different in the sister kingdoms, where the Universities assumed a different position. He had a strong conviction that the Bill ought not to be allowed to pass with the eighteenth clause omitted. If the present were the proper time and opportunity, and the discussion were not limited by the terms of the notice convening the meeting, he could say something on two other points in regard to which the Bill required amendment: he referred to the misrepresentation of the corporations in the Medical Council, and to the manner in which pecuniary matters were proposed to be dealt with. He proposed—

“That this meeting fully agrees with the opinion expressed in the

* The following extracts from a notice of one of Mr. Syme's books, published in the *Medico-Chirurgical Review*, at this juncture is not without its interest:—

“Scarcely had it issued from the press, when Mr. Syme was appointed to fill the important office in this metropolis held by the late Mr. Liston, and we gladly give him a stranger's welcome. We believe him to be eminently qualified for the duties he has undertaken, and fully to deserve the high reputation he has gained in the North, as a practical surgeon, enterprising operator, and clinical teacher.”

“But what we feel chiefly bound to notice, is the egotistical tone of the writer, and his almost contemptuous reference to the opinions and practice of his contemporaries. Mr. Syme never loses an opportunity of telling us that he was the first to suggest some new plan of treatment, or to carry into execution some new operation, and he sometimes gives to trifling modifications of treatment, or novelties in practice, all the consequence of grand original discoveries or valuable improvements in surgery. Mr. Syme must excuse our reminding him that, in this metropolis at least, there is no backwardness in acknowledging real worth, and in according ample credit for any real additions made to professional knowledge; and that the recognition of such claims may be safely left in the hands of his medical brethren. In proof of this, we need only refer to the generous appreciation by the profession of the talents and services of the late Mr. Liston.”

resolution of the Council of the College of the 9th instant, viz., that the original Clause 18 of the Medical Act (1858) Amendment Bill should be re-inserted in that Bill;

“And that a petition, in the name of the Fellows and Members of this College, as represented by this Meeting, and to the following effect, be drawn up and presented to the House of Lords, praying that, for the reasons stated therein, the original Clause 18 may be restored to the Bill.”

Mr. PARTRIDGE seconded the motion. He thought that it would be better to have no Bill at all, and that the Colleges should combine for the granting of licenses to practise.

Mr. GAMGEE thanked the President for having, in conjunction with the Vice-Presidents, spontaneously summoned the meeting. He thought that this act might be looked on as one of great importance. The privileges afforded to the Fellows and Members, of meeting in the College, was very great, though on the present occasion but few availed themselves of it—probably because the feeling on the question was unanimous. If Clause xviii were removed from the Bill, the confusion of qualifications would be worse confounded. He could not understand Mr. Busk's reference to the misrepresentation of the corporations in the Council; but he knew that the profession was very much misrepresented, if indeed it could be said to be represented at all.

Mr. ADAMS said that the position of the medical profession was most unsatisfactory. Bill after bill had been brought forward; and in 1870 we were still complaining. A general diploma would be of advantage to the profession and the public. Why should not the College of Surgeons prepare a Bill and submit it to the Legislature?

Mr. HECKSTALL SMITH believed that the feeling in favour of reinstating the eighteenth clause was very general. He had been greatly surprised at its omission; and rather than allow the Bill to pass without it, he would forego legislation altogether for the present. It was worth any amount of exertion to get the clause reinstated. If it were omitted, there would simply be an addition of these boards to those already existing. He strongly supported the motion.

Mr. ROGERS-HARRISON expressed his satisfaction with the course taken by the President and Vice-Presidents in summoning the meeting.

After some further discussion, in which Mr. Gant, Dr. Prosser James, and some other members took part, the motion was unanimously carried.

A vote of thanks to the Chairman, proposed by Mr. SPENCER WELLS, and seconded by Mr. GAMGEE, terminated the proceedings.

HARVEIAN ORATION AT THE ROYAL COLLEGE OF PHYSICIANS.

THE annual oration was delivered on Friday last by Dr. GULL to a crowded and much interested audience.

Dr. Gull, after paying a passing tribute to Harvey, referred to the central position occupied by medicine among the branches of knowledge open to man, and entered at once on a discussion of the question whether the essential relations between life and the other forces presented to us by nature were a legitimate subject of knowledge. The progress of chemistry, he remarked, had swept entirely away the belief once entertained that living bodies produced the substances of which they consisted, and had established a complete identity in substance between the organic and inorganic world; and, tracing the various forms of life upwards from its commencement in the vegetable, he expressed his conviction that every manifestation of it may yet be found to be an exhibition of powers and laws universally operative; and, though in progressing from the general operation of the law of life to its more intricate modes the difficulties of the inquiry doubtless increase, yet he believed that they were not essentially greater difficulties than such as had been overcome by the patience and docility of those whom it was his duty to commemorate. Physical science, by translating the before barren formula of cause and effect into suppression and reappearance, had opened to us a course of boundless promise; to the whole tenor of which the hypothesis of a separate vital force, independent of the ordinary forces of nature, and having no essential relation to them, was contrary,—since that hypothesis consigned us to a perpetual mental inactivity and ignorance in that region of knowledge in which above all others man is interested; an attitude which the lecturer showed many of the keenest minds, alike of the present and of the past, had pronounced inadmissible. “Whether, to use an expression of Harvey's day, living things are ever produced automatically, that is *de novo*, through putrefaction or otherwise, is, like the question of the universality or limitation of the germ-power, still a matter upon which opinion is divided; and, as it is my duty on this occasion to exhort you to investigate nature by way of an experiment, I must ask you not readily to

cept negative conclusions, which impose limits where none may really exist. Still, it must be admitted that it is under the strictest and severest limits that nature does operate. If organisation be automatic, it is so in a deeper and higher and wider sense than the mind of man has as yet conceived; it is a process of whose beginning we have no knowledge or conception, and the present facts of which must ever make greater and greater demands upon the intellect to fathom them. It is an operation which includes in its last developments an intellectual and moral law; all the infinite variety we see around us and all that subtle world we feel within. While recognising to the full the great success which has attended the labours of the physicists and chemists upon what may be termed the confines of life, the higher and more strictly vital phenomena still remain unsolved; nor can we be said to have acquired a clue to the idea of the organic operations until we are able to try our knowledge by prediction, and to foretell what must arise under given conditions." And, though the recent discoveries respecting molecular constitution which are expressed in the laws of colloid bodies are of the highest value, yet the evolution of the various tissues and organs of the body from the apparently homogeneous ovum is still almost as much beyond scientific comprehension as it was when this relation was instituted. The part played by light in the formation of the vegetable tissues, as recently more fully investigated by Professor Tyndall, and the discoveries of Dr. Marshall Hall respecting the reflex nervous system were next referred to; and the new position in respect to nature assigned to man by the power of controlling the conditions of his life was dwelt on in reference to the duty thus imposed on him, specially, to remove all removeable causes of bodily and mental disease. The idea that we can so far fathom the Divine purposes as to be warranted in permitting any evil to continue which it is in our power to remove was emphatically repudiated. The search for specifics, also, in comparison with that for the means of preventing zymotic and other diseases was earnestly deprecated, and a tribute was paid to the noble and successful labours of the late Sir James Simpson in all departments of hygiene. Though the theoretical value of the germ theory of disease may be yet unsettled, yet had it done no more than promote the purity of the water-supply to large towns, its good results would have been incalculable. We already owe to it the metropolitan drainage works, the water-supply of our large towns, the purification of the Thames, and such partial filtration of our drinking water as the public waterworks companies cannot avoid. A reference was then made to the investigation of the germ theory by the "Cholera Committee" of the College in the year 1849, when the most prolonged and elaborate inquiries resulted in demonstrating the absence of any peculiar germs or other such organic bodies from the atmosphere. The supposed germs (when really germs, for many shapes had been included in the supposed direful growth) were found to be spores of known harmless fungi and confervæ, whereof if even the startling number of "thirty-seven and a-half millions should be contained in about two drachms of water," it is probable the whole or repeated units of such millions might be harmlessly swallowed. That the infectious diseases spread by emanations from the sick must have been long known, and that such emanations are of a solid nature, we may infer from the fact that they may be dried and conveyed from place to place; but in what state we know no more to-day than was known a thousand years past. No new fact, indeed, respecting the propagation of contagious disease appeared to have been revealed by the recent investigations on dust. The lecturer concluded with a reference to the sober, yet docile, spirit which medicine required in her disciples, and the call which it makes on them to recognise in opposites, not contraries, but elements affording to each other mutual support and completeness. In this aspect medicine embraced the twofold study of the physical and spiritual parts of man's nature. "What we have chiefly to avoid is, that discouragement should not pass into denial. If our difficulties are great, our hope and our assurance are firm, that the laws of health in their highest acceptance are laws of truth, and, I do not hesitate to say, laws of holiness."

The lecture was listened to with great attention, and was frequently applauded.

A PATIENT OF THE FEVER HOSPITAL, Netherfield Road, Liverpool, in attempting to escape over the gate during the night, was impaled on the spikes and instantly killed.

VACCINATION.—Thirty-five persons were convicted at Oldham on Monday last of infringing the provisions of the Vaccination Acts, and fined from one shilling to twenty shillings each.

TESTIMONIAL.—Dr. T. B. Christie has been presented with a solid silver teakettle as a testimonial from the officers and servants of the North Riding Lunatic Asylum, Clifton, Yorkshire, on his being appointed Resident Medical Superintendent of the Royal India Lunatic Asylum, Ealing.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 23rd, 1870.

Evans, Alfred Henry, Nottingham
Nicholls, Howard Hill John, Kennington Park
Noott, William Mathias, Cardigan, South Wales
Pratt, Thomas Gray, Clifton Road, N.W.
Tuck, Frank Sextus, Cresswell Park, Lee, S.E.

MEDICAL VACANCIES.

The following vacancies are announced:—

ANDERSON'S UNIVERSITY, Glasgow—Professor of Scientific Chemistry: applications 15th.
BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Resident Medical Officer: applications, 21st; election, 25th.
BIRMINGHAM LUNATIC ASYLUM—Assistant Medical Officer.
CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road—Assistant-Surgeon: applications, 14th.
EAST ASHFORD UNION, Kent—Medical Officer for District No. 5: applications, 4th.
HOSPITAL FOR SICK CHILDREN, Great Ormond Street—Assistant-Physician; Assistant-Surgeon: applications, 5th.
HOSPITAL FOR WOMEN, Soho Square—Surgeon: applications, 9th.
INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, Margaret Street, Cavendish Square—Visiting Physician: applications, 12th.
LEEDS DISPENSARY—Surgeon.
LEEDS PUBLIC DISPENSARY—Assistant Resident Medical Officer: applications, 6th.
LINCOLN GENERAL DISPENSARY—House-Surgeon.
LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Demonstrator of Anatomy: applications, 9th.
MALE LOCK HOSPITAL—House-Surgeon: applications, 15th; vacancy, Aug. 1.
MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: August 25th.
NEWCASTLE-UPON-TYNE INFIRMARY—Assistant-Surgeon.
NORTHAMPTON GENERAL INFIRMARY—Assistant House-Surgeon: applications, 9th; election, 19th.
PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY—Junior House-Surgeon: applications, 6th; duties, August 12th.
ROTHERHAM DISPENSARY—Resident House-Surgeon: applications, 4th; election, 13th.
ROTHERHAM UNION, Yorkshire—Medical Officer for the Beighton District: applications, 2nd; election, 4th.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL—Clinical Assistant: applications, 4th.
ST. BARTHOLOMEW'S HOSPITAL—Two Ophthalmic Surgeons: applications, 8th; House Committee, 12th; appointments, 27th.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Two Medical Officers: applications, 15th.
SOUTH STAFFORDSHIRE GENERAL HOSPITAL—House-Surgeon: applications, 2nd; election, 19th.
STAFFORDSHIRE LUNATIC ASYLUM, Stafford—Assistant Medical Officer.
UNIVERSITY COLLEGE, London—Professor of Practical Physiology and Histology: applications, 6th.
WORCESTER INFIRMARY—Dispenser.

BIRTHS.

JORDISON.—On June 28th, at Malpas, Cheshire, the wife of *Christopher Jordison, L.R.C.P., of a daughter.
WINTERBOTHAM.—On June 26th, at Bridgwater, the wife of *W. L. Winterbotham, M.B.Lond., of a daughter.

DINNER AND PRESENTATION TO DR. MACAULAY, OF CANONBIE.—Dr. Macaulay, of Canonbie, has just received a handsome gift in the shape of one hundred and two sovereigns, and been entertained at dinner under very peculiar circumstances. It appears that at the county election, in 1868, he voted in the liberal interest for Sir Sydney Waterlow; and in March of 1869, when, by reason of a hitch, that election had to be repeated, he voted on the same side. Shortly thereafter he received an intimation from Mr. Connell, the Duke of Buccleuch's Eskdale chamberlain, that his services would not be required as medical officer at Canonbie Collieries after Whitsunday. This was on the 25th of January. About the same time, the same gentleman moved, at a meeting of the Parochial Board, that Dr. Macaulay be dismissed his office under it, and the motion having been put twice, was at length seconded, and agreed to in silence. On the 23rd of February he was also ordered to leave the house of which he was in occupation. Two petitions were sent to his Grace—one signed by two hundred and thirty out of two hundred and thirty-eight colliers working in the pits, and the other bearing the signatures of fourteen hundred persons above fourteen years of age, out of a gross population in the parish of about three thousand of all ages, so that it was signed by nearly all the adults in Dr. Macaulay's favour. Of these petitions no notice was taken. Dr. Macaulay made several efforts by waiting upon and writing to the Duke for an explanation, but received none. Dr. Macaulay's friends accordingly determined to show their sympathy for him, and on Friday in last week he was presented by the inhabitants of the parish with an address signed by one thousand three hundred and fifty-eight persons, and a purse containing one hundred and two sove-

reigns. He was afterwards entertained to dinner by fully a hundred of his sympathisers. There were present at the dinner both Tories and Liberals.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Epidemiological Society.—Entomological Society.
WEDNESDAY.—Obstetrical Society of London, 7 P.M., Council Meeting. 8 P.M., Dr. Rasch, "On Air in the Vagina"; Mr. George Lowe, "A Case of Hæmorrhage from Retained Placenta after Abortion, terminating fatally." And other papers by Dr. Routh and Dr. Rogers.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

DR. WILSON.—Your letter shall appear.

MR. BULTEEL.—Many thanks for your letter. It was excluded last week only by want of space.

WOUND OF ELBOW-JOINT.—Will the author of this paper kindly send us his name, as it does not occur in his manuscript. The case shall appear.

DR. DOBBIE (Glasgow).—Dr. Gairdner, Dr. McCall Anderson, and Mr. Buchanan.

"A PROVINCIAL GENERAL PRACTITIONER."—We have forwarded your note to Mr. Lawson.

ERRATUM.—In the report of the Pathological Society of Dublin, in the JOURNAL for June 4th, p. 579, in the last line, "*extracapsular*" should have been "*intracapsular*."

MUTTON.—Mr. Tallerman, of Norton Folgate, N.E., buys up preserved mutton of various kinds from Australia. We believe the mutton hams to which you refer may be obtained from him.

LUNATICS AT HOME.

WE commend to the consideration of our sagacious contemporary, who desires to liberate seven-tenths of the inmates of our asylums, the following cases, which were all reported in the newspapers within a period of ten days, and which illustrate very forcibly some of our remarks upon "lunatics at home."

On May 15th, the wife of James Goodwin, a collier, residing at Brownedge, in Staffordshire, cut the throats of two of her children, and her own. No motive can be suggested for her extraordinary conduct. She is supposed to be insane.

On May 16th, Alfred Shelly White was brought before Mr. Flowers, at Bow Street, charged with having attempted to murder Mr. Charles Buxton, M.P., by shooting at him with a revolver. The prisoner has been tried, and found not guilty on the score of insanity.

On May 19th, a young man named Williams, who is connected with a respectable English family, shot Mr. John Gold, the landlord of the Derby Hotel, at Douglas, Isle of Man, without the slightest provocation; and afterwards blew his own brains out. It is supposed that Williams was in a state of madness when he committed the terrible double crime.

On May 22nd, James Riddiough attempted to murder Thomas Whittaker, a mason, residing at Eccleshill, near Bradford. Riddiough was walking with Whittaker, when, in a familiar manner, he put one arm round his neck, and suddenly cut his throat frightfully, from ear to ear. Riddiough, who was condemned to death for murder in 1847, and who has, since his liberation on a ticket-of-leave, stabbed a man and threatened to murder his wife, is subject to fits and mental disease.

On May 26th, a man named Finch, who lives at Sandon, three miles from Chelmsford, hacked his wife to death with a bill-hook, as she lay in bed. Finch, who has been an inmate of an asylum, is believed to be insane.

THE KENT AND CANTERBURY HOSPITAL.

SIR,—In the JOURNAL of June 18th, there is a statement relative to the Kent and Canterbury Hospital, for which, I fear, I am responsible; viz., that "a fourth the beds are medical, and three-fourths surgical." Now, on looking through the record for the year 1869, I find that 332 of the cases were surgical and 279 medical—a much larger proportion. In explanation of the error, I would add that the medical patients are, as a rule, retained in the hospital for a shorter period than the surgical patients; so that at one time the proportion of the medical to surgical cases is very small, averaging about one-third of the whole.

I am, etc.

FRANCIS BATEMAN, House-Surgeon
Kent and Canterbury Hospital, June 21st, 1870.

THE CONTAGIOUS DISEASES ACT.

SIR,—I have read with much interest your excellent article upon the "Contagious Diseases" question. In the course of it, you say: "This, then, is the dilemma which Christian England finds itself; forced to allow to a certain section of the population that which her creed tells her is a deadly sin."

With reference to this passage, I venture to call your attention to what "the Church" says upon the subject. In the address with which the priest commends the marriage service, it is stated that matrimony was ordained. "First. For the procreation of children, etc. Secondly. It was ordained for a remedy against and to avoid fornication; that such persons as have not the gift of continence might marry and keep themselves undefiled members of Christ's body." The Church here distinctly asserts that continence is a gift. Allow me to ask if the non-possession of a gift can really be a deadly sin? I am, etc.,
S.

June 21st, 1870.

THE DISPENSARY SYSTEM.

SIR,—I observe in your impression of June 4th, that, at a meeting of the Poor-Land Medical Officers' Association, Mr. Benson Baker is reported to have said, that "by the introduction of dispensaries, a great saving of the medical officers' time would be effected, and he would be able to give that attention to the merits of each case which, under the present system, it was impossible for him to do." heartily wish it were so in my case; but I find it very much the reverse.

Formerly, in my parish, each district medical officer received the pauper patient at his own house, the medicines being dispensed for all at the Workhouse; and the system worked well. Now I have to go daily to a Dispensary, a mile from my house, and outside my district. Formerly, I could see at my own house before eleven o'clock all my parish patients who were able to attend there, and also a private patients who might come to consult me. Now, I must wait at home my private patients till eleven, and then go to the Dispensary, when I ought to be beginning my round of visits, thus losing at least an hour and a half of the best part of the day. And that, be it observed, without any compensation; for the guardians have twice refused to raise my salary, even although, by the new system of diminishing the number of vaccinators (let me add, *en passant*, of vaccinators also), I have been deprived of my office as a public vaccinator, and although my salary is much less than others of my colleagues in the parish, who do less work and see their pauper patients at their own homes. Of course, if a clerk, a reliever, officer, or a dispenser, had part of his emolument taken away, and his work at the same time increased, any one, even a member of a board, would see the propriety of giving him compensation; but medical men are apparently supposed to be so wealthy or so generous, that they will do any extra work they are asked to do without expecting any additional remuneration. I am, etc.,
June 1870.

A METROPOLITAN MEDICAL OFFICER.

WE are indebted to correspondents for the following periodicals, containing new reports and other matters of medical interest:—The Indian Medical Gazette, May 30th; The New York Medical Gazette, June 11th; The Parochial Critic, June 29th; The New York Medical Record, June 16th; The Boston Medical and Surgical Journal, June 16th; The Madras Mail, April 18th; The Gardener's Chronicle, June 25th; The Poor-Law Chronicle, June 21st; The Cosmopolitan, June 23rd; The Medical Temperance Journal for July; The Chemist and Druggist Advocate, June 20th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Maudsley, London; Mr. A. P. Watkins, Worcester; Dr. Langmore, London; Dr. Shaw, London; Dr. Matthiesen, London; Dr. Kelly, London; Dr. Lion Beale, London; Mutton; S.; Mr. S. W. North, York; Dr. W. White, Southampton; Mr. J. Barber, Manchester; Dr. Gervin, London; Dr. Dunlop, Glasgow; Dr. Haughton, Dublin; Dr. F. B. Nunneley, London; M.D. Edin.; Mr. C. Bradburn, Nottingham; Dr. Black, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. James Russell, Birmingham; Dr. J. Risdon Bennett, London; Dr. Heathe, Leeds; Dr. Wilks, London; Dr. Morell Mackenzie, London; Dr. J. Dobbie, Glasgow; Mr. C. Holthouse, London; Messrs. Maw, Son, and Thompson, London; Mr. W. Acton, London; Dr. Corfield, London; Mr. W. L. Winterbotham, Bridgwater; Mr. C. G. Wheelhouse, Leeds; Dr. Wilson, Cheltenham; T. Principal and Academic Staff of King's College; Mr. J. R. Ireland, Stourbridge; The Registrar-General of England; The Secretary of Apothecaries' Hall; T. Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Mr. T. Watkin Williams, Birmingham; Mr. C. Jeaffreson, Newcastle-upon-Tyne; Dr. Paul, London; Dr. Hyde Salter, London; Dr. D. Dyce Brown, Aberdeen; Mr. Henry Smith, London; Mr. Wanklyn, London; Dr. Higginbottom, Nottingham; Dr. Holman, Reigate; Dr. W. Kelly, Taunton; Dr. J. Rogers, London; Dr. Mapother, Dublin; Mr. Jordison, Malpas; Dr. Ward, Huntingdon; Mr. Appleby, Llandudno; Mr. Thorn, Norwich; Mr. Bulteel, Stonehouse; Mr. Trestrail, Harston; Dr. Vinen, London; Mr. Spencer Wells, London; Dr. Letheby, London; etc.

BOOKS, ETC., RECEIVED.

Dr. J. Matthews Duncan's Testimonials, etc. First Series. Ambition's Dream. A Poem. London: 1870.
The Irish Poor-Law Medical System. By Dispensarius. Dublin: 1870.
First Annual Report of the Bromley Cottage Hospital. Established 1869.



SIR JAMES CLARK, BART., M.D., F.R.S., K.C.B.

LUMLEIAN LECTURES

ON THE

NATURAL HISTORY AND DIAGNOSIS OF
INTRATHORACIC CANCER.*Delivered before the Royal College of Physicians, 1870.*

By JAMES RISDON BENNETT, M.D.,

Fellow of the College.

V.

A MARKED distinction between the progress of an intrathoracic aneurism and cancer is the well known tendency of the former to produce *absorption of bone and external tumour*. Dr. Stokes says that he has seen no instance of cancer of the mediastinum inducing either one or the other; nor have I met with any instance of absorption of bone. But of external tumours, thus induced, I have met with several instances. Mr. Holmes, however, records a case in which both external tumour and absorption of bone resulted from the outward growth of a malignant mediastinal tumour. The man, twenty-three years of age, was a patient of Dr. Pitman, and was admitted with a tumour presenting towards the right of the upper part of the sternum; it felt almost solid, and pulsed strongly. No aneurismal *bruit* could be detected; but a systolic murmur was heard over the tumour and at the base of the heart. The pulse was full and bounding, and there was an inequality in the successive beats at the right wrist. The man was stout and of florid complexion, and had had hæmoptysis. It was found, after death, that the tumour had completely absorbed the sternum in many places.

In a case recorded by Dr. Pollock, a tumour appeared in the suspicious situation of the second intercostal space, hard, exquisitely tender, and the seat of lancinating pains. I could also quote other cases in which distinct external tumours and limited protrusions of the thoracic parietes have been met with.

The spinal column is not infrequently invaded by intrathoracic cancer, though seldom to the extent seen in the case last detailed; and here it was accompanied by an external tumour in the dorsal region. My friend Dr. Stone has also related to me the case of a lady who, having for some time had a small scirrhus tumour of the mamma, gradually became paraplegic. The auscultatory phenomena for a long time gave no indications of thoracic disease; but a tumour made its appearance between the scapulæ, which was the seat of much pain and tenderness. Ultimately, there was a systolic murmur; and signs of pressure on the heart and aorta supervened. After death, the lungs and heart were found to be pressed forward against the sternum, and the aorta flattened by enlargement of the bodies of three of the dorsal vertebræ, which were converted into a tapioca-like mass by colloid cancer. The interscapular tumour was produced by enlargement of these vertebræ, the seat of colloid cancer—a form of cancer very rarely met with in the spinal column.

As a general rule, cancer invading the spinal column does not extend through the meninges and infect the cord, or even induce inflammatory changes in the nervous substance. The cord itself was not implicated in the case of the young woman just detailed. In the following case, however, inflammatory softening of the cord resulted from the cancerous disease of the vertebræ and meninges. This case, moreover, is remarkable from the early age of the patient, a boy eleven years old; and from the wide diffusion of cancer through the system.

April 1864. G. C., a lad, aged 11, of rather pale and delicate aspect for a country boy, stated, when admitted into St. Thomas's Hospital, that he had never had any illness, and that a week previously he was at work in the fields with his father. On returning home, he complained of pain in his back and loins, and was unable to walk or even stand. On questioning him, he said that the pain of his back was now gone, but he had lost the use of his lower extremities. Sensation was a little impaired. The sphincters were impaired; and the bladder was now enormously distended, the urine having dribbled away for some days before admission. The skin was warm; pulse quickened; tongue slightly furred and coated. He was ordered a purgative, a saline diaphoretic mixture, and hot wet blankets, with the use of the catheter at regular intervals. Two days after admission, he had some power of motion of the right leg, but none of the left. The left leg and thigh were swollen and œdematous. There was also some œdema over the back towards the middle, but no tenderness or pain along the whole course of the spine. He did not make any complaint of pain. There

was no twitching or other spasmodic action. He slept well after the use of the blanket, in which he sweated freely. Pulse 100, soft; tongue not dry, but somewhat furred. He took food well. The breathing was quiet. He had no cough. The urine was pale, exalbuminous, and free from sugar.

A day or two after this, enlarged glands were observed in the groin. The œdema of the left extremity and of the back continued. He had regained some power of the sphincter ani, but none of the bladder. The secretion of urine continued free. On April 11th, he lay on the left side, and had some numbness of the left arm. The leg was much swollen, and there was a superficial sore of the sacrum. A month later—viz., May 13th—there was œdema of the abdominal integuments of the left side, as well as of the leg; and there was some enlargement of the veins, as well as tenderness. On June 9th—a month later—he had become very anæmic. The hypochondria were dilated and tense. There were some nodules on the sternum, and deep depressions of the ribs on each side. The abdomen was swollen and tympanitic. The liver, however, could not be felt below the ribs. The respiration was quiet, and could be heard quite low down. There was no dyspnoea, cough, or other pulmonary symptoms. The heart was *in situ*. There was considerable distension of the superficial veins. He did not appear to be suffering much in any way, and took his food tolerably well. He died on June 23rd.

Autopsy.—The body was extremely emaciated. The lower extremities and the lower part of the trunk were highly anasarcaous, the left leg being rather more swollen than the right. The skin was quite pale. The brain and its membranes were quite healthy. The muscles of the back contained several masses of white soft cancer, apparently taking the place of the muscular tissue on each side of the dorsal spines. The anterior part of the vertebral canal contained similar growths, extending from the middle dorsal region downwards to the sacrum, in front of, and somewhat adherent to, the anterior surface of the dura mater. The internal surface of the dura mater and the surface of the spinal cord appeared healthy; but, on microscopic examination of the tissue of the cord, that of the middle dorsal region was found to contain numerous spherical granule-corpuscles; and many of the nerve-cells seemed granular, as if in process of conversion into granule-corpuscles. The tissues of the cervical and lower dorsal portions of the cord appeared healthy. There was a collection of turbid brownish fluid in the left pleura, and some shreds of lymph were adherent loosely to the left lung. The pleuræ and the lungs contained numerous masses of white soft cancer, varying in size from an egg down to the smallest visible particles projecting from the surface of the pleuræ. Many similar masses were found in the anterior and posterior mediastinal spaces and in front of the lumbar vertebræ, forming a continuous series from the neck to the sacrum. The cancer was white, and all more or less soft and juicy, some masses appearing quite soft and creamy in the centre. Some of the masses in the lungs involved portions of the bronchial tubes—without, however, rendering them impervious; the affected portions of the tube being quite white and opaque. The heart and its valves appeared healthy. The pericardium presented old cellular adhesions. The liver was much enlarged and somewhat fatty. The spleen was also very large; but neither of these viscera contained any cancer. The right kidney was large and somewhat congested, weighing six ounces. The left kidney was small, weighing three ounces; its cortical substance was inflamed and partially destroyed by pressure from within outwards, the pelvis and the upper portion of the ureter being distended with urine. Near the bladder, the ureter was completely occluded by a mass of encephaloid, apparently springing from the outer surface of the bladder on the left side, and occupying a great part of the cavity of the pelvis, considerably compressing the rectum. The right ureter was pervious; the bladder was contracted, its walls thick; its mucous membrane was apparently healthy. The suprarenal bodies and pancreas appeared healthy. The stomach and intestines also seemed healthy, except that the colon was much distended with solid faecal matter; the sigmoid flexure especially forming a large pouch, which projected forwards above the bladder and pubes. There were several enlarged glands in the groin, converted into masses of soft cancer, and pressing on the iliac veins, which were filled with adherent brownish-coloured clot. The glands in the left groin were especially enlarged; and on this side the obstruction to the venous circulation extended rather higher up, and was more complete.

There are, I believe, very few cases on record in which the *heart* has been the seat of cancer, except as associated with the same disease of the lungs or mediastinum. It is not, however, very rare to find the pericardium and heart invaded by the progress of cancer commencing in other parts of the thoracic cavity. We have seen that the heart may be pressed on and displaced by mediastinal growths, and its action thus seriously deranged. It is not, therefore, remarkable that we should

frequently meet with cardiac *bruits* and modifications of rhythm and impulse in connexion with various forms of intrathoracic cancer. This should be borne in mind in obscure cases, where there may be any question as to the existence of aneurism. It has in several instances been found to mislead, when the real cause of signs of pressure has not been ascertained. I have not myself met with an instance in which the cancer was confined to the heart. A few years ago, however, Bricheteau published a very interesting case in which the heart alone was the seat of disease within the thorax, but associated with similar disease of the ovaries. The cardiac affection was not suspected during life; the patient, a girl aged 24, having been admitted with slight signs of pleuropneumonia, which subsided. When apparently going on well, the pulse suddenly rose to 156 or 160; and the sphygmographic tracing showed a series of curves, without any line of ascent. The heart's sounds continued normal, and the patient complained only of a feeling of weakness and oppression. She had no palpitation. On the morning of the last visit paid, she seemed better, and the pulse had fallen to 140. Two hours afterwards, when trying to reach a morsel of sugar from the stand by the bedside, she fell back and died. On opening the thorax, numerous pleuritic adhesions were discovered. The pericardium contained a little serum, and the heart rested in it perpendicularly. The left ventricle was of a yellow colour, and presented numerous irregularities of surface. Its muscular fibres were almost completely destroyed, and replaced by irregular yellowish masses, firm, and projecting from the surface. On scraping these masses, they yielded a yellowish cancerous juice. They extended into the posterior wall of the right ventricle, and into the right auricle, as well as into the inter-ventricular septum. In the interior of the left ventricle there were numerous smooth and round vegetations. The right ovary presented the appearance of a white mass of considerable weight and consistence. The microscope showed the cancerous nature of the masses, and a fatty state of that portion of the muscular structure of the heart which was not replaced by cancer. The other organs were healthy.

Dr. Sutton has favoured me with the details of a very rare case, in which the heart was the primary seat of intrathoracic cancer, but had become affected by the extension of disease through the parietes of the chest, from scirrhus of the mamma. A lady, fifty-three years of age, was suffering from a tumour in the left breast, which was considered by an eminent surgeon to be scirrhus. This tumour apparently ceased to grow; but the patient's health continued impaired, and by degrees her breathing became affected, and she complained of much breathlessness on exertion. On examining the chest, the lungs were found to be somewhat emphysematous; but there was no evidence of bronchitis, and the small amount of emphysema seemed quite inadequate to account for the breathlessness. The heart's action was regular, and there was no increase of the cardiac dulness. The first sound of the heart was very feeble, but unattended by any murmur. The lady gradually lost flesh, particularly of the extremities; she complained of pain about her chest; and the cardiac region became very tender on percussion. The shortness of breath increased, and frequent nausea and occasional vomiting supervened. The feeling of sickness increased, and became most distressing night and day. The respiration became much accelerated. Nothing relieved the nausea, except very temporarily; and the patient sank. After death, the tumour of the mamma proved to be scirrhus. It had penetrated through the intercostal muscle by a narrow pedicle, and involved the pericardium, forming at the root of the heart a tumour of the size of a small orange. This tumour surrounded the pulmonary artery and aorta, the innominate and left carotid and subclavian arteries, running along the outer coats, but not, apparently, diminishing the channel of those vessels. The growth also extended down towards the apex and into the anterior wall of the right ventricle. The heart weighed about five ounces; it was apparently much atrophied. The lungs were emphysematous, but otherwise healthy. With the exception of a fibrous tumour in the uterus, the other organs were healthy.

Neither of these cases, I think, helps us much in determining the symptoms and diagnosis of cancer of the heart. Increase of dyspnoea, pain, palpitation, faintness, and vomiting appear, from a comparison of other cases with those which I have given, to have been the most prominent symptoms; and of those symptoms, faintness and vomiting or nausea have been most frequently noticed. When the valvular apparatus has been the seat of cancerous deposits, deranged rhythm and morbid *bruits* have been not infrequently noted.

Materials for a more accurate diagnosis of the various forms of intrathoracic cancer are daily accumulating; and I would fain hope that the clinical experience which these lectures have afforded me the opportunity of recording will be accepted as a contribution of some value to those who may be able to pursue still further the investigation of a subject full of practical interest and importance.

BLOOD-LETTING AS A REMEDY IN ACUTE SCARLATINA DROPSY.

By J. P. BRAMWELL, M.D., L.R.C.S.E., Perth,
Visiting Surgeon Perth Infirmary.

MANY years ago, I had formed a high opinion of the value of blood-letting in acute scarlatina dropsy, and more ample experience has confirmed me in my former views. A severe and protracted epidemic of scarlatina in Perth has enabled me to see much of this malady. Dropsy, as a sequela, has been unusually common, and very deadly; nine cases dying from this cause alone out of forty-four fatal scarlatina cases. During this epidemic seventeen cases of dropsy have come under my care, and on a previous occasion two, making a total of nineteen cases. Depletion has been my chief remedy, and the results have been eighteen recoveries to one death. To show that these cases have, as a whole, been far from mild, it may be stated that five of them had uræmic convulsions, more or less severe; others showed symptoms of uræmia in a less degree, and some of them were highly anasarcaous. It was observed that three-fourths of the dropsical cases were preceded by a mild attack of scarlatina. Certainly cold was not the exciting cause, as the majority of them were most carefully watched and never exposed at all. It seems more probable that, when the scarlatina rash is copious, the skin does the bulk of the poison-elimination work; when the contrary, it is the kidneys which suffer from the poison, become congested, and hence the anasarca. The disease was generally ushered in by febrile symptoms, but this was not always the case; the urine was sometimes reduced to an ounce or two in the twenty-four hours; at other times it might be as much as thirty ounces; but then, its specific gravity was always low, and it showed decided proofs of a want of excretion of urea. I need not mention that it was always albuminous, sometimes bloody, and containing disintegrated epithelia and tube-casts.

Uræmic symptoms were common enough—pain in the head, drowsiness, slowing of the pulse, which was often also unrhythmical, dilatation of the pupils, impaired vision, amounting sometimes to all but complete blindness; rarely, vomiting of grumous blood was superadded. A curious circumstance, first noticed, I think, by Professor Christison, was also observed; that the danger of uræmia was not always in the ratio of the quantity of urine passed, or of urea excreted, some patients becoming convulsed while secreting fifteen or twenty ounces in the twenty-four hours, and others showing no uræmic symptoms while the urine was all but suppressed.

Treatment.—I have found nothing to be compared to blood-letting in the dropsy which follows scarlet fever; it is incomparably the best diuretic, and often turns the tide when all other means have failed. It is not intended, however, to assert that all cases of this kind require depletion, as not a few of the milder sort will do well if sharply purged and freely sweated; but there are many cases that altogether refuse to respond to such treatment, and diuretics even of a mild unirritating character, such as digitalis with bitartrate or acetate of potass, do not better the patient's condition in the slightest degree. In my own hands they have signally failed when used before depletion, and such is also the general experience of my professional friends in this quarter.

As a general rule, local depletion, from two to six leeches over the loins, according to age, will answer every purpose; but, should uræmic convulsions ensue, general bleeding will be found invaluable, both in arresting the fits and in restoring the secretion of urine. When the patient is over eight years of age, eight or ten ounces should be drawn, *or a decided effect will not be produced*. Chloroform may here also be used with much benefit after depletion, but I should not consider it good treatment to trust to it alone.

It has been argued against bleeding in this malady that the convulsions are, in a large measure, owing a watery condition of blood and an exhausted state of system. This, however, is a mere assumption; the blood drawn is not found deficient in solids, and those who thus suffer, as has been already remarked, have gone easily through the primary malady, and are not much shaken. The truth is, the convulsions are caused by a blood-poison; and general depletion removes this by restoring the kidneys to working order again.

The following cases will best show the value of this remedy.

CASE I.—A boy, aged 8 years, was recovering from a mild attack of scarlatina, when, about the fourteenth day after the fever had disappeared, dropsical symptoms showed themselves. For this he was ordered calomel in very small doses, one-sixth of a grain every six hours, along with three drops of digitalis tincture, and his bowels were purged by compound jalap powder. His breathing soon became seriously impeded, and it was found that he was suffering from œdema of the glottis; this, however, was subdued by free swabbing with a

strong nitrate of silver solution, and insufflation of alum powder. His urine was albuminous, but increased in quantity. Symptoms of uræmia now supervened; namely, slow pulse, pain in the head, and dry retching; and next day there came violent convulsions, at first at intervals, and then all but constantly. His pulse was pausing every third or fourth beat, his respiration was very hurried and laboured, and at intervals a gush of grumous fluid like coffee-grounds, composed of altered blood, escaped from his nostrils, being thus ejected by the stomach. About eight ounces of blood were taken from his arm, and chloroform was then administered so often as the fit threatened to recur. We had him turned upon his side, when he became quiet, and slept for several hours. A fit again threatening, the chloroform was readministered. After this he slept well, and awoke to consciousness next morning, having no more convulsions or other uræmic symptoms; he was now passing urine freely, the secretion being aided by powders of bitartrate of potass and digitalis. This boy made a good recovery.

CASE II.—A boy, aged 11 years, had a mild attack of scarlet fever. Ten days after recovery he became slowly dropsical, without any marked febrile reaction; his urine was albuminous, contained tube-casts and renal epithelium in abundance, and ranged between three and four ounces in the twenty-four hours. He was purged freely, had warm baths, counterirritation to the loins, and diuretics, all to no purpose; he became more dropsical, and his urine rather diminished than increased. Symptoms of uræmia having begun to show themselves, I bled him to ten ounces. Immediate relief followed, and in forty hours afterwards he was passing urine in the quantity of twenty to thirty ounces daily, with a steady continued increase; the urine was still albuminous. He was kept strictly to bed, and had a warm bath every night for two weeks afterwards. The quantity of urine was now normal; the albumen was gone. Recovery was uninterrupted and satisfactory.

CASE III.—A boy, aged 6 years, after a slight attack of scarlet fever, became highly anasarcaous. The urine was reduced to two or three ounces in the twenty-four hours. He was ordered Mindererus' spirit, with antimonial wine and the warm bath, and his bowels were opened by the compound scammony powder; still there was no improvement. Digitalis infusion, with acetate of potass, was now substituted, but neither kidneys nor skin could be made to act. The dropsy went on increasing; his face was very puffy; the scrotum and penis were much swollen; he was very drowsy and complained of his head; symptoms of pulmonary congestion also appeared. Four leeches were now applied to the loins, and a very copious discharge of blood ensued, which hot linseed poultices much aided. The bleeding was difficult to control, and alarmed his parents, but no bad consequence followed. On the contrary, he began next day to pass urine in considerable quantity: a steady diuresis set in, and the boy made a good recovery.

CASE IV.—Into one of our infirmary wards a little boy, aged 5 years, entered with all the symptoms of scarlatina dropsy. Three members in this family had the scarlatina in a latent form, and all became dropsical. The little fellow referred to was quite water-logged, and of prodigious weight considering his age and size. He was purged freely, and had calomel and digitalis for several days; his loins were irritated with mustard sinapisms, but all to no purpose. He was then cupped over the loins, and four ounces of blood extracted. In forty-eight hours a free diuresis set in; he continued to pass urine in enormous quantities, and made a speedy and permanent recovery.

I could adduce several other cases of this kind where the beneficial effects of local depletion were sufficiently apparent; to do so, however, would be to extend this paper beyond due limits. I shall, therefore, conclude by the history of another case, which presented certain interesting exceptional peculiarities.

CASE V.—A delicate strumous boy, aged 8 years, had a sharp attack of scarlatina, with rather formidable throat-complication; from this he recovered, however, and all seemed to be going well. Fifteen days afterwards, febrile reaction set in; his urine became scanty and albuminous; and general anasarca supervened. He was purged smartly, had a mixture of acetate of ammonia and antimonial wine, and was sweated freely several times with hot bottles surrounded with moist flannel. The fever fell somewhat, and the urine increased, but in a few days he had returned to his old condition; the urine was more scanty, smoky, and albuminous; the fever was considerable; and he was becoming more anasarcaous. A repetition of the former remedies did not produce similar good results. Four leeches were now applied to the loins, followed by warm cataplasms; a large quantity of blood was discharged. In forty-eight hours the quantity of urine had increased; when boiled it did not indicate the presence of albumen. The kidneys continued to secrete more freely, and in eight days the dropsy was all but gone. Febrile reaction now, however, again appeared, the urine became scanty and bloody, and a second attack of dropsy (which I have never seen before in such cases) was ushered in by a convulsion

fit; this, however, did not return, and, as he had been freely depleted so recently, a moist vapour-bath, with acetate of ammonia and antimonial wine were preferred. The dropsy yielded speedily this time to the means specified, and a steady recovery followed.

It would seem that in this case the convulsions were not of an uræmic character, else they certainly would have returned and called for the use of the lancet. It is more likely they were produced by nerve-shock from an inflamed condition of important organs, such as the kidneys, just as we sometimes see in acute pneumonia occurring in young people.

We are not careful to reconcile the facts adduced with our modern ideas of inflammation, viewed from a histological standpoint, inasmuch as it is more rational to ask that theories should be remodelled to agree with facts, than facts altered to tally with theories. We frankly confess that depletion in pneumonia is injurious and not beneficial; we firmly maintain that it is highly beneficial in renal inflammation associated with scarlatina dropsy.* Both we believe to be facts unquestionable, but facts which *à priori* no modern theories of nutrition, normal or abnormal, could ever have led us to predicate. Let us hold then to the simple truths, that blood-letting is injurious in certain inflammations and curative in others, that at present we do not exactly see why it should be so, but so it is; and this we consider as a safer and better way to advance medical science, than to draw too hasty generalisations which would deprive us of a valuable remedy in not a few diseases where it is urgently needed, renal dropsy among the rest.

REMARKS ON PARACENTESIS PERICARDII.

By T. CLIFFORD ALLBUTT, M.A., M.D. Cantab., F.L.S.,
Physician to the Leeds Infirmary.

THE case of Dropsy of the Pericardium, published by my friend and colleague Dr. Heaton, in the BRITISH MEDICAL JOURNAL for July 2, 1870, and his remarks upon the case, are so interesting and so important that I cannot refrain from adding a few comments of my own. Dr. Heaton makes especial reference to the value of tapping in cases of pericardial dropsy, and he alludes to a case in which this operation was successfully performed at my request by Mr. Wheelhouse. His attitude is naturally and properly one rather of distrust and of cautious criticism; and as I have, I believe, the responsibility of bringing this operation before the profession in this country and of urging the more frequent performance of it, from me some reply may fairly be expected. Dr. Heaton's observations add to our knowledge of the subject and of its difficulties, but I am still hopeful that these difficulties are only difficulties and nothing more.

Very fortunately, in the case before us no question of responsibility in the treatment can arise; the patient was either unseen by Dr. Heaton before his death, or he died before there was any opportunity of making an accurate examination of his state. The case was one of that kind of pericardial dropsy which I have called phthisical; it occurs in phthisical subjects, is unattended by obvious inflammation, is serous in character, is abundant in quantity, and tends rapidly to return when evacuated. We see the same characters in the hydrothorax which occurs in persons of the same constitution. In my lecture on this subject in the *Lancet*, I described it as "a form which, like some forms of pleurisy, runs silently and quickly to effusion, rather than to coagulating and organising products; a form, moreover, which, from the tendency to syncope from failure of the heart's action, has been called 'paralytic'" (*Lancet*, June 12th, 1869). It is well-known that changes suddenly produced are more dangerous than the same changes slowly established; and in the present case, I suppose from the elasticity of the pericardium when punctured, and from the quantity of fluid, which was rather the quantity of a recent than of a chronic effusion, that the dropsy came on quickly, and thus killed the patient by embarrassment of the heart. The same quantity of fluid ("eight or ten ounces") slowly poured out would probably have been well borne.

Dr. Heaton attributes death to the failure "of a feeble heart seriously encumbered." The heart is said to have been "well-contracted," and, though it was "small," no note of any degeneration of its tissue is made, so that I should attribute death rather to the rapidity of the effusion than to the quantity of it.

Be this as it may, the presence of fluid near the heart is surely a condition of ever present danger. In summing up against the operation, even if the diagnosis had been made, Dr. Heaton considers as one

* Can any one tell us how it is that pneumonic inflammation has changed its type (if it have changed it), and renal inflammation, the effect of scarlatina, is so very conservative, still to prefer the old sthenic forms to asthenic ones? It is curious how certain alleged general changes of type should pick and choose in this strange select fashion; always assuming that the change-of-type theory is correct.

argument, "that our patient's habitual condition was not one of immediate danger". I am disposed, on the contrary, to think, first, that the condition was not a "habitual" one, but a recent one; and, secondly, that it was one of imminent danger. I can scarcely suppose, with Dr. Heaton, that "the fatal syncope could hardly have been anticipated." Dropsy of the pericardium is not common, but hydrothorax on the left side is rather common, and, as one of the reasons for my frequent resort to the trocar in these latter cases, I have constantly said to the students that patients with a pleura distended with fluid are in hourly danger of fatal syncope. Such a termination as that in Dr. Heaton's case, I think, occurs not uncommonly when we least expect it, especially in cases where the effusion has been rapidly poured out.

The elasticity of the pericardium discovered after death is very important. Oppolzer (*Vorlesungen*, Bd. 1, Lief. i), among other *à priori* objections to the operation of tapping the pericardium, says that, as the pericardium is an inelastic bag without a vent, its fluid will not run out. Oppolzer's objections have about the value which such objections generally have; and, as to this one in particular, we see that in some cases, at least, the bag is elastic. We can count, therefore, on its reacting upon its contents, as well as upon the rising of the diaphragm and the expansion of the lungs. Dr. Heaton says that, after exposure of the pericardium, "from an accidental puncture, a jet of serum was discharged with some force;" and other persons present assured me that the jet rose to two feet in height, at least, and was visible from all parts of the room.

The next point of importance is that, in spite of its dropsy, the pericardium was overlapped by the left lung to the normal extent, or nearly so. I suppose this observation was made before the "accidental puncture" of the sack; but in any case I hesitate to rely upon the *post mortem* arrangement of the parts, uncontrolled by previous examination, as a guide of their arrangement during life. Many changes take place after death which tend to disturb the relations of the organs to each other. Granting, however, that this overlapping might have made the diagnosis difficult (and, if so, this is a most important clinical fact), yet I cannot see how it should "seriously increase the dangers of the operation." The space of normal dulness is surely amply sufficient for the insertion of the trocar; and, as a matter of fact, in both my cases the trocar was inserted at the upper border of the fifth left cartilage, about a third of an inch from the sternum, a puncture which, even in the present case, would have been perfectly safe. Careful percussion during life would, moreover, enable us easily to avoid any injury to overlying lung.

Dr. Heaton then goes on to say—"We must consider that the operation is never free from danger. This is, no doubt, true, not only of paracentesis pericardii, but of every interference with the human body. But is it quite fair to say, as a measure of this danger, that—"In the majority of cases, I believe, the result has been unfavourable?" Now, let us ask, first, what is meant by an unfavourable result? Clearly, it ought to mean that the operation was itself the cause of death, as in an unsuccessful ovariectomy or amputation; or that it hastened death, as in an unsuccessful tracheotomy; or, again, that while it was of no benefit to the patient, it added much to his suffering. I believe that even this last interpretation could not be established, and I feel sure that the first two could not. The pain of the operation is very slight; and, if performed with a fine trocar (Weiss, No. 1) is, I believe, wholly devoid of serious risk. Again, let us inquire how often the operation has been performed? I believe I am the only medical man who has had recourse to it in England. It has been performed for me once by Mr. Wheelhouse with striking success, in the case to which Dr. Heaton alludes; and Mr. Teale operated twice for me in a second case. In this latter case we had to deal with a "phthisical" effusion in a girl dying of rapid bronchitis of a consumptive character, probably of tubercular character. Her distress from the pericardial effusion was such, that Mr. Teale drew off the fluid for me twice with great relief to the poor girl, whose lung-malady, however, soon killed her. This case can scarcely be counted among the unfavourable results; but it might be placed on the other side.

On the continent the operation has been performed more frequently; but, on the whole, in a very few cases. My own impulse came from Trousseau, with whom I was for many months in close connection as a pupil. He said to me on two separate occasions, "If the need ever arise with you, tap the pericardium; the operation has never yet had a fair trial."

Trousseau was at one time in favour of operation by incision, but I believe that farther experience had modified his opinion. In most of the recorded cases tapping was done in chronic cases as a last resource, and had the success which belongs to last resources, or indeed something more; for Trousseau, Champouillon, and Aran, had each a successful case, with recovery. Henri Roger published a case in the *Union*

Médicale, No. 141, 1868, which resembles that under the care of Mr. Teale and myself. He twice punctured the pericardium in a chronic case, a girl, aged 11. He drew off 100 grammes by the first and 500 grammes by the second puncture, the sack having rapidly refilled. After the second puncture the heart-troubles wholly ceased, though at the time of writing, which was thirty days after the second operation, the girl was in great danger from the effects of disease and dropsy elsewhere. It is very important to observe here that the sac which filled twice did not fill again a third time. In estimating the failures of paracentesis pericardii, the kind of operation ought also to be noted. Riolan trepanned the sternum, but this procedure, supported though it was by the great name of Velpeau, has many dangers and disadvantages and no merits. The scalpel operations, again, whether thoracic (Trousseau) or epigastric (Larrey), are unnecessarily elaborate and have risks and drawbacks which do not belong to the puncture; while, on the other hand, the risks attributed to the trocar operation—the risk, for instance, from non-apposition of the orifices—are found in practice to have no reality. Finally, it is said that serious mistakes have been made in puncturing the pericardium for pleural dropsy or for no dropsy at all. Roux is said to have tapped a dilated heart; and perhaps the less said about it the better. Pleural dropsies, I admit, have been taken for pericardial, and the mistakes were made by no less men than Desault and Larrey. But, in these cases, the exudations were curiously circumscribed and pressed severely upon the heart; so that they were dropsies of the heart in a clinical, if not an anatomical sense. It is said that Skoda once tapped a medullary carcinoma of the mediastinum with the intention of relieving a distended pericardium; but a similar mistake has been made over and over again in cases supposed to be pleural dropsies, without prejudicing the operation of thoracentesis. So far, then, from discouraging the operation of paracentesis pericardii, I would urge upon my friend Dr. Heaton, and upon the profession, that the operation by trocar, if carefully performed, and performed after a careful physical examination, has few risks or none; that it is not an alarming or a very painful operation; and that it gives a chance of life or indeed a fair hope of life in many cases which are now abandoned to death.

CASE OF GRANULAR DEGENERATION OF THE VOLUNTARY MUSCLES.

By EDWARD MERYON, M.D.

I HAVE now under my care at the Infirmary for Epilepsy and Paralysis a case of degeneration of the voluntary muscles, such as I have described in two papers communicated to the Royal Medical and Chirurgical Society, and which the Council have done me the honour to publish in the *Transactions* for 1852 and 1866.

The subject of the present case is a girl aged ten, in whom the peculiar waddling gait is as yet the only symptom. There is, however, a gradually increasing weakness of the muscles of the back and legs, and an entire absence of any indication of nervous disturbance. The girl has neither ache nor pain, nor is there, at any time or under any circumstances, the quivering or starting of the diseased muscles which Cruveilhier has remarked in the cases which he has described as of "atrophie musculaire progressive."

When the patient was first admitted into the Infirmary, I hoped that I had detected a clue to the cause of the disease—as being in the semi-lunar ganglion—in consequence of pain in the region of the epigastrium, which occurred after any little exertion; but that pain was undoubtedly of a dyspeptic character; for no sooner was the child carefully fed than the pain vanished, and for the last seven weeks she has had none of it, notwithstanding that I have made her walk, and use gymnastic exercises as much as she is able to do. For about six weeks her power of walking remained nearly stationary. At one time, I thought it was somewhat improved; and during that time she was under the influence of arsenic.

About a fortnight ago, for no adequate reason, I discontinued the arsenic, and ordered the hypophosphite of soda, with a bitter tincture, and continued the faradisation which has been used from the day of her admission; but, during the period that she has taken the hypophosphite, she has rapidly lost power; so much so, that she can now scarcely stand without supporting herself with her hands. I have therefore resumed the use of the arsenic.

The girl is of healthy parentage, but has a sister, older than herself (about 14), who is similarly, but more, affected. She can no longer stand, and her arms are beginning to be implicated in the disease. A brother, not yet three years old, is already showing symptoms of the disease.

In every case of so-called muscular atrophy which I have seen or read of, in which disease either of the spinal cord or of the medulla oblongata has been detected, some symptoms of nervous disturbance have manifested themselves during life, either in pain, or in tremor, or quivering of the diseased muscles; but in every case which I have described as of *granular degeneration of the voluntary muscles*, there has been an absolute absence of any indication of nervous disturbance, as there is in my present patient. I am therefore induced to continue in the belief which I have heretofore expressed, of an idiopathic disease of the muscles, which is probably dependent on a defective nutrition of the sarcous elements. Every case, also, has begun in the lower extremities, and has appeared to extend in a centrifugal direction, respectless of the course and distribution of nerves. In the case in question, the sacro-lumbalis, the longissimus dorsi, the spinalis dorsi, the quadratus lumborum, and, I believe, the psoas and iliacus muscles are affected, so that the spinal column has nearly lost its sigmoid curves; and if the arsenic fail to arrest the morbid action, the muscles of the thigh will be next diseased, and then those of the legs. When the legs are disabled, I doubt not that the serrati and splenii muscles, the spinati, the deltoid, the biceps and triceps, and eventually the muscles of the forearm, will become successively implicated, in the order in which I have named them.

SINGULAR CASE OF ATTEMPTED POISONING BY LAUDANUM.

By JAMES DOBBIE, M.D., Glasgow.

A SHORT time ago, I was called to see a lady who, I was informed, had swallowed laudanum. On arriving at the house, I found the lady, apparently about forty years of age, unmarried, sitting up in bed, in a considerable state of excitement, and vomiting a dark fluid with a strong smell of laudanum. I encouraged the vomiting by administering mustard and water, and afterwards gave her coffee; and kept her awake most of the night. On calling early next morning, I found the patient well, and none the worse for her dose.

The peculiarities of the case are, that this patient, who at one time had been insane, and who, at the time when I saw her, was labouring under an attack of the same disease, so that it was necessary to send her to an asylum, had, on the day on which I saw her, called on two respectable chemists, and purchased from each one ounce of laudanum; she went home, mixed the two ounces together, swallowed the dose, and retained it for two hours and a half, when she became sick and vomited; she then told her friends what she had done, and I was sent for. I ascertained from the druggists that she had purchased the laudanum; and the ejected matter had all the colour, smell, and appearance of it. Moreover, the laudanum had been taken on an empty stomach; for the patient had partaken very sparingly of potatoes and milk, at 2 o'clock, and she had taken the laudanum at 6; and it was at 8.30 p.m. that I was sent for and saw her. It is singular that two ounces of laudanum should have been swallowed by a person not accustomed to it, taken on an empty stomach, and retained for two hours and a half, without producing any deleterious effect—not even the slightest inclination to sleep.

CLINICAL NOTES.

(Reported from the Practice of Dr. WILKS, at Guy's Hospital.)

VI.—TIC DOULOUREUX CURED BY GALVANISM WHEN ALL MEDICINES HAD FAILED.

THE following case is reported by Mr. Blenkarne.

Sophia C., aged 60, was admitted January 7th, 1870, under Dr. Wilks. In August 1869, the patient first began to suffer from neuralgic pains in the left side of the head, referred to the upper part of the left frontal region, and extending down the left side of the nose. At first, the pains were slight and transient, but they gradually became worse and more frequent, until now they were most excruciating in character, and brought on by slight causes, such as blowing the nose, talking much, or eating. The nerve involved appeared to be the first division of the fifth. She had lost all her teeth on that side; and in consequence of that and of the pain which attempts at mastication caused her, she was obliged to chop her food very small. She never had rheumatic fever nor ague; and, excepting for the present complaint, was in good health. She was ordered three minims of tincture of aconite three times a day; this was gradually increased until it reached seven minims on the 27th. During this time she was upon the whole

no better; the paroxysms which came on at times were of the most violent kind. On February 1st, she was ordered a drachm of chloride of ammonium every six hours. On February 7th, being no better, she was ordered half a drachm of hydrated peroxide of iron and three grains of sulphate of quinine every four hours. On February 11th, she was no better, and was ordered 15 grains of bromide of potassium every four hours. On February 17th, she was no better. All medicine was ordered to be omitted, and a continuous current of galvanism from 25 batteries to be applied. After this she gradually improved. On the 28th, she expressed herself as much better. On March 7th, she had hardly any attacks of pain. On March 15th, she was steadily improving, and had scarcely any pain in the face. On March 18th, she went out, saying that she was quite well.

PROFESSOR FLOWER'S HUNTERIAN LECTURES ON THE COMPARATIVE ANATOMY OF THE MAMMALIA.

Delivered at the Royal College of Surgeons of England.

LECTURE XVII.—Wednesday, March 23rd.

IN Carnivora, the number of digits is never less than five, except in the Hyæna. As a general rule, the thumb is comparatively small, and does not readily reach the ground in the Dog and other digitigrades; but in the plantigrades, such as the Bear, it is more developed. There is generally a kind of symmetry in the length of the digits; the third and fourth being the largest, and the second and fifth smaller and nearly equal. The first is the shortest. The number of bones in the carpus appears reduced; there is a fusion of the intermediate and radial bones (the scaphoid and lunar), forming what has been called the scapho-lunar bone. This is found in the Seals, as well as in the terrestrial Carnivora. The pisiform bone is well developed; and nearly all the Carnivora have a sesamoid bone on the radial side. There is no os centrale. Most Carnivora have a peculiar modification of the last phalanges for the support of large claws. In the Lion, for instance, the ungual phalanx forms a flat compressed plate, from the base of which grows a kind of sheath enveloping it, and leaving a space in which the nail or claw is attached. In the Dog, the outer sheath is shorter, and the claw is straighter and less powerful. In the Bear, the outer sheath is more extended than in the Dog. In order to provide for keeping the claws in an effective condition, there is in some Carnivora a peculiar arrangement for retracting them; the last phalanx is capable of being bent back on the next, which is specially hollowed to receive it. A strong elastic ligament holds the retracted phalanx in position; and the claw, when protruded, is drawn down by the tendon of the flexor muscle. In the Seals, the hand is broad and somewhat flattened, but the ulnar side of the carpus is much aborted, as in many swimming animals; so that the fifth digit is not only articulated to the unciform bone, but is drawn up to the cuneiform bone in the first row.

In Insectivora, as the Hedgehog, there are almost always five non-retractile claws. The scaphoid and lunar bones are generally connate, and the os centrale is often present. In the Mole, the hand is very large and broad; the number of phalanges is normal, and the os centrale is present. The ungual phalanges are disproportionately developed. At the outer or radial side of the hand there is a bone at first sight resembling a sixth finger, but in reality only an extra developed sesamoid bone; it has been called the os calciforme, and is apparently intended to give breadth to the hand.

In Chiroptera, the carpus is small, and presents great tendency to union of bones in various combinations. The fingers are much elongated, to support the membrane used in flying; the thumb is always free, and has a large hooked claw at the end. The third digit is especially lengthened; the other digits are sometimes reduced to two phalanges, as in the Pteropus.

Rodentia nearly always have five well developed fingers; but sometimes the first is abortive, as in the Capibara. The digits generally have the same relative length as in the Carnivora. In the Beaver, the scaphoid and lunar bones are united, and there are a well marked os centrale and a distinct sesamoid on each side. The Capromys and Capibara also have the scaphoid and lunar bones joined, and an os centrale.

Cetacea alone among Mammalia have more than three phalanges; sometimes there are as many as twelve or fourteen. There are mostly

five digits; the first is sometimes wanting. The phalanges are flat and square, and have (as also in some Seals) epiphyses at both ends. The carpal bones are broad and flat, and are arranged in a manner somewhat resembling mosaic work; there are generally five, of which it is difficult to determine the homology. In the Porpoise, for instance, the upper row consists of three bones, apparently the scaphoid, lunar, and cuneiform; and the lower of two bones, apparently the unciform and trapezoid. The os magnum and the trapezium appear to be wanting. The unciform bone is small; and the fifth digit is chiefly supported by the cuneiform bone.

In the Sirenia, there is more conformity with the normal type of hand. There is no excess in the number of phalanges. The bones of the carpus are sometimes ankylosed together; in the Dugong, three of the lower row form one mass, the upper row consisting of the scapho-lunar and cuneiform. The fifth digit is attached mostly to the unciform bone.

Among the Artiodactylous Ungulata, the Pig has the carpal bones separate, without an os centrale. There are four digits, two large and two small; the first digit is absent, with the trapezium. The phalanges are flattened on the inner side, and arranged in two pairs forming the cloven hoof; the third and fourth digits being the longest. In some small Deer, there is an amalgamation of the two middle metacarpals into a "canon-bone"; and the outer digits are reduced in size, especially at the upper ends of the metacarpal bones. In the Sheep, the outer toes are reduced to mere styliform metacarpals. In the Ox, the outer toes are nearly lost, so far as bone is concerned, being represented only by small nails which lie loose. In all the true Pecora, the trapezium and os magnum are united; but in the Camel they remain separate.

In the Perissodactyla, the middle digit is large, and is flanked on each side by the other digits, reduced in size. In the Horse, the outer digits are represented by the splint-bones, being the rudiments of the metacarpals.

Edentata present many modifications. In the Great Armadillo (*Dasypus Gigas*), the carpus consists of the ordinary bones; there are two long digits on the inner side, and next to these one consisting almost entirely of a falciform compressed claw; of the ten digits on the outer side, the fifth is quite rudimentary. The two outer digits are probably used for walking, and the others for scratching. The hand in the Great Anteater is formed somewhat on the same type. In the Sloths, the hand is long and narrow; in some of them, the second, third, and fourth digits remain; in another genus, the second and third, with rudiments only of the first and fourth.

In the Marsupialia, the hand is generally normal, resembling that of the Carnivora, but without the union of the scaphoid and lunar bones. In the Choeropus, the hand resembles somewhat that of the Pig, in consisting of two digits. A study of the limb in the *Perameles* shows that the digits are the second and third.

Pelvic Girdle.—This consists of a rod or bar of cartilage with an upper and a lower extremity, and a cup-shaped cavity or acetabulum on its outer side. As in the shoulder-girdle, the upper extremities diverge, while the lower approximate, coming together without the intervention of a bone representing the sternum. The part above the acetabulum is ossified from a single centre, and forms the ilium; the lower part is ossified from two centres, which coalesce, leaving a vacant space which is filled up with membrane; the anterior of the bones thus formed is the os pubis, and the posterior the ischium. The upper part is always connected with the vertebral column; and the bones at the lower end are connected at the symphysis pubis.

The ilium, like the scapula, is essentially a three-sided prism. There is an additional ossification at the upper border; and it has also various epiphyses. There is also generally a triradiate epiphysis in the acetabulum.

The human pelvis is much modified from the normal condition.

The time allowed for the lectures allowed reference only to two or three aberrant forms of pelvis in the lower Mammalia.

The pelvis of the Dugong, in the Sirenia, consists merely of two bones, one on each side, connected by ligament to the transverse processes of the vertebræ. Each bone is formed from two ossifications; and the lower part, representing the os pubis, meets its fellow in the middle line.

In Cetacea there is only one centre of ossification on each side. The bone supports the crura of the penis or of the clitoris, and appears to correspond to the ischia of other Mammalia.

Marsupialia and Monotremata have two curious bones above the pubes—marsupial bones. They are wanting in some Marsupials. These bones are formed of ossified portions of the tendon of the external oblique muscle. The cremaster muscle hooks round them; and they give attachment to the muscles compressing the mammary gland.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

NOTES OF VISITS TO THE NEWCASTLE INFIRMARY.

[BY OUR OWN REPORTER.]

WE have little to say in praise of the Infirmary itself: it is old and ill-constructed, and, in our judgment, too near to the railway station to be quiet. We cannot doubt that its proximity to the railway involves considerable disturbance to the repose of the patients.

There are two house-surgeons (senior and junior), and the clinical clerks and dressers, who are selected from the pupils, reside in the Infirmary for a term.

The following are some of the notes respecting the practice, cases, etc., which our visit supplied.

Carbolic acid is freely used in the surgical wards, though not exclusively on Professor Lister's plan. It is used mainly as a dressing for wounds and sores.

Dr. Charlton kindly showed us some interesting cases, one of them being a case of *syphilitic paraplegia* in a young man of 22, who, shortly before admission, had been working in the wet while under the influence of mercury. It appeared that the patient had had syphilis nine months previously, for which he had taken mercury; indeed, at the time of falling ill, fourteen days before his admission, he was severely salivated. He had a sore on the roof of the mouth, and another on the outer side of the left ankle, and some dark copper-coloured spots on the lower extremities; there was also incontinence of urine, which much aggravated the phimosi with which the man was troubled. The patient had improved under treatment by iodide of potassium and blisters to the back at the outset, and subsequently by syrup of quinine and iodine.

Apropos of a case of Bright's disease, Dr. Charlton remarked that he had found the vomiting which sometimes occurs in that disease to be best checked by creasote; and he regards it as almost a specific in that form of vomiting. He does not, however, find it act as a special check on vomiting due to other causes. Dr. Charlton has sometimes been led to diagnose Bright's disease when both dropsy and head-symptoms were absent, by the fact that creasote checked the vomiting. This we regard as a clinical fact of some importance.

Dr. Embleton drew our attention to several interesting cases then under his care. One was that of a man aged 50, the subject of locomotor ataxy; but in whom, contrary to the usual course of such cases, there was incontinence of urine. The question arose whether this was due to concomitant disease of the urinary organs or was a part of the nervous disease. We made out for ourselves that the man had all the usual symptoms of locomotor ataxy; that is to say, he had lost the power of co-ordinating his lower limbs; there were pains in the limbs and back, loss of tactile sensibility, and impairment of sight and hearing. There was no true paralysis; his mind was clear; there was no evidence of cerebellar disease; in fact, the marked paralysis of the bladder was the only unusual symptom. There was no paralysis of the lower bowel.

Dr. Embleton pointed out, in a case of Bright's disease, an interesting, and to us somewhat novel, clinical sign of disease of organs or parts supplied by the pneumogastric nerve. He said "tenderness on pressure of the pneumogastric in its course through the neck is evidence of inflammatory disease of some of the organs to which it is distributed, whether it be stomach, lung, spleen, liver, or kidneys"; and Dr. Embleton added that he had observed it in cases of Bright's disease verified by *post mortem* examinations. The nerve on the side affected, if only one side be affected, will be tender.

As regards acute rheumatism, the treatment usually adopted at the Newcastle Infirmary is the alkaline (bicarbonate of potash), with opium if required. Dr. Embleton has a high opinion of the value of solid nitrate of silver, when applied as a vesicant, to joints containing fluid after the acuter symptoms of rheumatism have subsided.

Among the many interesting cases which Dr. Philipson has under his care, we noticed a case of true scurvy in a landsman, aged 53, a striker by trade, living in Newcastle. Although earning good wages, and therefore not wanting the means to procure for himself fruit and vegetables, he had been living exclusively on bread, meat, and tea. He said he never thought or cared much about vegetables. When he came into the Infirmary, he had yellow discoloration and purpuric

spots on the lower limbs, and the ham-strings were contracted. He was intensely anæmic, and had bleeding from the gums. Under appropriate treatment he rapidly amended. This was a case of true scurvy in a man living within reach of antiscorbutics. It is singular that he should have felt no desire whatever for fruit or vegetables. We have seen several such cases in London, but mostly in the persons of poor sempstresses whose scanty means will hardly enable them to procure the necessities of life.

Dr. Philipson informed us that lead-poisoning was common in Newcastle, owing to the number of persons occupied in the white-lead works there. Dr. Philipson has observed that whilst epilepsy, amaurosis, and other affections of the nervous system, are common, wrist-drop is not so frequently met with as in London. It is doubtful to what this special immunity is attributable. It is, however, worthy of note that the majority of the patients are young women, many of whom are engaged in certain departments of the works. It would seem as if the excitable nervous systems of women were more readily influenced by lead than those of men. We do not doubt, however, that so able an observer as Dr. Philipson will, in due time, determine the cause of the nervous lesions to which females are so liable when poisoned by lead.

On the day of our first visit to the Infirmary, Dr. Gibb tied the superficial femoral artery in a man aged 33, suffering from popliteal aneurism. The artery was tied with catgut, and the ligature cut short in the hope that it would be absorbed. The wound was put up on Lister's plan. Digital compression had been tried without benefit; in fact, the aneurism measured half an inch more after twenty-four hours' compression than it did previously.

MIDDLESEX HOSPITAL.

FATAL CASE OF SUNSTROKE, WITH RISE OF TEMPERATURE AFTER DEATH.

(Under the care of Dr. HENRY THOMPSON.)

J. S., aged 59, butcher, was admitted into the Middlesex Hospital on June 23rd. A sister and two brothers had, it appeared, died of apoplexy. The patient himself had, about a year ago, temporary paralysis of one side of the body. On the afternoon of Wednesday, June 22nd—hitherto the hottest day in the year—he came home from his work feeling giddy and sick, and complaining of pain in the head. He passed a restless and delirious night, but next day was well enough to go to work. Again he continued at work until 11.35 A.M., when he fell down unconscious.

On admission, 12.30 P.M., his face and lips were pale. There were numerous purplish spots over the trunk and limbs; pulse 80, weak; respiration 20, stertorous. He was in complete coma; arcus senilis was well marked. He had a cataract in the left lens. The left pupil was dilated; the right contracted. The mouth seemed drawn a little to the right side when he breathed. A murmur was heard from the apex of the heart obliquely upwards in the direction of the sternum. Examination of the chest, however, was very imperfectly made, and the result was much obscured by rhonchus and other abnormal pulmonary sounds. —12.45 P.M. Pulse 130, temperature 105 deg. —1 P.M. He died. The face was intensely purple before death, and much paler immediately after death, when the right pupil became dilated, and the temperature rose to 105.40 deg. The right lens was now seen to be occupied with cataract. The temperature rose considerably after death. At 1.20 P.M., the temperature was 107.2 deg.; at 1.35 P.M., 107.2 deg.; and at 2 P.M., 106 deg.

Autopsy Twenty-six Hours after Death.—There was intense engorgement of the lungs, especially at their bases, where there were diffused patches of extravasated blood. The lining membrane of the bronchial tubes was highly injected. The heart was large, pale, and flabby. The left ventricle was much dilated, somewhat hypertrophied; its muscular substance was everywhere fatty, both to the naked eye and under the microscope. The aortic and mitral valves contained atheromatous masses, and beneath the attachment of the mitral curtains was a deposit of hard nodular atheroma. There was atheroma also in the coronary arteries; but the vessels were nowhere completely plugged. There was slight vascular dilatation of the posterior wall of the aorta, just above the valves. The liver was large, fatty, and congested in parts. The spleen was large, rather firm, much congested. The kidneys were very large and congested, but presented no distinct evidence of disease. The brain was small and anæmic. There was a small quantity of clear fluid in the subarachnoid space. The vessels everywhere were highly atheromatous, but apparently at no part plugged. The brain and membranes were otherwise healthy. The cranial sinuses were en-

gorged. The blood was everywhere fluid. There was much staining of the tissues.

CLINICAL REMARKS BY DR. THOMPSON.—Gentlemen, the facts are few that shed any light upon this case; but I think that there is enough evidence—positive and negative—to establish, with a fair amount of probability, the diagnosis of insolation or sunstroke. It is true that the heart was fearfully degenerated and disorganised, and the arteries of the brain were almost universally atheromatous. It is true that the man had formerly experienced a passing head-attack, which left him paralysed for a short time; and his family were eminently apoplectic. It is true that the day of the consummated attack was cooler than that of the invasion or of the preliminary symptoms; and all this might seem to point in other directions: nevertheless, on the whole, I believe it to have been sunstroke.

Apoplexy in its ordinary form is said at least sometimes to have its preliminary symptoms, prodromata, warnings, or threatenings; but I am not aware that they include delirium. Delirium may now and then, but not often, precede the coma of kidney-disease: but simple coma is not apoplexy, and in our case there was no ascertained kidney-disease. On the other hand, the symptoms on the day preceding the final attack correspond exactly with what might have been expected in sunstroke occurring gradually, as it often does occur.

Secondly, the bodily temperature was exceedingly high; reaching 105 deg. during life, and about 107 deg. after death. I am not aware that this great elevation of temperature ever takes place in any of the ordinary forms of apoplexy; but it does occur in sunstroke, and is strongly characteristic of it.

Lastly, the revelations of the dead-house speak positively and negatively in favour of sunstroke. Positively, what Dr. Maclean calls unexampled engorgement of the lungs is peculiar to insolation; again, fluidity of the blood is an almost invariable appearance. Negatively, there was no softening discovered—no clot, no accumulation of serum, no thrombosis, no embolism—only anæmia and poverty of brain-sustenance. It is just possible, as far as the *post mortem* phenomena are concerned, that we may refer the attack to some minute and undiscovered plugging of the vessels, or to a degenerate and disabled heart, which failed to propel blood in due amount to an already ill-nourished and atheromatous brain—thus draining the arteries and overfilling the venous system. A good deal might be said on this side of the question; and the state of things last mentioned may have been auxiliary to the event. Nevertheless, I adhere to sunstroke. What is sunstroke? You are told in the books that sunstroke is of two forms—(1) cardiac, syncopal, or asthenic; and (2) cerebrospinal, congestive, or apoplectic; but a large proportion of cases are examples of the two forms combined. The *post mortem* appearances vary. In some cases there is a congested brain; in others not. In the present case, which certainly, as far as it fell under our observation, apparently belonged in the main to the congestive form, there was no congestion of the brain-substance at all. Now, in the face of all these facts, does it not appear that the *post mortem* cerebral phenomena afford little or no clue to the real cause of death? The original intrinsic cause of death—the primary pathological agent or process which immediately comes into play after exposure to the sun's rays—must surely be the same in all cases, and work essentially in the same way. It is this primary agent or process which destroys life, whether there be congestion or no congestion, apoplexy or syncope; and this agent is simply excessive intrinsic heat. This is Niemeyer's view; and I believe he is right, although the Germans have perhaps gone too far in the degree of destructive power which they ascribe to bodily heat in general—particularly in fevers, and more particularly with delirium and head-symptoms. Of course, in these cases one cannot deny that excessive heat may consume the structures and derange their operations; and on this view it is quite proper to reduce the temperature in fever. On the other hand, heat is certainly produced by consumption of tissue; and, on the whole, it would be safest to conclude that in fevers its most prominent character is that of a morbid symptom, and its least prominent character that of a morbid agent. It would appear, however, to be far otherwise in sunstroke, which for the most part makes its onset during hard work along with exposure to the sun—at least such is its mode of invasion in Europe. In other words, a man already overheated within by exercise, receives from without an enormous accession of heat, which there is no radiation and sometimes no evaporation to carry away. What wonder, then, if he become heated beyond the powers of nature to endure with impunity, and so succumb to heat alone? In sunstroke, then, excessive bodily heat is, in the main, the morbid agent, and not, in the same degree, a morbid symptom—the converse of what takes place in fevers.

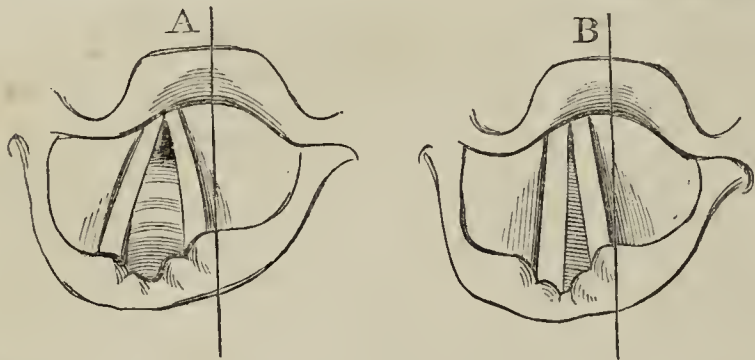
HOSPITAL FOR DISEASES OF THE THROAT.

CASE OF DISPLACEMENT OF THE LARYNX, AND UNILATERAL PARALYSIS OF THE LARYNGEAL MUSCLES, WITH LARGE EXTERNAL TUMOUR.

(Under the care of Dr. MORELL MACKENZIE.)

J. C., aged 60, watchmaker, was admitted on April 13th, 1870, on account of difficulty of swallowing. He stated that he had never had syphilis, and had enjoyed good health until eighteen months previously, when he had first experienced a sensation of choking on attempting to swallow meat. He had also a frequent desire to clear the throat. Accompanying these symptoms, he had frequent cough, with tenacious white expectoration. In the previous September, a swelling had begun to form in the left side of the neck. Swallowing had continued to become worse; and, at the time of application for admission, he was unable to swallow any form of solid food; he was, in consequence, very much emaciated. He had never experienced any difficulty in breathing, but had, for some months, spoken in a thick muffled voice.

On examination, a swelling of the size of a goose's egg was found on the left side of the neck, commencing about an inch below the jaw. It was hard, uniform, and moveable; the superjacent integument was not adherent. On laryngoscopic examination, a most peculiar appearance presented itself. The epiglottis was quite normal in position and appearance, but the parts beneath were pushed completely to the right side, so that the left vocal cord and ventricular band, and arytenoid cartilages, were seen to be considerably on the right side of the median line, and the left ary-epiglottic fold was considerably lengthened.



Added to this there was paralysis of the muscles on the left side, so that on inspiration (A) the left cord was not abducted, nor in phonation (B) was it properly adducted. The case has been treated with Maison-neuve's caustic arrows (chloride of zinc and flour pasté) with decided benefit, in diminution of the size of the tumour and improvement in the patient's power of deglutition.

Dr. Mackenzie remarked that it was exceedingly rare to see such complete displacement of the larynx, without any alteration in the position of the epiglottis. In this case, it was difficult to tell whether paralysis of the laryngeal muscles on the left side was due to pressure on the left recurrent or pneumogastric nerve; or whether the loss of power was of a mechanical nature, the result of the muscles being greatly stretched.

CONGENITAL GROWTHS IN THE LARYNX.

(Under the care of Dr. MORELL MACKENZIE.)

Thomas M., aged 2 years, 4 months, the child of a lighterman, was brought to the hospital on May 9th, by his parents, who gave the following account of him. From the first moment of birth he had never cried like other babies; his voice was always "croupy." For the last six or eight months, his breathing had been gradually getting worse; but he had never breathed quite freely since birth. He could not lie down, but was always put to bed with his head very high; he was very restless in his movements during sleep, and woke frequently.

The child was a fine rosy boy, well nourished and well developed for his age. On making him try to talk, it was observed that the voice was entirely suppressed, except occasionally if he was excited, when a slight gruff vocal sound was emitted. His breathing was unusually noisy and stertorous. There was, however, but slight cough, and no expectoration. His father and mother were both healthy. They had one other child, eight months old, whose voice was quite lusty.

A laryngoscopic examination was attempted, but with purely negative results, the child being quite unmanageable. Dr. Morell Mackenzie, however, at once gave it as his opinion that the case was one of congenital growths in the larynx. The complete aphonia and difficulty of breathing seemed to indicate that the growth was of considerable size, and probably in the immediate neighbourhood of the vocal cords.

The respiration becoming daily more embarrassed, the parents were recommended to bring the child into the hospital. This was done on May 9th; and, on the following day, at Dr. Mackenzie's request, tracheotomy was performed. The tube was inserted very quickly, with but little hæmorrhage. The child seemed to rally for a time, and took stimulants and nourishment. Eight hours after the operation, the respiration was observed to become very feeble, although there was at no time any stridor or dyspnoea. He sank twelve hours after the operation; and it was observed that he had never coughed nor made any effort to expel mucus from the tube. On a *post mortem* examination, the diagnosis was at once verified; the glottis being almost completely blocked up. Both vocal cords, the right ventricular band, and half of the left were entirely covered by a cauliflower mass of warty growths, which, on microscopic examination, were found to be of an epithelial character.

Dr. Mackenzie observed that cases of congenital growth were not so rare as was generally supposed; he had himself met with three other instances, distinctly congenital, in a series of a hundred cases of laryngeal growth under his care, besides several others, probably of the same early origin, but with not so distinct a history. There are two cases in the Museum of St. Bartholomew's Hospital, and one in that of St. Thomas's; and a large number of examples, more or less certainly congenital, have been collected by Dr. Cauzit. If the bodies of still-born children, and of infants dying shortly after birth, were carefully examined with a view of discovering laryngeal growths, Dr. Mackenzie believed that the percentage of congenital cases would be very largely increased.

UNIVERSITY COLLEGE HOSPITAL.

FISH BONE IMPACTED IN ISCHIO-RECTAL FOSSA FOR FOURTEEN YEARS.

(Under the care of Mr. MARSHALL.)

WE have to thank Mr. A. SHEWEN, House-Surgeon, for the following notes.

T. H., a healthy warehouseman, aged 34, was admitted on April 12th, suffering from fistula *in ano* of fourteen years' duration. He first noticed a small tender pimple by the side of the anus; this enlarged very slowly, and at last burst and discharged, for some years only intermittently, but lately continuously. A blind external fistula was found, which ran for about four inches by the side of the gut. This was slit up, but the skin on the outer side became doughy, red, and indurated. A further exploration, a few days afterwards, resulted in the discovery, under this inflamed skin, of a considerable cavity, which communicated with the fistula; in it, a foreign body was felt. The unhealthy tissues were freely incised, and a *pin-shaped fish bone, an inch long*, extracted by means of polypus forceps; it lay under the fold of the nates, at a distance of three inches from the gut. The wound now healed rapidly. Mr. Marshall remarked that the presence of foreign bodies in this situation was not very uncommon; in one case he had removed a false tooth, with gold plate attached, from the same situation.

REVIEWS AND NOTICES.

PRACTICAL PATHOLOGY. By HENRY LEE, Surgeon to St. George's Hospital, etc. Third Edition. In Two Volumes. London: Churchill and Sons. 1870.

THE fact that these lectures have reached a third edition is in itself an indication of the reception they have met with from the profession, and at the same time renders any long notice from us superfluous. In the present edition there are no illustrations introduced, as those given before have been for the most part published elsewhere. Each lecture has been carefully revised, and additions made where they were thought to be necessary.

In the first four lectures, a very clear and interesting account of the subjects of Purulent Infection and Phlebitis is given, and of their mutual relations. Some cases are narrated in which phlebitis of veins of the upper and lower extremities, attended with rigors, was treated by compression of the chief vein affected between the inflamed part and the heart. The author in any future case would prefer subcutaneous section of the vein to mere compression.

The fifth, sixth, and seventh lectures, are devoted to the subjects of Varicose Veins, Varicocele, and the Obliteration of Varicose Veins. Neither division of a vein alone, nor ligation of a vein alone, insures obliteration. Compression at two places with subcutaneous division between is invariably followed by closure of the channel.

The Repair of Arteries and Veins after injury is discussed in Lecture VIII.

The ninth lecture is occupied with Mortification as a result of Disease of the Arteries.

Diseases of the Rectum are discussed in Lectures X to XVII; viz., Inflammation, Hæmorrhoids, Polypus, Stricture, Obstruction of Bowels, Affections of Sphincter Ani, Malignant Disease, Restorative Operations.

In Lecture XVII, on Imperforate Anus, in cases where there is a cul-de-sac of intestine to be felt bulging in the neighbourhood of the perinæum, though with a distinct septum between, the author recommends puncturing with a middle-sized trochar rather than incision with a scalpel, and tying the edges of the intestine down to the anus. If the intestine be far up, incision must be practised; and if this be not practicable, then lumbar colotomy is recommended in preference to Littré's operation.

In Lecture XVIII, various causes leading to long-continued pain in bone are discussed; and two cases in which trephining gave exit to pus and was followed by relief, are narrated.

In an interesting lecture on the subject of Excision of Joints, four cases of excision of the head of the femur are tabulated. Two of them were in children of 14 (a boy and a girl), and the other two were in a boy of 8 and a girl of 7 years of age. All the patients recovered with more or less useful limbs. In one case, the patient walked a distance of about four miles to the hospital two years after the operation.

In thirteen cases of excision of the knee, recovery followed in eleven. Of the other two patients, one was a man aged 21, who died at the end of three weeks: pyæmic deposits were found in one lung. The second was a girl aged 5, who died in sixteen days: tubercular deposits were found at the base of the brain, and the bones divided were in a state of osteo-myelitis.

Of the eleven patients who recovered, five were under 10 years of age; four, 10-15; one was 24; and one 34 years of age. In the latter case, the patella being ankylosed to the femur, the saw-cut was made through it, and the upper half left *in situ*. In a lad of 12, from various complications the limb was ultimately five-and-a-half inches shorter than the other. It was, however, very useful. A boy aged 7 was readmitted after twelve months for moveable articulation. The soft fibrous tissues were removed without any ill-result. In the remaining cases, the report of the usefulness of the limb is highly satisfactory.

Four cases of excision of the elbow are tabulated. A girl aged 15, operated on for strumous disease, was seen five years afterwards with "perfect use of the arm". A boy aged 13, on whose elbow a primary operation was performed, had the power of free flexion and extension two months afterwards. In a man of 36, a secondary operation, necessitated by the results of an injury, was followed by union at the end of three months; but subsequently there was some necrosis going on. In the last case, a woman aged 20, firm fibrous union resulted, but amputation was resorted to after long interval for severe pain, and necrosis was found in the ulna.

As most of the cases of excision of the knee were in children, a high mortality could not be expected; yet the fact that only one patient died of pyæmia, directly due to the operation, shows a more than usually encouraging result.

The lectures in the second volume are devoted to the subjects of Syphilis and Gonorrhœa. The whole question of syphilis is entered into at length; and much pains have been taken to represent the most recent views on the subject. Some very interesting cases showing unusual modes of transmission of syphilis are narrated in the Lectures XXV and XXVI. In Lecture XXVII are details of cases in which symptoms of constitutional syphilis were present without the occurrence of any primary symptoms. A sketch of the accounts hitherto published of Vaccino-Syphilitic Inoculation is given in Lecture XXVIII. Under the head of Inherited Syphilis, the author mentions that there are some cases which go to prove that the child may be affected and yet the mother may escape. This is stated more doubtfully, however, than we should have thought necessary nowadays. It has been noted repeatedly that women may present no symptoms of syphilis whatever till after several confinements with children decidedly syphilitic.

In the concluding lecture, details of several cases are given in which albuminuria was present from various surgical causes independent of disease of the kidneys.

As the summary of the experience of a very able hospital surgeon on some of the most important practical questions of the day, the volumes must rank as a very valuable contribution to our literature.

A MANUAL OF ZOOLOGY FOR THE USE OF STUDENTS; with a General Introduction on the Principles of Zoology. By HENRY ALLEYNE NICHOLSON, M.D., B.Sc., M.A., Lecturer on Natural Philosophy in the Extra-Academical School of Edinburgh, etc. Vol. I, Invertebrate Animals. Pp. 322. London: 1870.

THIS is a book which was wanted. Dr. NICHOLSON has perceived

the want, and has undertaken to supply it; and he has well done his task. In his preface, he modestly disclaims all title to originality. What he has aimed at is, to lay before his readers "not a mere mass of undigested facts, but something like an orderly and systematic review of the main facts required to be known by the student." Those who know what advances have been made in zoology in recent years, and what a vast amount of information in the science lies scattered here and there in monographs, transactions of societies, journals, etc., will readily allow that to collect material from these sources and form it into a compact and sufficiently complete treatise, is a task for which one might well claim credit, even though he imported little or nothing of originality into his work.

The General Introduction consists of chapters on the Definition of Biology and Zoology, the Differences between Organised and Unorganised Bodies, the Nature of Life, the Differences between Animals and Plants, the Differences between Different Animals, and other subjects bearing on zoological science. Dr. Nicholson's remarks on the various topics are clear and judicious. On the debated subject of vital force he thus expresses himself.

"If, in conclusion, it be asked whether the term 'vital force' is any longer permissible in the mouth of a scientific man, the question must, I think, be answered in the affirmative. Formerly, no doubt, the progress of science was retarded and its growth checked by a too exclusive reference of natural phenomena to a so-called vital force. Equally unquestionable is the fact that the development of biological science has progressed contemporaneously with the successive victories gained by the physicists over the vitalists. Still, no physicist has hitherto succeeded in explaining any fundamental vital phenomenon upon purely physical and chemical principles. The simplest vital phenomenon has in it something over and above the merely chemical and physical forces which we can demonstrate in the laboratory. It is easy, for example, to say that the action of the gastric juice is a chemical one; and doubtless the discovery of this fact was a great step in physiological science. Nevertheless, in spite of the most searching investigations, it is certain that digestion presents phenomena which are as yet inexplicable upon any chemical theory. This is exemplified in its most striking form when we look at a simple organism like the *amœba*. . . Any organism when just dead consists of the same protoplasm as before, in the same forms, and with the same arrangement; but it has most unquestionably lost a something by which all its properties and actions were modified, and some of them were produced. What that something is, we do not know, and perhaps never shall know; and it is possible, though highly improbable, that future discoveries may demonstrate that it is merely a subtle modification of some physical force. In the meanwhile, as all vital actions exhibit this mysterious something, it would appear unphilosophical to ignore its existence altogether; and the term 'vital force' may therefore be retained with advantage. In using this term, however, it must not be forgotten that we are simply employing a convenient expression for an unknown quantity, for that residual portion of every vital action which cannot at present be referred to the operation of any known physical force."

In his remarks on Classification, Dr. Nicholson demonstrates very ably the meaning of the doctrine expressed by Professor Huxley, of the distinction between the morphological and physiological types; and shows at once to the student how it is that a linear classification—such as has been sometimes attempted—is an impossibility.

"The *status* of any given animal depends upon two conditions—one, its morphological type; the other, the degree to which specialisation of function is carried. Now, if we take two animals, one of which belongs to a lower morphological type than the other, no degree of specialisation of function, however great, will place the former above the latter, as far as its *type of structure* is concerned, though it may make the former a more highly organised animal. Every vertebrate animal, for example, belongs to a higher morphological type than every mollusc; but the higher molluscs, such as cuttle-fishes, are much more highly organised, as far as their type is concerned, than are the lowest vertebrata. In a linear classification, therefore, the cuttle-fishes should be placed above the lowest fishes—such as the lancelet—in spite of the fact that the type upon which the latter are constructed is by far the highest of the two."

Having disposed of the preliminary matter, the author proceeds with his descriptions of the subdivisions of the Invertebrata, beginning with the Protozoa and ending with the Mollusca. In doing this, he notices not only the existing but the extinct forces; and thus places before us at one view all that is known about a class or an order. The descriptions are clear and sufficient, and are accompanied with woodcuts; and at the end of each chapter is a synopsis of the characters of the orders and families described.

To those who are not acquainted with the modern nomenclature of

zoology, a copious glossary, with the derivations of words, which is placed at the end of the volume, will render every required assistance.

We thank Dr. Nicholson heartily for having so ably placed within the reach of students of zoology an excellent outline of that which is known or believed in the scientific world about the invertebrate animals; and we shall look forward with pleasure to the appearance of a second volume containing the zoology of the Vertebrata.

MUSEUM NOTES.

THE ROYAL COLLEGE OF SURGEONS.

Notes of some of the New Specimens added to the Museum.

ACCORDING to custom, the new specimens obtained during the year have been arranged for inspection in the theatre. We shall briefly mention some of the more important.

2672 D shows an Uterus, with both Ovaries, which was removed during life by the late Mr. Nunneley of Leeds. The specimen consists of a tumour of the size of a child's head, and several smaller ones of the size of fists. No history of the case is obtainable.

Among the specimens which have come into the possession of the College from the collection of the late Mr. Hodgson are two which show commencing Necrosis of small portions of Ribs; a peculiar feature being, that in each the pleural aspect of the rib is the one involved. In each there is considerable deposit of new bone adjacent to the disease. The cause of the disease is not known in either. In one there is evidence of a previous fracture.

Another of Mr. Hodgson's specimens is the Calvaria of one Anne Buchan, showing most extensive ravages of syphilitic caries—a condition of things which, since the introduction of iodide of potassium, is becoming less and less common.

In the same collection of the late Mr. Hodgson is a Skull showing deep indentations and irregularities, probably from sabre-cuts. The repair is perfect.

Mr. Busk exhibits the cast of an excellent Stump after Pirogoff's amputation, together with the Astragalus and the portion of the Os Calcis removed. Mr. Busk is accustomed to slope the section of the os calcis backwards much more obliquely than is usually done, and thus secures a better stump.

A Kidney perforated by a pistol-ball is shown by Mr. Le Gros Clark. It was removed from a boy who was shot in the abdomen by a ball from a parlour-pistol, which at the same time wounded the gall-duct and grazed the duodenum. The ball was removed from just beneath the skin of the back a few days before the boy's death, which occurred several weeks after the accident. It is interesting to note that there had been hæmaturia only once—on the day immediately following the accident.

Comparative Pathology is illustrated in several interesting specimens.

Mr. Carr Jackson contributes a Rib from a Sheep, showing bony union with oblique displacement. He also sends the Tibia and Fibula of a Dog fractured at the middle, and re-united with considerable displacement. Both this and the preceding show no difference in the mode of union from what is common in the human subject, except such as result from anatomical peculiarities.

The specimens illustrating fractures from the human subject are not numerous. There are two of extracapsular fractures of the Neck of the Femur; one presented by the President of the College, Mr. Cock, and the other by Mr. John Adams. Both of them show the neck driven into the shoulders; and, in Mr. Cock's specimen, a condition approaching true impaction exists. In Mr. Adams' specimen, the trochanters are comminuted. In both, it is almost certain that, had the patients lived, union by bone would have occurred.

Mr. Busk has sent two specimens from the same patient. One of them shows a fracture in the lower end of the Humerus: it is a Y-shaped fracture, with the stem passing vertically into the joint. The other shows a fracture of the lower end of the Radius, with great displacement of the carpal fragment backwards and towards the radial border. The carpal fragment is comminuted, and there is also a fracture in the lower part of the ulna. The injury was compound, and there is extensive deposit of new bone.

Dr. Robert Ferguson has sent a portion of Skull (from a case of suicide) fractured by a pistol-ball, showing the usual conditions of increased size of the inner aperture, and splintering of the inner table. The bullet is also kept, and shows its sides fluted by the bone through which it has passed.

Mr. J. B. Perrin has presented parts of a Tibia and Fibula united after a compound fracture with terrible displacement. They are from

the left leg, and the fracture is in the lower third. The lower fragment of the tibia has been carried behind and to the outer side of the upper one, and the sole of the foot must have looked towards the side of its fellow. The two bones are welded together. The union is firm and massive. There appears to have been disease of the ankle-joint.

From Mr. Birkett we have a large Lipoma from the Scrotum. The tumour is undoubted fat, and is arranged in large lobules. Whether it began in the scrotum, or travelled thither from the abdominal wall, is perhaps open to doubt.

Mr. Poland has presented a very interesting Fibro-cystic Tumour of the Scalp—a variety of the "peculiar form of the sebaceous tumour of the scalp," described by Mr. Cock in *Guy's Hospital Reports* some years ago.

The President has presented an example of the condition of things some weeks after Puncture of the Bladder by the Rectum; an operation with which his name is closely connected. A fistulous canal has been established which enters the bladder about half-an-inch behind the urethra a little to the left of the middle line. The fistula is lined by mucous membrane.

Sir W. Fergusson exhibits a handsome article of jewellery, consisting of a massive gold Pencil-Case, five inches long. The point of surgical interest is that it was swallowed, and, after being retained in the intestine twenty-two days, passed safely *per anum*. In connection with this specimen, we may mention two tooth-plates sent by the President, which were removed by œsophagotomy from two patients, by whom they had been swallowed.

[To be concluded.]

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

(Communicated by Mr. REGINALD HARRISON, F.R.C.S.)

Specimen of Fracture of the Odontoid Process.—In the course of the Hunterian Society Oration, recently published in the JOURNAL, Mr. Bryant alluded to an interesting case of fracture of the odontoid process of the second vertebra. A very similar specimen has been recently added to this museum. (Series G., 3, 10.)

The history of the case is briefly this. A middle-aged man was struck on the back of the head by a cotton-bale falling from a height. He was in the first instance removed to an institution in the town, thence to his home, and finally to the Royal Infirmary, where he died *three weeks* from the date of the accident; paralysis, which had first been only partial, becoming complete.

The specimen exhibits a fracture through the base of the odontoid process, completely separating it from the vertebra. The broken edges were covered with lymph. The several ligaments appeared unimpaired. The spinal cord, as examined from without, and on section, presented no appearance either of laceration or softening, though it is probable that a closer examination with the microscope would have revealed some disintegration corresponding to the seat of fracture.

ANKYLOSIS OF VERTEBRÆ BY AN ANTERIOR SPLINT OF BONE.

THERE is a peculiar form of ankylosis of the vertebræ which is fairly common both in man and in the lower animals, but which has as yet not attracted much attention. Specimens of it are to be found in most of our museums, and allusions to it occur in many of our standard works; but we do not know that any one has ventured an opinion as to its cause, or as to the diathesis with which it is associated. It consists in the formation of a splint of new bone in front of the bodies of the vertebræ, frequently bridging over six or eight intervertebral spaces, and entirely destroying the flexibility of the part. The new bone is generally abruptly margined; and it rarely covers the whole of the vertebral bodies, being not unfrequently distinctly on one side. Rokitansky has very aptly compared it to what would result from a stream of molten material allowed to run downwards, and subsequently ossified. The intervertebral substances do not undergo any change, and there is no sort of caries of any part. It is not precisely ossification of the anterior common ligament, since it often greatly exceeds that structure in thickness; it is rather a deposit of new bone beneath it.

Several interesting questions occur in connexion with this form of ankylosis.

1. Is it always senile?
2. Is it associated with any symptoms during life, other than those of immobility—such, for instance, as rheumatic aching?
3. Does it follow in cases in which violent sprains have been experienced, and in which it may be supposed that the fibres of the anterior common ligament have been stretched or torn?

4. Has it anything to do with special occupation and the manner in which the back is bent?

5. Does it occur in association with the curious changes grouped together under the name of chronic rheumatic arthritis?

One of our objects in drawing attention to this disease at the present time is to point out that it is an occasional cause of fracture. Patients in whom ankylosis has occurred subsequently to carious destruction of the vertebræ are but rarely able to undertake laborious employments, and are consequently seldom exposed to the risk of fracture. The peculiar form of ankylosis under discussion does not, however, disqualify for work; and we have recently come across two specimens in which fractures had occurred in connexion with it. It is common in horses, and has long been recognised in them as a predisposing cause of fracture. We subjoin references to the specimens we have mentioned.

QUEEN'S COLLEGE, BIRMINGHAM.

Fracture of Spine in a Patient in whom the Bodies of the Vertebræ were primarily Anchylosed.—The specimen shows a fracture through the body of a vertebra (a dorsal one); there has been no attempt at union, nor is there any new bone thrown out at the edges of the line of fracture. There had been extensive formation of bone, in the form of rounded outgrowths, on and about the anterior border of three intervertebral discs, two immediately above and one immediately below the seat of fracture. The bodies of these vertebræ were therefore quite ankylosed together. The new bone is smooth and compact on its surface.

THE LONDON HOSPITAL MUSEUM.

Ossification beneath Anterior Common Ligament of Vertebræ and subsequent Fracture.—Our woodcut illustrates a specimen from the museum of the London Hospital, which was obtained by Mr. J. M. Mackenzie a few years ago from a patient who died from various injuries. The spine was found fractured in a very unusual manner in the lumbar region. Previously to the accident, the vertebræ had been welded together by a long splint of new bone deposited beneath the anterior common ligament. This splint was an eighth of an inch in thickness, and very strong. It covered only the left half of the front aspect of the vertebral bodies, uniting them firmly together, but not dipping into their interspaces. The new bone had been broken across at three places, and the body of one vertebra had also been cracked, but no displacement



Fracture of vertebra after ankylosis by splint of new bone.

had occurred. In the woodcut, the fracture in the vertebral body is seen to be vertical. The transverse fractures of the new bone occurred in each instance opposite an intervertebral space. The contents of the spinal canal had not been injured.

The specimen alluded to above in the museum of Queen's College, Birmingham, is probably of a similar kind.

Deposits of bone of this kind are common in horses; and subsequent fractures are also not infrequent. We give below references to some specimens.

THE MUSEUM OF THE ROYAL COLLEGE OF VETERINARY SURGEONS (RED LION SQUARE).

THERE are in this museum a series of valuable specimens showing the not unfrequent influence of this form of ankylosis of the vertebræ in predisposing to fracture. We may mention the following.

No. 605 shows ankylosis of the vertebræ, and subsequent fracture of the tenth.

No. 606. Fracture of the vertebral chain at about the eleventh dorsal vertebra, consequent upon bony deposits and ankylosis of the vertebral joints.

No. 607. A fracture of ankylosed dorsal vertebræ.

In none of the above is there any history of the kind of violence which caused the fracture. In the following, it is given; and its slight character would strongly support the opinion that the ankylosis is a very powerful predisposing cause.

No. 608. "Comminuted fracture of a dorsal vertebra, caused by violent struggling during an operation; ankylosis of the vertebral joints having been the predisposing cause."

No. 609 is, again, a specimen of fracture of ankylosed dorsal vertebræ.

In the Museum of the Royal Veterinary College, Camden Town, there are also several specimens of the same kind.



The appended woodcut shews the form of ankylosis to which we refer, in the dorsal spine of a horse.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PATENT CHAMELEON SOAP.

UNDER this title we have received a small canister containing a powder which, when shaken into water, is dissolved, giving a purple colour to the water. The soap is described as being a most perfect disinfectant, and as possessing antiseptic properties.

The preparation, which is a mixture of powdered soap with alkali and permanganate, will, we consider, prove an useful and efficient preparation.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 9TH, 1870.

BRITISH THERAPEUTICS.

II.—SEA-AIR.

IN what cases is the sea-side especially to be recommended? It is not a little remarkable how small is the amount of definite information which we possess in answer to this question. Although the effects of change of air and scene are beneficial to all, and although the more special effects of sea-air are beneficial to most, there can be no doubt that persons differ a good deal in their susceptibility to advantage from this source. With not a few, the sea positively disagrees. Can we identify these? Can we make any rough classification of our clients, and say to some, you will derive the utmost possible benefit from going to the sea-side; you will get but little; to you it is matter of no concern where you go; and to you, again, sea-air will be hurtful? We fear but little progress has been made in this direction; yet we are dealing with one of the most useful and efficient of our therapeutic agents. There is a wide spread opinion that the sea suits all children; and as regards adults, most who aim at seeking a foundation for a definite opinion, generally consult the previous experience of the individual. There are but few grown-up persons in the middle classes of society who have not, at one time or other, tried the sea; and many tell us at once: "Ah! it never suited me;" or, "Oh! it is new life to me." Upon such results of previous trial we found our advice. In addition to this, we have many of us our own special crotchets. We never send cases of chronic skin-disease to the sea; or, perhaps, we send all chronic skin-disease there. Some scrupulously avoid the sea if the patient be liable to uterine derangements. Others hold that nervous ailments are usually made worse; and some think that the digestive organs ought to be in good order before resort is made to the tonic influence of sea-air. In "scrofula", sea-bathing has a time-honoured reputation. Dr. Russel's work on scrofula it was that first set the fashion of going to the sea-side. Before his time, it was customary to advise invalids to carefully avoid "the pestilent vapours of the sea." No doubt modern facilities in travelling have done much to develop our present habits; but it was Dr. Russel who first started the idea that salt water was medicinal. His book on *Glandular Consumption* was published in 1750.

In order better to carry out his plan of treatment, Dr. Russel removed to Brighton, then a mere fishing village; and from him the prosperity of the metropolis of watering places dates. The fashion was set; and invalids flocked to the coast at all parts. Weymouth, Lyme Regis, Margate, Yarmouth, Scarborough, and many other places soon became known as places suitable for the resort of bathers. It was to bathe that invalids went; no advantage was expected from the air alone. By degrees, however, as the fashion advanced, others than invalids went; and thus the knowledge was gained that to most inland residents a

change to the sea-side was found "bracing" and useful to the health. Various attractions were now provided by those who found their profit in the new custom, partly with the view of diminishing the tedium of those who went for health-reasons, and partly with the hope of attracting others also. The introduction of steam as a means of transit completed the work, by placing the luxury of a few weeks at the sea-side within the reach of almost all. Nor is there any telling where the habit may stop; for it is still increasing steadily, and there are probably good reasons for believing that it has done immense good to the health of the community. In 1796, an effort was made to secure for the poor a share of the advantages which the rich enjoyed; and an Infirmary was established at Margate for the reception, from all parts of the country, of poor persons suffering from scrofula. During the last thirty years, numerous other sanatoria or convalescent homes at the sea-side have sprung up. Some of these, as, for instance, those at Bournemouth, Ventnor, and Torquay, are intended especially for the treatment of the supposed ally of scrofula—tuberculosis of the lungs. Faith in the sanative influence of sea-air, as sea-air, in cases of genuine tubercular consumption, has probably diminished rather than increased of late; and it is rather special advantages as regards sheltered situations, equable temperature, etc., than the bracing effect of a marine atmosphere that are sought. In proportion as we approach accuracy in the ability to distinguish between scrofulous pneumonia, and tuberculosis proper, will our faith in sea-air for the latter probably diminish; at any rate, we have almost universally ceased to recommend cold sea-bathing in the last named condition. In Dr. Russel's time, and for some time afterwards, bathing was resorted to in cases which now we should regard as very unsuitable, and at seasons at which we should deem it very likely to be prejudicial. The faith in the efficacy of the sea dip was then almost unbounded; and invalids who could not afford to stay, put themselves to expense and trouble to secure one shivering plunge. Some of our more crowded bathing places began with the provision, by an innkeeper, of a single "machine", for the use of passing travellers by coach who wished to dip.

Several of our best observers as to the treatment of the later forms of constitutional syphilis, have, we believe, formed strong opinions as to the benefit of sea-air in their cure. Certain forms of phagedæna, in which the cause of the peculiar action is in part local, and in part constitutional, will stop at the seaside when all measures have failed elsewhere. Some of the worst of the varieties of rupia, attended by deep ulceration, recover very quickly under the same drugs when given at the sea-side, which they had resisted inland. So, also, with some syphilitic diseases of the nervous system. In a majority of instances, iodides act admirably in these cases; but now and then, under their use, the patient becomes weak, loses flesh and vigour, and a fatal event may even be threatened. In such instances, residence at the sea-side, with very free exposure to sea-air, whilst at the same time the medicine is continued, will often do marvellous good.

With regard to skin diseases, the prescriber is in some difficulty. Many of them depend on diatheses—scrofula, for instance—which are specially benefited by the sea; but, at the same time, the local influence of a brine-laden atmosphere is apt to prove irritating. Mr. Startin, our great authority in all matters relating to dermatological therapeutics, systematically discourages his patients, we believe, from resorting to the sea, and especially forbids it in all cases of lupus. In many cases of chronic lichen and eczema in children, the sea will, however, prove a cure in a most definite way; and in some other maladies, and even in lupus itself, the advantage to the constitution seems to outweigh the loss in local irritation. In the latter, the great point to remember is that no constitutional treatment will cure, and that efficient local measures must be adopted, whether the patient reside inland or at the coast. Upon this and many other matters of detail, careful records of observations by local residents, especially by the surgeons of our sanatoria and hospitals, will be most valuable.

Putting aside the scrofulous diathesis respecting which all are agreed, we may still urge the question: Can we identify any special states of

health as certain to be benefited by the sea? We believe that there is good reason to hold that bronchocele is very rarely met with on the sea-border, and never in association with the severe form of cachexia which often attends it in mountain districts. Now, bronchocele when met with in connexion with the usual causes (*i.e.*, when endemic, and not accidental), is but the symptom of a general disease; and probably many individuals who never manifest this one sign of the dyscrasia, yet suffer in greater or less degree from the effects of the same climatic influences. Iodine is known to have a specific influence on bronchocele, and the absence of iodine in air and water is one of its suspected causes. May we infer from this that all who suffer from bronchocele in any stage are likely to derive special benefit from sea-air? and may we, if that be affirmed, extend our argument to the inference that all who reside in bronchocele districts will be likely to gain by periodic visits to the coast? This question is one upon which valuable information may be given by medical men resident in each locality: by those who send and by those who receive the patients. That of the former will, of course, be much the more valuable.

So fashionable has become the resort to the sea for purposes distinct from the pursuit of health, that far less attention is probably now paid to the questions of preparation and of conduct when there, than was previously the case. People have found out that they can rush with impunity to the sea-side and take a bath without preparation, and the precautions of the past are almost wholly neglected. Our mothers and grandmothers never thought of taking their children to the sea without a preparatory dose of aperient medicine; nor would they have dreamt of allowing bathing until the third day of residence was passed. It is very possible that we now too uniformly neglect these little matters. Probably it is the experience of many, that any great change of climate, especially change from a relaxing to a very invigorating one, always produces some influence on the intestines. Sometimes it causes a temporary diarrhoea; at other times it constipates. This influence is quite apart from that of change of diet. Is it true that in cases in which some degree of purgation results, the ulterior effect is best? and that those who suffer from constipation are those most likely to complain afterwards of headache and general feelings of disagreement? If this be true, is it a clue to the diathesis likely to be advantaged by the sea, or may it be taken as a hint in favour of a preparatory purge?

The advantages and disadvantages of salt-water bathing we will not now discuss. It is too large a subject. Confining our remarks to sea residence only, we next say a word or two as to the best *regimen* to be adopted whilst there. Without doubt, many pleasure-seekers entirely counteract the collateral benefit to health which they might receive, by the most irrational management of their habits. They idle too much in every sense, and feast too much, availing themselves of the sharpening of appetite which the sea-air gives, to consume things in quantity and quality very different from those in home use, and far less suitable. He who wishes to get all that is to be got from his trip, should take exercise liberally and live frugally. Probably there are very few who would not, under such circumstances, derive great benefit from entire abstinence from dietetic stimulants. The effect of the air is usually quite sufficient to maintain the appetite and digestion, and there is no sort of advantage in attempting to stimulate them artificially. None but those who have tried it can realise the benefit obtained from occasional abstinences of this kind; and if all who seek change of air (with, perhaps, the fewest exceptions) were to practise water-drinking during their holidays, and not revert to their former customs until, after return home, they found positive signs of its being requisite to resume the employment of stimulants, much benefit to health would result. Many would enjoy their holidays much more; would find themselves, in fact, much more uniformly in that state of nervous system which permits the highest appreciation of pleasure from external events. Many would come home with an item of new knowledge as to their own health and the things which influence it, a kind of knowledge which might prove of great value to them in after-life.

LADY-SURGEONS.

WE tried lately to make it clear that the female sex as a whole will be no gainers by such a re-arrangement of the terms of partnership under which the two sexes have hitherto worked, as should admit women to masculine employments. Our argument was that, inasmuch as the sum total paid by the public for medical services is probably not capable of much increase, so every guinea earned by a woman is taken from the receipts of her male competitors, and the latter are thus rendered less able to support wives and families. Every successful lady-surgeon supplants, in all probability, a married surgeon, and the sex thus gains nothing at all. We urged that the present movement in behalf of feminine independence is, at the bottom, one in favour of celibacy; and that, whatever may be the intentions of those who promote it, they are, in exact ratio with their success, quite certain to increase the proportion of single women. We commend this view of the case to the thoughtful attention of all who in earnest wish well to the future of our race. If an increase of individual independence and a reduction in our marriage tendencies be desirable, by all means let them come; but, meanwhile, it will be for the best that we should understand what we are doing. The argument which we have used in reference to the social economics of the question is, we believe, beyond dispute, but it is not in itself conclusive on the question. It is possible, indeed, that the loss which would result to the community in this direction would be more than counterbalanced by gain in others. Thus, if it could be shown that female navvies (there are plenty such on the Continent) do more work than men, and require less food, there would be in that fact a good reason for altering some of our rules as to the kind of tasks appropriate to the two sexes; and just the same remark of course applies to medical pursuits. If ladies be likely to excel in the practice of surgery—if they have special aptitudes which men do not possess, either for the discovery of new principles or for the detailed employment, for the good of the sick, of those which are known, then a very strong reason will exist for their admission into our ranks, some which might outweigh any æsthetic notions, and even reduce to nothing the pecuniary loss which it has been proved would occur.

This question—as to what the world may properly expect from the female sex in the field of science—is one of much importance and also of some difficulty. We do not, however, believe that it is so difficult as some think; and in alluding to it we especially wish to examine a prevailing opinion which appears to us a very delusive fallacy. It is common to argue that the achievements of women in the past furnish no criterion of what they are capable of, since the sex has been artificially repressed and its development hindered. This is so evidently true to some extent that it has led, we believe, to an extent of hopefulness on the part of the upholders of feminine equality, which is irrational and wholly contrary to sound physiology. It is quite certain that the mental development of any individual woman may be dwarfed and cramped by the social restrictions which surround her life; but it is, we hold, equally certain that, when society has done this, it has done its utmost, and that it possesses no power whatever to cause any persistent sexual disparity which shall be transmissible hereditarily. A physiological law, which no human ingenuity could defeat, is here interposed. A child is the offspring of two parents, and, whether male or female, derives his or her qualities from both. There are, not improbably, certain secondary laws which regulate the influence of the parents; but, so far as is yet known, the law as regards the bequest of brains is “share and share alike”. An intellectual father has no power of determining his mental ability to male offspring only, nor can he prevent the risk that retarded development of his wife’s capacity may revenge itself in stupid sons. The relative peculiarities of sex are probably unalterable. They belong not only to the mental and moral qualities, but to every part of the organism; and it would probably be just as reasonable to expect by cultivation to diminish the difference in average height which exists between the two sexes, as that in mental power. Under the operation of this beneficent law—almost the key-stone, if

rightly understood, of future progress—it becomes impossible for the sexes to diverge too widely. The woman is not left subject to the selfishness or caprice of the man excepting within narrow limits; and the one sex as a whole cannot possibly progress without also elevating the other. All history, we believe, corroborates this view of the matter; the sexes never attain equality, neither do they ever differ beyond certain limits. In no instance do we find the production of noble qualities and capacities in the male without observing, also, their analogues in his companion. The two sexes must, from very necessity, rise or fall together.

If the truth of this law be admitted, and its application kept clearly in mind, the decision as to what are the special avocations suited for each sex is rendered much more easy. So long as unlimited power of relative alteration is believed to exist, so long is it all uncertainty as regards the future. We dare not either affirm or deny anything. If, however, our stand-point be a good one, we have no great difficulty in looking forward; for the light of the past and present is trustworthy. Let us then, guided by that light, ask how the matter stands as regards the fitness of woman for the medical profession. The question is not as to absolute fitness; for had we none others, or were the supply of men scanty, we would avail ourselves willingly of the surgical services of the sisterhood. The question is, however, relative, and should be put thus: "Is it likely that women, in the average, will equal men in their capacity for medical pursuits?" If this cannot be affirmed, it avails but little to prove that this or that individual woman excels in intellect this or that individual man.

The data open for our use are of two kinds. First, we have the certain facts of physiology,—that the female brain is by some ounces smaller than that of the male, and that it probably attains its ultimate development and is subjected to senile atrophy somewhat earlier. Our object is not to assert that these differences are in themselves great ones, but rather that they are real. So far as they go, there can be little doubt that they imply superior adaptation of the male brain for pursuits requiring continuous thought, large grasp of memory, and power of utilising experience. Next, we may assert that this inference is supported by all past experience. Exceptions have undoubtedly occurred, and women have been whose intellects very closely approached to the masculine type; but they have been those usually in whom some of the more essential characteristics of their own sex were but feebly traced. We would not say one word in disparagement of the exertions and achievements of this class of women. The world has been much indebted to them. But we still have no wish that the whole sex should follow their example; nor do we believe that such a result is in the least within possibility. They are exceptions, and must be counted as such. That in the majority of women, and especially in those in whom the most beautiful and distinctive traits of womanhood are most strongly marked, there is a decided deficiency of the harder faculties which such a profession as that of medicine requires, is a statement which all experience supports. Nor can it be alleged with plausibility that difference in education accounts for this. In many isolated instances, girls have been trained with the same care as their brothers, and educated in the same subjects, yet with the result of confirming rather than destroying the general rule of fundamental difference. In one of our social sections, it has been for two centuries the constant practice to allow to the female sex every educational advantage which could be secured, and at the same time to guard it in every possible way from waste of time and mental power in frivolous pursuits; yet the Society of Friends has, we are glad to say, effected during seven generations no approach to destruction of the moral and intellectual differences between the sexes.

Our position, then, with such facts and probabilities is clear. It will be for the world's advantage in every way that all that is possible should be done for the improved education of the female sex; and it is doubtless most desirable that many of our old notions as to what is fitting and what not for a lady's avocation should undergo much modification. But if it be attempted to assert that equality exists, that equality is attainable, or that it is desirable, then, on behalf of both sexes, we protest.

The movement in favour of the pursuit of medicine by women, and many other parallel aims of the same section of social innovators, appear to us to be based on a short-sighted policy, which hopes to cure a deep-rooted evil by the adoption of an utterly delusive expedient. We regret the movement and the kind of success which it has obtained. It is one which will tend inevitably to increase the rivalries and competition which already curse the world. We have all of us had mothers; most of us have sisters; many of us wives and daughters. Surely there lacks nothing either to convince our minds or to impress our hearts as to the absolute identity of interests of the two sexes. We regret the movement not alone on account of the direct evil which it is likely to do, but still more because it serves to divert attention from the true solution of one of the pressing problems of the day.

THE CHAIR OF MIDWIFERY IN EDINBURGH.

THE result of the election to the Chair of Midwifery has given rise to much astonishment and just indignation. Dr. Matthews Duncan, whose claims were considered by every member of the profession in this country who knew anything of the matter, as well as by the leading obstetricians abroad, to be unmistakably superior to those of the other candidates, has been passed over; and a gentleman, the nephew of the late Sir James Simpson, who, so far as we have been able to learn, possessed no special claims at all to the appointment, has been elected. By whom? and for what reason? It will be understood that, by the Universities (Scotland) Act (1858), the patronage of the seventeen Chairs, previously entirely in the gift of the Town Council, was for good reasons, taken out of their hands, and transferred to seven Curators; *three* of these are nominated by the University Court, and *four* by the Town Council. The Town Council has, therefore, still a majority of one. The Curators representing the University Court are Sir William Gibson-Craig, Lord Neaves, and Mr. D. Milne-Home; those representing the Town Council are Mr. Law (the Lord Provost), Bailie Skinner, Bailie Russell, and Bailie Fyfe. On Monday, all the Curators were present, with the exception of Bailie Skinner, who, however, left a sealed paper containing his vote. Dr. Alexander R. Simpson, Glasgow, was nominated by the Lord Provost; Dr. Keiller, by Bailie Russell; and Dr. Matthews Duncan, by Sir William Gibson-Craig. Bailie Fyfe spoke in support of Dr. Simpson, and Lord Neaves and Mr. D. Milne-Home in support of Dr. Matthews Duncan. Bailie Skinner's sealed paper was opened, and it was found that his vote was given in favour of Dr. Simpson. Dr. Matthews Duncan and Dr. Simpson having each three votes, and Dr. Keiller only one, Bailie Russell withdrew his amendment, and gave his vote for Dr. Simpson, who was thus elected by four to three votes.

It will thus be seen that the Curators of the Town Council, by their majority of one, carried the election. When we come to ask *why* their selection fell upon Dr. Simpson, we confess we are utterly unable to answer the question, unless it be that the successful candidate is a relation of the late Professor. If this be the case, and no other explanation is forthcoming, the sooner such an excuse for electing a gentleman to fill a University Chair is put an end to the better. Whatever the excuse, whatever the opinion of the Town Councillors, there is but one opinion amongst professional men, who are best able to judge, that the Town Councillors are not fit and proper persons to be entrusted with such matters, and that something ought at once to be done to introduce reform in the election to these Chairs in the University; and to prevent the repetition of such an occurrence as that of Monday. Throughout the whole kingdom, we may say, there is a universal feeling of disgust and indignation at the result of the election, and of sympathy with Dr. Duncan. In Edinburgh, a document is being largely signed, sympathising with Dr. Duncan; and a petition has been prepared, to which upwards of three hundred students have already subscribed their names, requesting him to give a course of lectures during the ensuing winter. The students of the University have even thought fit, in large numbers, to request Dr. Simpson to resign the

Chair to which he has been appointed. In London, a meeting has been called for Monday next—details of which are given elsewhere—to protest against the appointment, and to consider the present mode of election to the Edinburgh University Chairs. The meeting is, we hear, likely to be attended not only by a large number of old Edinburgh men, but by others who desire to show their sympathy for Dr. Duncan, and at the same time to express their views on the evil results to medical science and education likely to follow such a mode of election. There will be, doubtless, numerous suggestions for reform in the Court of Curators. Whatever may be done, one thing is imperative, that the influence of the Town Councillors should be at least largely counteracted by men who are capable of selecting, and who can be trusted to appoint, the best candidate.

THE MEDICAL BILL.

THERE is no time to be lost. Those of our associates who are in earnest in the wish that the Medical Bill should be so modified as to secure direct representation, must at once bestir themselves. The Bill has now passed on to the consideration of the House of Commons; and it is upon the members of this House that our influence can be most easily brought to bear. Conferences should be immediately sought with local members, and the matter urged upon their attention. The facts are sufficiently clear to permit of their being made easily comprehensible to anyone. We claim direct representation—first, as a matter of justice, because the Medical Council will be, to some extent, the governing body of the profession, and, as such, will be supported wholly by fees paid by the profession. This is, however, by no means our chief reason for wishing for it, our main motive being the desire to make medical examinations as effective as possible for the good alike of the public and of the profession. We maintain that to perpetuate the old system is to leave the power in the hands of mediæval oligarchies, whose incompetency to use it liberally has been repeatedly proved. We ask that the institutions which govern our profession be planned on the model of those which rule our country; we protest that there is not a single individual in the ranks of those for whom we claim votes who is not thoroughly well-qualified to use such power with ability and discretion; and we feel sure that a popular election would secure for us a Medical Council far more capable of dealing boldly with the great questions that come before it than any we have yet had. The battle is, indeed, between liberal institutions and the narrow spirit of monopoly. No personal exertions should be counted too great which will help us to the victory.

HOSPITAL POST MORTEM EXAMINATIONS.

THE very important question as to the right of Hospital authorities to perform *post mortem* examinations on the bodies of those who die within their walls is again under discussion. Dr. Steele, the Medical Superintendent of Guy's Hospital, was summoned to the Borough Police Court a few days ago for having permitted such an examination. The authorities at Guy's Hospital have all along stood out for their right to make *post mortem* examinations, and hence the unequalled reputation of their school for pathological research.

The magistrate had a very decided leaning in favour of the applicant. The case was adjourned, in order that the Hospital might consult its legal advisers. We have already expressed our strong opinion that the making of an ordinary *post mortem* examination certainly does not come within the scope the Anatomy Act. It is to be desired that all concerned in the matter should at the present juncture carefully restrict themselves to the steps of an ordinary *post mortem* examination, and that scrupulous care should be taken to avoid unnecessary injury to the feelings of friends. It is much to be regretted that some of our magistrates have not good sense enough to avoid the use of expressions which are calculated to excite prejudice in the minds of the ignorant. They ought to know that such phrases as "cutting up the body", "cutting the body about", etc., are not applicable to an orderly investigation as to the cause of death. They ought also to recollect that the cause of science and the interests of the public are very deeply at

stake. If it should come to pass that in future the consent of relatives must always be obtained, a very serious blow will have been inflicted on the pursuit of pathological science in England.

THE Princess Mary of Teck visited the Hospital for Relief of Diseases of the Joints, Queen Square, Bloomsbury Square, this week; and, after remaining some time in the Hospital, expressed her gratification at the visit.

THE EDITORSHIP OF THE PHARMACEUTICAL JOURNAL.

DR. B. H. PAUL, whose high claims as a candidate we noticed last week, has been appointed, by a large majority of the Council of the Pharmaceutical Society, to the editorship of the *Pharmaceutical Journal*. We wish Dr. Paul every success in the important work which he has undertaken.

ELECTION OF COUNCILLORS IN THE ROYAL COLLEGE OF SURGEONS. ON Thursday last, the election of members of the Council of the Royal College of Surgeons took place. There were two vacancies, caused by the retirement of Mr. Joseph Swan of Tavistock Square, and Mr. Thomas Paget of Leicester. The four candidates were, in order of seniority, Mr. Erasmus Wilson, F.R.S., Professor of Dermatology in the College; Mr. Spencer Wells; Mr. Holmes Coote; and Mr. Henry Lee. The result of the voting was as follows.

	Votes.	Plumpers.
Wilson	121	29
Lee	112	19
Wells	80	9
Coote	80	21

Messrs. Wilson and Lee were consequently elected. The number of Fellows who voted was 234, being about 70 fewer than last year. This is probably attributable to the fact that the election excited comparatively little interest, all the candidates being men of similar liberal views in regard to College politics.

THE MEDICAL ARRANGEMENTS AT WIMBLEDON.

SURGEON-MAJOR WYATT, Coldstream Guards; Assistant-Surgeon Templeton, Royal Artillery; and Assistant-Surgeon Mayo, of the Inns of Court Volunteers, have been appointed in charge of the medical arrangements at the Camp this year. The Hospital and other arrangements are the same as in previous years. We trust that the authorities will reconsider their decision to withhold waterproofs unless in wet weather, and furnish them to all in camp throughout the meeting, be it wet or dry. It is a precaution which ought to be taken especially with those unaccustomed to camp life; and really, as a matter of economy and discipline, it is not worthy of serious consideration.

THE MAGIC LANTERN IN MEDICINE.

BOTH the public and the profession, and especially those who are engaged in training the practitioners of the future, have a common interest in whatever tends to help the student to acquire a knowledge of the cases which he will hereafter have to treat. Of course, the use of the magic lantern for educational purposes is not new: it is already in use, we believe, in some of our medical schools, to illustrate the chemical and other lectures. Nor is the combination of photography with the phantasmagoria an absolute novelty; but the application of these to cutaneous medicine, as shown by Mr. Balmanno Squire at the Polytechnic Institution on Monday last, is, we believe, novel, and was certainly to a very great extent successful. The directors of the Polytechnic Institution very obligingly placed their oxyhydrogen apparatus and the large theatre at Mr. Squire's disposal; and the theatre was twice filled on the same evening—Mr. Squire obligingly repeating the performance for the benefit of those who came late. The photographs are done on glass, and coloured as transparencies, with glazed colours. They can then be used as slides for the lantern, and will most of them bear to be enlarged to even double of life-size. Amongst the views, or portraits rather, of skin-disease, were cases of complete alopecia, of alopecia areata, lupus, psoriasis, eczema, syphilides, pedicularia, porrigo

larvalis, and epithelial cancer. They were not all equally good, almost as a matter of course; but the worst of them possessed advantages over most plates. The portrait of eczema showed to least advantage in the gallery, and next to that porrigo larvalis; the colouring of both these being somewhat unnatural, to our eye, at that distance. Mr. Squire naively accompanied these dissolving views with a running commentary. He is very sanguine as to the future of his method; and we cannot but congratulate him on a very successful means of smoothing some of the difficulties which beset the student of cutaneous medicine.

MR. BRUCE'S VACCINATION COMMITTEE.

MR. BRUCE'S Select Committee on Vaccination will not be issued, we believe, till 1871. It is granted, as Mr. Bruce stated, with the conviction that the evidence thus collected and popularised will have the happy effect of reconciling the present opponents of vaccination to a practice which now saves half a million of lives annually in Europe, and to which we owe at this moment our exemption from a highly contagious epidemic which is slaying its thousands on the other side of the Channel. Dr. Playfair's speech, which is but briefly reported, produced a very favourable effect on the House; and, had the matter gone to a division, Mr. Candlish would have had the merest handful of followers. But, in such a matter, the persuasive logic of facts will prove a great aid to the universal approval of strict compulsion.

BABY-FARMING.

THE further development of the Brixton baby-farming case will lay bare to its base the system of legalised infanticide which is carried on under that title. The want of supervision—the farce called adoption, the facilities for the disposal of bodies, the absence of registration either of birth or death—are all strongly characterised. This will do more to insure future legislative redress than many long arrays of figures and ably urged arguments. A life picture such as this appeals to the mind through all the avenues of feeling and imagination as well as reason. It translates truth from the abstract state into the form of embodied realism, and such tales as have been told in the police-court during the last few weeks will long haunt the popular mind, and will not cease to influence it, until these ghosts are laid by measures which at least pretend to be remedial. The immediate remedies we have already emphatically urged: their necessity has been proved by irrefutable argument. We do not need here to repeat those arguments, for in our profession they have been accepted. It has been part of the mission of this JOURNAL during the last few years to examine, debate, and urge them from every point of view. They have been in great part adopted by the State Medicine Committee of the British Medical and the Social Science Associations, and embodied in a memorial laid before the Government. Briefly, they are: the compulsory registration of births; the registration of still-births; and, for our own account, we must add, the registration of nurses receiving children for hire; and the regulation of adoption. There is another and deeper evil lying at the bottom of the impulse to neglect and the indifference to infanticide; this is, the injustice of the bastardy laws, the difficulties of affiliation, and the facilities with which the arbitrary and small payment required by law is evaded and defied.

MEDICO-LEGAL ARBITRATIONS.

WE had occasion to discuss the machinery for regulating the compensation for railway injuries on the passing of the Railways Regulation Bill. Every one is agreed that the present mode of legal arbitration as to the nature of the injuries and their extent, and the medical and surgical grounds for assessment of injuries, is very unsatisfactory. Some of the most eminent medical men decline to go into court with such cases; some, on the contrary, delight in the sort of partisan conflict which often takes the place of a calm impartial review of the facts. The Railway Regulations Act proposed, by its eighteenth clause, to provide a means of assessment of damages, by enabling the judge in arbitration to order an examination by a suitable medical authority on behalf of the court, and has recognised the principle of an assessor, for

which we have often contended. Baron Martin, in his recent evidence before the Committee of the House of Commons now considering the subject of compensation for railway injuries, expressed his preference for such a mode of adjusting differences as to extent and importance of injuries. He did not state, however, why neither he nor any of the judges have called into use the clause which purports to give that desirable power. We can very well imagine the reasons. It was pointed out at the time by Dr. Wade of Birmingham, in our columns, that this clause, excellent in principle, would be in practice unworkable. But it is important to elicit from the judges a direct statement of the difficulties of using the absurdly inoperative powers of a clause so good in principle and so excellent in its object. Will one of our medical members call the attention of the Home Secretary in the House of Commons to this subject, and ask whether provision has been used by any of the judges, and, if not, what have been the obstacles, seeing that it is approved in principle by the leading members of the judicial bench?

TENURE OF HOSPITAL APPOINTMENTS.

SOME dissatisfaction has recently been expressed in Lyons in consequence of Dr. Pomiès, one of the hospital surgeons of that city, being called on to resign in consequence of the expiration of his ten years of office, while still in the full enjoyment of ability to perform his professional duties. Dr. Pomiès has, with the sanction of the Hospital Medico-Chirurgical Society, published a memoir on the subject, and has proposed a scheme which has been adopted by the administration of the civil hospitals in Lyons. By it, the tenure of office is increased from ten to fifteen years; and the staff of one of the hospitals—la Charité—which has hitherto consisted of one medical officer appointed by the administration, has been doubled, and placed under the same regulations as in the other hospitals—the Hôtel-Dieu and the Croix Rousse.

HOW TO PRODUCE HEAT-APOPLEXY.

IN Reynolds's *System of Medicine*, the general prophylaxis of heat-apoplexy is thus summed up by Professor Maclean, the most recent and eminent authority on the subject: "Men will bear a high temperature in the open air with comparative impunity, provided (a) it be not too long continued; (b) that the dress be reasonably adapted to the temperature; (c) that the free movement of the chest be not interfered with." Now, in the case of Malone, of the 9th Regiment, who died of heat-apoplexy on the march, and in the case of all the men who suffered so much distress and injury from the circumstances of those marches, these causes of death were all brought into hostile action. First, they were subjected to high temperature unnecessarily long continued, inasmuch as the march was deliberately arranged to occupy precisely the hottest hours of the day, whereas, by commencing it three or four hours earlier—say four o'clock instead of nine in the morning—this exposure to heat might have been avoided. Secondly, the dress was not reasonably adapted to the temperature; for the men are described as having been in heavy marching order—carrying, therefore, between fifty and sixty pounds weight, and heavily clad. The dress was most unnecessarily adapted to heighten all the evil effects of prolonged exertion under the direct rays of a broiling sun, and to produce heat-apoplexy. Thirdly, the free movement of the chest was ingeniously hampered by a contrivance which has a well established and well deserved celebrity for its special aptitude and efficiency for that purpose. Malone carried his pack. This was, we understand, a pack of the old pattern. Now, that pack has been condemned, after having been allowed a long period of cruel activity in breaking down the circulation and general powers—literally breaking the soldier's heart. The peculiarly oppressive effects of this pack in strangling the respiration, pressing on the vessels and nerves in the armpits, and impeding the movements of the wall of the chest, have been made known by the Pack Committee, and were fully described by Professor Maclean in the celebrated lecture which we reported in 1868, and the publication of which quickened reform in proportion to the intensity of official indignation which it caused. Here

there is an artificial accumulation by authority of all the means known, announced, and predicted to cause heat-apoplexy. Of the men exposed to these causes, one died; one was reported dead, but has recovered; and a considerable number suffered intensely. They fell out in distress. Many of those who arrived were in a state of absolute exhaustion; and, although of course the effects passed off superficially in a few days, it is not possible to say how much real damage was done. Here, then, was an elaborate and successful effort to put in force all the agencies for producing heat-apoplexy, and for favouring the production of heart-disease. The experiment only partially succeeded, because it was not carried out with perseverance. Excuses so careful, so superficially plausible, and so well received, as those which have been supplied to the Minister of War for the satisfaction of the House of Commons, afford every encouragement to commanding officers to continue the same ingenious course. But, happily, the voice of the public has made itself heard through the press, and has divined the truth with unerring instinct. Its condemnation is just, and is not to be deprecated.

BRITISH MEDICAL BENEVOLENT FUND.

AT the last monthly meeting the sum of £115 was distributed in grants to ten applicants, while six other cases were postponed for further inquiry, and three passed over as not being suitable cases for assistance. The death of one of the inmates of Providence Place, Chippenham, was reported, so that there is now a vacancy, the candidates for which must be M.R.C.S. of England or the widow of such. Among the subscriptions received since our last notice are the following:—Thos. Knight, Esq. (Brompton), £10 10s.; H. S. (London), £10; Sir H. Holland, Bart. (add.), £10; Geo. Critchett, Esq., £5 5s.; Chas. Rothwell, Esq. (Bolton), £6.

"DEATH FROM NATURAL CAUSES."

WE cannot but regret the aversion to allow *post mortem* examinations which is so commonly displayed by our coroners. In the following case, for instance, we can see no sufficient reason why such an examination should not have been allowed; indeed, we think it was due to the unqualified practitioner who had been in attendance, no less than to the public, that the verdict of the jury should be founded on evidence the sufficiency of which would be open to no question. A lady, unmarried, and described as out of health and liable to palpitation of the heart, went to Weymouth for change of air, from Yeovil. She was attended at Weymouth for two or three days by an unqualified practitioner named Colmer, also living at Yeovil. She died about four days after going to Weymouth. Mr. Colmer gave her various medicines, the chief effect of which was to make her continuously sick: she was also purged, and her tongue was preternaturally clean; her temperature on the one occasion when it was taken was 99 deg. Fahr. Dr. Lush of Weymouth, who was called in shortly before her death, was unable to give any satisfactory reason for the fatal issue. The medicines, stated by Mr. Colmer to contain very innocent ingredients, were made up by a druggist in Weymouth. This druggist did not give evidence at the inquest.

THE SERPENTINE IMPROVEMENTS.

AN influential deputation of noblemen and gentlemen, including several medical men and officers of health, waited upon Mr. Ayrton at the office of Woods and Forests, on the subject of the works now being carried out at the Serpentine. It was urged that what was now being done would not render that piece of water either safe or healthy: the mud would, it was feared, still be left; and the depth was excessive, being of various and considerable depths, as much as fourteen feet at the lower and eight feet at the upper end, and therefore unsafe for bathers and skaters. In fact, the various speakers said more than enough to show that the operation now being carried out would effect no real improvement. Mr. Ayrton, however, said he would not alter the course commenced by his predecessor. The specification was, he said, to make the bottom and depth satisfactory, and also of a proper

slope. This was, he considered, sufficient. He thought the slope very suitable; and if it were unsafe for bathers, let them, he said, go elsewhere. Such were the conclusions of the Chief Commissioner; and we regret that we cannot agree to any one of them. To render the Serpentine healthy, a hard and proper bottom is necessary, which will not become transformed into mud; and to render it in any degree safe, the depth must be considerably reduced. It is to be hoped that some further steps may be taken to insure that these improvements be yet effected, notwithstanding the opposition of the First Commissioner.

LUNATICS IN THE CITY.

SOME of the morning papers have printed the following story.

"An elderly woman yesterday came to the Mansion House with the following laconic note, addressed 'To the Right Hon. the Lord Mayor.'—'Send at once two regiments of men in armour to seize a warrant for £18,000,000: 19: 11½ at the Bank of England, York, and Bristol.' She was told to wait in the next room. One of the officers, however, showed her into the street, instead of taking her into the room. About an hour and a half afterwards she returned, and said she had been waiting for the soldiers, and was disappointed that they had not come. She was then directed to go to the Constable of the Tower, and went away apparently quite satisfied."

The joke of seeing a lunatic waiting in the street for an hour and a half, and then directing her to go to the Constable at the Tower, is one which every one must appreciate. To send an innocent on a fool's errand is an easy piece of humour. But we are not quite sure that in a magistrate's court this explosion of fun is quite in place; or that to set a witless woman wandering is the right fulfilment of the duties of public officers. If vagabonds found wandering are arrested, lunatics should be restored to the charge of their friends. It is not quite so safe to leave them wandering at large, as it has lately been the fashion to represent; and if the Constable of the Tower proved no more thoughtful than the constables at the Mansion House, this woman might easily come to harm, or do harm, which they had the opportunity, and as we think, the duty to prevent.

THE NATURAL HISTORY OF DISEASE.

THE tenets of the "Peculiar People" are well known. They hold that no man who is in a state of grace ever meets with an accident or breaks a leg. They refuse to use any of the human means by which we are permitted to relieve pain, or aid in the removal of disease, or the hastening of cure. They rely solely on prayer and inunction. Such opinions are too preposterous to be refuted here: on the other hand, they are too serious to be laughed at. The statement that they decline medical aid in child-birth, and refuse to set a broken leg, indicates the extraordinary perversity of their reading of Scripture. It has been estimated that the danger to a woman from neglect of proper attendance at child-birth is such as to multiply the mortality in child-bed by fifty-fold. It is a case for theological rather than for medical argumentation, however; for the ground of their action is not that they doubt that broken legs knit straighter and more firmly when they are set, or that the dangers of child-birth are diminished by medical attendance, but that persons in a state of grace are authorised to dispense with such earthly aid, that they may anticipate Divine interference from prayer and inunction. There are eighty "Peculiar People" in Woolwich, and a little timely missionary work there might lead to the saving of life. It is a matter of ordinary experience that calling public attention to these peculiarities of belief rather leads to their extension than favours their extinction. In the case which has attracted much attention this week, a man aged 48 years expired under circumstances which gave rise to a charge of manslaughter, it being alleged that he would not have died if medicine had been administered to him. Dr. Ryley gave evidence that the deceased had died from consumption, but he believed that, had he been medically attended his life might have been prolonged, or even saved. One of the elders expounded the doctrines of the sect, and stated that he had prayed with him and anointed him with olive oil. This was to carry out the precepts in the last epistle of James. They were not surprised at his death, for his was a sickness unto death.

The Coroner said the deceased was old enough to call a doctor for himself; and the jury returned a verdict of "Death from consumption", censuring the want of common humanity displayed by the "Peculiar People" in not calling in medical aid.

THE POPLAR HOSPITAL.

A BAZAAR was held on Wednesday and Thursday, in aid of the funds of the Poplar Hospital, on board two large vessels lying at the entrance of the East India Docks. There was a large attendance. The band of the Grenadier Guards was present during both days.

ST. GEORGE'S HOSPITAL.

THE recent appeal to the public in aid of the funds of this Hospital has been very successful. The Governors are now in a position to open three or four wards of the new wing, which had previously been closed for want of funds. This will relieve in great measure several of the wards which are overcrowded, and, in addition, increase the total number of beds by about twenty-four.

THE UNIVERSITY OF VIENNA.

A SITE for a new building for the University of Vienna has been fixed on. It is in the Paradeplatz, where also are the Senate-house and the Town-hall. The new University will consist of a central building, to which buildings for the study of natural history (anatomy, zootomy, zoology, botany, mineralogy and petrography, geology and palæontology) will be attached.

POISONING BY CARBONIC OXIDE.

DR. JOHN PERCY, F.R.S., of the School of Mines, whose special scientific tastes have led him from the practice of medicine, of which profession he was early a distinguished working member, to the cultivation of metallurgical chemistry, publishes in the *Times* a warning against the poisonous effects of waste gas from the blast-furnace. The poisonous ingredient of this gas, he states, is carbonic oxide, and the inhalation of it in very small quantity, whether pure or mixed with common air, rapidly destroys life. The use of the waste gas from our blast-furnaces for heating steam-boilers, mine-kilns, etc., is extending daily, and he fears that death from its inhalation may become more frequent than hitherto, unless those who deal with it are fully instructed in its action on man. The medical officers of iron-works and mine-kilns are in a position to profitably impress this caution on the persons concerned. Several cases of the kind have been collected and published by Dr. Percy in his standard work on Metallurgy, which includes many important hygienic and medico-legal details.

ÆOLIAN LIARS.

THANKS to the indignant energy of an agitated merchant, there is some probability of the abatement of a crying nuisance, of a purely metropolitan character, peculiarly injurious to invalids, but not to them alone. The noisy ruffians who perambulate at intervals the quiet streets of the suburbs and make night hideous with their discordant yells of imaginary special editions of evening papers, have hitherto escaped with impunity. The most impudent of their class combine in small knots to fill the air with ingeniously discordant howls announcing a purely fictitious catastrophe, and charging a penny for a newspaper which contains no reference to it. To a merchant in the act of digestive rumination, the sudden intimation of an European catastrophe is probably eminently distasteful. Mr. Stiebel seems to have thought it worth while investing a shilling to satisfy himself of the source of the report that "the Emperor Napoleon was shot," and, finding that his noisy persecutor was propagating utterly fictitious news at the top of his voice, he very properly gave him into custody. The man is remanded, and will be committed for trial. A smart punishment will be well deserved, and will probably save us from future inflictions from these fellows, who have till now paraded the West-end at their own sweet will, shouting falsehoods with puffed cheeks as they listed, the very personification of what Charles Lamb described as Æolian liars.

THE RECENT MIDWIFERY ELECTION AT EDINBURGH.

WE are requested to state that a meeting will be held at five o'clock on Monday afternoon, the 11th instant, in the rooms of the Medical Society of London, 32A, George Street, Hanover Square, London, W., to consider the recent election to the Chair of Midwifery in the University of Edinburgh, and the general question of the mode of election to the Professorships in that University. All who take an interest in the welfare of the Edinburgh School of Medicine and the advancement of University education, are earnestly invited to attend. Gentlemen unable to attend are requested to send their views in writing, addressed "To the Chairman of the meeting." We understand that a large number of influential members of the profession in London have expressed their intention of being present. The matter is one which does not alone concern those connected with the University of Edinburgh, but the general interests of medical science in this country; more especially the branch on which Dr. Duncan has shed more than usual lustre.

SCOTLAND.

THE Edinburgh University Regatta passed off successfully on the 2nd instant.

ENGLISH PROFESSORS IN SCOTCH UNIVERSITIES.

MR. SYME's death will of course not cause any vacancy in the surgical appointments at the Edinburgh Infirmary. He had resigned a year ago, and his place has already been filled by a most able successor. It is not a little remarkable that Scotland, which for long not only furnished her own chairs, but supplied surgical talent very largely to her sister kingdom, is now in turn a borrower. Laycock, Hughes Bennett, Turner, and Lister, are all Englishmen, and they occupy the chairs of Alison, Allen Thomson, Goodsir, and Syme, all of them Scots. It is quite true, on the other hand, that the London profession counts several illustrious names from north of the Tweed, but scarcely perhaps in so large a proportion as it once did. "Auld Reekie" must look to her laurels.

THE CHAIR OF MIDWIFERY IN EDINBURGH.

WE can but hope that numerous and various good results will spring out of the recent election. If Scotch candidates should learn the lesson that the publication of big books of testimonials by men of well-established repute is as useless as it is indecorous, something will have been gained. We know a little of the evils of contested elections in London, but our friends of the northern metropolis beat us completely in this matter. A candidate in London who should collect letters from his friends in all parts of Europe and America, from men far younger than himself and his inferiors in status, and who should publish first and second series with appendices to them and with subsequent appendices, would, we believe, not be considered to add to his own dignity or to increase his chances of success. With us the real value of testimonials is beginning to be fairly estimated, and whenever anything like an attempt at their miscellaneous collection is made, it receives its proper reward in absolute neglect. Possibly this is what has just happened at Edinburgh; but, if so, it is rather hard that no warning was given, for those concerned did but act in conformity with local custom.

GLASGOW SANITARY INSPECTION SERVICE.

GLASGOW has just taken a most important and decided step towards wiping away the reproach which it has justly incurred of late years in consequence of the high death-rate from preventable diseases, as shown by the Registrar-General's returns. A system of inspection has now been organised which appears to be of unequalled completeness, and it, if properly worked, must affect the mortality of Glasgow in a very marked degree. A full account of the sanitary arrangements is given in the *Glasgow Daily Express*, from which we take the following particulars.

"The 'Sanitary Inspection Service' consists of a chief officer, five district inspectors, and thirty ordinary nuisance inspectors, each of whom has a section of one of the five districts into which the city has been divided under his charge. Their duty is to ascertain, by personal investigation, the sanitary condition of each lane, court, close, stair, ash-pit, etc., in the quarters to which they are appointed. Their inspection is to be conducted with a view especially to cleanliness, ventilation, sewage, paving, and the prompt removal of all filth or offensive matter, so as to prevent as much as possible the pollution of the air breathed by the inhabitants. It will also be the duty of the ordinary nuisance inspector to report to the chief inspector any structural defects, while pointing out to the owners, factors, or occupants such means as are readily available for the removal of sanitary abuses connected with their dwellings. When such suggestions are not attended to, he is to report all such cases of neglect to his district inspector, who will then take the matter up in a more or less compulsory form. In addition to this staff, special inspectors are appointed for epidemics, for lodging-houses, houses 'ticketed' for overcrowding, for bakehouses, for workshops, and unwholesome meat. These special inspectors, like the others, will conduct their mission by constant personal visitation, with the Acts of Parliament and instructions consistent therewith in their hands; and while using all kindly and persuasive influence to enforce the requirements of the law and the public good, will report to the district inspectors with a view to more stringent measures. The laws for the regulation of workshops and the suppression of unwholesome meat were never so likely of being enforced as they will be under the active rule now inaugurated. A staff of 'female visitors' has also been employed, whose duty it is to visit and instruct the poorer classes as to cleanliness of person, of children, of beds, and houses; and to give lessons, if need be, in sewing, bed-making, clothes-mending, and other domestic labours. In addition to this large and diversified inspecting and visiting service, there is a 'Cleansing Service,' consisting of a chief officer, yard men, fumigators, and washers. This bureau has a wash-house under its care, where, besides the fumigating and cleansing operations of its servants in wretched and filthy private houses, articles are sent to be washed, purified, and returned to their owners. Over all these operations, 'the Medical Service' watches and wards, and through its district officers has its eye, its word of skill, and its directing and guiding hand everywhere."

IRELAND.

MR. BRADY, M.P. for Leitrim, has been appointed a deputy lieutenant for that county.

SIR DOMINIC CORRIGAN.

It is announced on authority that Sir Dominic Corrigan will be the chosen candidate of the Liberal party for the representation of the City of Dublin. It is stated to be probable that he will enjoy a walk over on this occasion.

UNIVERSITY OF DUBLIN.

THE honorary degree of LL.D. was on Wednesday conferred on General Lord Strathnairn, Lord Monk, the Chief Baron (Baron Fitzgerald), and Justices Christian and Fitzgerald; and that of M.D. on Dr. Rawdon McNamara and Inspector General Dane.

THE MEDICAL BILL.

THE refusal of the Government to allow representation of the profession in the Council, and its other defects, have rendered the Medical Bill very unpopular; but no organised efforts to procure its rejection have been attempted. It is hoped that the lateness of the session may, however, induce its promoters to postpone it until next year.

COLLEGE OF SURGEONS.—THE MEDICAL BILL.

A LARGE meeting of the Fellows was held on June 25th, when the following, amongst other resolutions, was unanimously passed:—

"That inasmuch as that this College, since its foundation up to the present moment, has faithfully and efficiently discharged the duties imposed upon it by its Charters, of providing thoroughly well educated medical officers for the Military and Civil Services, it is, in the opinion of the College, most unjust now, in violation of its Charters, to pass any Act of Parliament which would interfere with its privileges; and more especially so, as the proposed Medical Act (1858) Amendment Bill

contemplates exceptional legislation in favour of other bodies, solely on the grounds, as this College is given to understand, that their prerogatives, out of respect to the Charters which these bodies possess, and in virtue of which they were incorporated, should not be interfered with." A petition to both Houses of Parliament was then adopted, which embodied the above resolution, and prayed that the amendment of the Duke of Richmond should be thrown out. A desire that the Bill may not become law this session is now very generally entertained.

THE QUEEN'S UNIVERSITY.

THE examinations for M.D. and M.Ch. have concluded; sixteen candidates for the former and fourteen for the latter were successful. The clinical examination in medicine was conducted by Dr. Cuming, at the South Workhouse, and that in surgery at the College of Surgeons by Dr. Mapother, the patients being brought from the admission rooms of two of the hospitals.

THE DOCTORS' INCOME TAX.

THE Chairman at Clare Sessions, last week, decided that a medical man could not claim reduction of income tax for the keeping of horses and groom, if they were used even once for any purpose not strictly professional.

VISITATION OF THE COLLEGE OF PHYSICIANS.

ON Monday, the decision in the appeal of Dr. McSwiney to be declared a Fellow was given by the Lord Chancellor, the Chief Justice, Chief Justice of the Common Pleas, and the Chief Baron.

"The visitors thought that vote by ballot was not warranted by any clause of the charter; but on the contrary, was in violation of the letter as well as the spirit of some of its provisions. . . . The visitors should, therefore, declare the bye-law void and illegal on the second ground as well as on the first. The result was, that the bye-law being in all its parts illegal, the visitors could not pronounce Dr. McSwiney duly elected a Fellow of the College, as otherwise they would have done, he having had a majority of votes at the ballot; and accordingly there should be a new election. But, as the visitors conceived that the petition was legally justified by the circumstances of the case, and must issue in advantage to the College from the ascertainment of the true principle that should govern their proceedings, they would rule that Dr. McSwiney should be indemnified in his costs out of the funds of the College; and that the costs incurred on the other side should also be paid out of the College funds."

As only three of the present Fellows have been elected without ballot, and as five are required to form the College, it is very generally thought that a new charter must be sought for the reconstruction of the body.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

NATURAL SCIENCE.—The Examiners in the Natural Science School—Professor H. J. S. Smith; E. Chapman, Esq.; and J. F. Payne, Esq.—have issued the following class list.

Class I: Walter W. Fisher, Merton; Edwin H. Lendon, University; Charles S. Taylor, Merton.

Class II: John F. Hartley, Brasenose.

Class III: John N. Burrow, Queen's.

MAGDALEN COLLEGE.—There will be an election in this College in October next to one Demyship and one Exhibition for proficiency in Natural Science. Both Demyship and Exhibition average about £83 *per annum*. They are tenable for five years. The examination will be in the principles of Chemistry, Physiology, and Physics; but a clear and exact knowledge of the principles of any one of the abovenamed branches of science will be preferred to a more general and less accurate acquaintance with more than one. No person will be eligible who shall have attained the age of twenty years, and who is not sufficiently instructed in other subjects to matriculate as a member of the College. Testimonials of good conduct will be required; and a certificate of birth and baptism, which must be presented to the President on Monday, the 3rd of October, between the hours of three and six, or eight and nine, P.M. The examination will commence on the following day. No entrance fee or caution money are required by the College. The University fees, payable on matriculation, amount to £2:10.

EDITORSHIP OF THE BRITISH MEDICAL JOURNAL.

THE office of Editor of the BRITISH MEDICAL JOURNAL is about to become vacant. Gentlemen desirous of being appointed to the same, are requested to forward their applications to the President of the Council, W. D. HUSBAND, Esq., York, on or before the 30th day of July, 1870.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
ANNUAL MEETING.

THE Thirty-eighth Annual Meeting of the British Medical Association will be held in Newcastle-upon-Tyne, on Tuesday, Wednesday, Thursday, and Friday, the 9th, 10th, 11th, and 12th of August next.

President—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

President-elect—EDWARD CHARLTON, M.D., Senior Physician to the Newcastle-upon-Tyne Infirmary.

An *Address in Medicine* will be delivered by FRANCIS SIBSON, M.D., F.R.S., F.R.C.P., Physician to St. Mary's Hospital.

An *Address in Surgery* will be delivered by G. Y. HEATH, M.B., M.R.C.S., Surgeon to the Newcastle-upon-Tyne Infirmary.

The business of the meeting will be conducted under six Sections:

Section A. MEDICINE.—*President*: Dr. Embleton. *Vice-Presidents*: Dr. Simpson and Dr. Lyons. *Secretaries*: Dr. H. Barnes, Carlisle, and Dr. Morell Mackenzie, 13, Weymouth Street, London.

Section B. SURGERY.—*President*: Professor Lister. *Vice-Presidents*: Charles Trotter, Esq., and Timothy Holmes, Esq. *Secretaries*: Dr. Arnison, Newcastle-upon-Tyne, and W. H. Favell, Esq., Sheffield.

Section C. PHYSIOLOGY.—*President*: Dr. A. Clark. *Vice-Presidents*: Dr. Sanderson and Dr. Hayden. *Secretaries*: T. C. Nesham, M.D., Newcastle-upon-Tyne, and J. G. McKendrick, M.D., 29, Castle Terrace, Edinburgh.

Section D. MIDWIFERY.—*President*: Dr. Robert Barnes. *Vice-Presidents*: Dr. Gibson and Dr. G. Hewitt. *Secretaries*: Luke Armstrong, Esq., Newcastle-upon-Tyne, and J. H. Aveling, M.D., Rochester.

Section E. PUBLIC MEDICINE.—*President*: Dr. Rumsey. *Vice-Presidents*: Dr. Druitt and Dr. Morgan. *Secretaries*: Anthony Bell, Esq., Newcastle-upon-Tyne, and Dr. A. Ransome, Bowden, Cheshire.

Section F. PSYCHOLOGY.—*President*: Professor Laycock, M.D. *Vice-Presidents*: Dr. Sankey and Dr. Maudsley. *Secretaries*: Grainger Stewart, M.D., Borough Asylum, Newcastle-upon-Tyne, and T. Harrington Tuke, M.D., 37, Albemarle Street, London.

Notices of Motion.—The following notices have been given.

The Rev. Dr. BELL: That a Committee be appointed for the purpose of inquiring into the present constitution and operation of the Committee of Council; and whether it might not be better to have only one well constituted Council, consisting of a limited number—say fifty—to be elected by the general body of members through the medium of voting-papers: and that the Committee report to an ordinary general meeting, or to a special general meeting convened according to law.

Dr. STYRAP: That, considering the nature of the duties of the office of General Secretary, the great assistance rendered by the Honorary Local Secretaries, and the financial position of the Association, the increase of his original salary of £100 to £250 in 1866; £313 in 1867; £370 in 1868; and £364:9 in 1869, has been excessive.

That, in the opinion of this meeting, a stipend of £250 (inclusive) would be ample.

Dr. ELLIOT: That a volume of *Transactions* be annually published by this Association, to contain such essays or communications as are either too lengthy for admission into the JOURNAL, or may be deemed worthy of a more permanent record than a hebdomadal serial can secure.

Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary, at their earliest convenience.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, June 6th, 1870.

WEST SOMERSET BRANCH.

THE annual meeting of the above Branch will be held at the York Hotel, Weston-super-Mare, on Tuesday, July 12th, at 12.30 P.M.; H. J. ALFORD, M.B., Taunton, President; J. CORNWALL, Esq., Ashcott, President-elect.

The members of this Branch and of the Central Somerset Medical Society are kindly invited to lunch at the West of England Sanatorium or Convalescent Home, by the medical staff of that institution, at 2 P.M.

It is proposed during the course of the afternoon to visit the Weston-super-Mare Hospital and Fever Wards, and other objects of interest.

At 4 P.M., a general meeting for papers or cases and discussion will take place at the York Hotel.

The dinner will be at the York Hotel at 6.30 P.M. A special late down train will kindly be arranged by the Bristol and Exeter Railway Company on the night of the meeting.

Gentlemen intending to be present, or wishing to read papers, are requested to communicate as early as possible with the Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, June 21st, 1870.

BATH AND BRISTOL BRANCH.

THE annual meeting of the above Branch will be held on Thursday, July 14th, 1870, at the Mineral Water Hospital, Bath, at 4.30 P.M., when C. H. COLLINS, Esq., will resign the Chair to C. BLEECK, Esq., President-elect, who will deliver an address.

Members having any communications for the meeting, are requested to give notice of them to the Secretaries.

The following resolutions will be moved:

Mr. BARTRUM and Dr. SPENDER—"That it is desirable that the number of ordinary meetings be reduced to four."

Mr. TIBBITS and Dr. BRITTAN—"That any gentleman who has been black-balled by this Branch of this Association, shall not be admitted to the meetings."

The dinner will be held at the York House, Bath, at 6.30 P.M. Tickets, including ice and dessert, 7s. 6d. each. Wines at moderate charges.

The Bath Secretary particularly requests that those members who intend to be present at the dinner, will send him their names before Monday, July 11th, in order that the necessary arrangements may be completed.

R. S. FOWLER, Bath, } *Honorary Secretaries*.
CHARLES STEELE, Clifton }

METROPOLITAN COUNTIES BRANCH.

THE eighteenth annual meeting of this Branch will be held at the Castle Hotel, Richmond, on Friday, July 22nd, at 3 P.M. *President* for 1869-70, GEORGE JOHNSON, M.D.; *President-elect* for 1870-71, T. HECKSTALL SMITH, Esq.

Dinner at the Hotel at 5.30 P.M. Tickets (exclusive of wine) 10s. 6d. each.

A. P. STEWART, M.D. } *Honorary Secretaries*.
ALEXANDER HENRY, M.D. }

75, Grosvenor Street, June 22nd, 1870.

READING BRANCH.

THE annual meeting of the Reading Branch, and of the Reading Medico-Chirurgical and Pathological Societies, will be held in the Council Chamber, Reading, on Wednesday, July 30th.

The business of the Medico-Chirurgical Society will commence at 3.45 P.M.

The President of the Pathological Society will take the chair at 4 P.M. Dr. Shettle will read the annual address.

After the address, Mr. Young (the President of the Reading Branch) will take the chair.

Dinner at the George Hotel at 6 o'clock. Tickets, 15s each (comprehending the entire charge).

WM. B. YOUNG, } *Honorary Secretaries*.
GEORGE MAY, jun., }

Reading, July 4th, 1869.

SOUTH MIDLAND BRANCH: ANNUAL MEETING.

THE fourteenth annual meeting of this Branch was held at the Infirmary, Aylesbury, on Thursday, June 30th. There were present, CHARLES HOOPER, Esq., President, in the Chair, and eighteen other

members and visitors. The late President, Dr. Newman, not being present, the President-elect at once took the Chair.

The minutes of the last meeting were read and confirmed.

Officers and Council.—The following were elected. *President-elect:* William Clark, M.D., Wellingborough. *Committee of Management:* F. Buszard, M.D.; C. J. Evans, Esq.; D. J. T. Francis, M.D.; J. H. Hemming, Esq.; W. Moxon, Esq.; C. E. Prior, M.D.; T. J. Walker, M.D.; R. W. Watkins, Esq. *Representatives in the General Council:* R. Ceely, Esq.; D. J. T. Francis, M.D.; A. D. Mackay, M.B.; H. Terry, jun., Esq.; R. W. Watkins, Esq. *Honorary Secretaries:* J. M. Bryan, M.D.; and G. P. Goldsmith, Esq. (Mr. Goldsmith subsequently resigned office). *Treasurer:* J. M. Bryan, M.D.

New Members.—Dr. Herbert Grove Lee of Thame, Mr. Woodford Eagles of Aylesbury, and Mr. Thomas Warren of Prince's Risborough, were elected.

Resignation of Mr. Goldsmith.—A letter was read from Mr. Goldsmith, resigning the office of Honorary Secretary. It was resolved, on the motion of Mr. HENRY TERRY, jun., seconded by Mr. CEELY, that the office be not filled up, but that Dr. Bryan be requested to take on himself the whole of the duties.

Papers, etc.—The following communications were read:—1. An Abdominal Tumour of long standing (from 1822 to the present time, the patient having died aged 83.) It was found, on *post mortem* examination, to be a hydatid tumour attached to the liver. By R. Ceely, Esq.—2. A preparation of Disease of the Heart in a Cow, showing firm membranous bands of adhesive matter between the heart and pericardium. By R. Ceely, Esq.—3. Cases of Pneumonia treated with Tincture of Arnica. By C. E. Prior, M.D. (Read, in the author's absence, by the President.)—4. Case of Placenta Prævia. By J. M. Bryan, M.D.—5. Some patients were here introduced by Messrs. Ceely and Hooper; viz.: *a.* A Case of Popliteal Aneurism cured by Pressure; *b.* Excision of the Elbow-joint; *c.* A Case of Immense Hypertrophy of the Cranial and other Bones after Injury.—6. Notes on Cases of Typhoid Fever. By R. H. Coombs, Esq.—7. A specimen was shown of Comminuted Compound Fracture of the Thigh-bone, passing completely through the condyles into the knee-joint. Sent by J. Carruthers, Esq., of the Northampton Infirmary.—8. A short discussion on Chloral Hydrate was instituted by Mr. Ceely.

Next Meeting.—It was decided to hold the next autumnal meeting at Stony Stratford, in September or October.

Dinner.—The members (fifteen in number) dined at the George Hotel, at 4 P.M.

EAST ANGLIAN AND CAMBRIDGE AND HUNTINGDON BRANCHES: ANNUAL MEETING.

THE annual meeting of these Branches was held in Ipswich, on Friday, June 25th, under the presidency of Dr. CHEVALLIER.

The members of the Association were most hospitably entertained at luncheon at 1.30, in the large board-room of the new East Suffolk Hospital, by the members of the medical and surgical staff. The Senior Physician, Dr. Durrant, occupied the chair, and was supported by the Chaplain to the hospital (Rev. J. B. Meadows), the President (Dr. Chevallier), and by upwards of forty members of the Association, in addition to a considerable number of medical visitors. After luncheon the company were invited to inspect the recent improvements and additions to the hospital. This building, which has but recently been reopened, has been entirely reconstructed. It is pleasantly situated upon the high grounds, at the back of the town of Ipswich, and commands a very extensive view of the valley of the Gipping and of the river Orwell. It is now capable of accommodating about one hundred in-patients, and has also an extensive out-patient department. There are a great number of small wards for the isolation of eye and other special cases, as well as wards excellently arranged for the entire separation of any cases of contagious diseases that may arise. There are also four large wards, two on each side, male and female, each containing sixteen beds. The windows on each side are of admirable dimensions, and are replete with every modern appliance. The two stoves are back to back in the centre of the ward—an arrangement which is said to be most successful in diffusing heat, and by their position adding to the comfort of the patients, enabling everyone in the ward to see the fire while in bed. In the provisions for warmth and ventilation, and in the excellent bath and water-closet accommodation in each ward they are comparable with those of any existing hospital. Hot water is circulated all over the building, and every water-closet is fitted with Jennings's patent. There is a good operating theatre, and the board-room is a room of remarkably fine dimensions.

From the hospital the members of the Association repaired to the

Town Hall, and at three o'clock the business of the general meeting commenced. The ex-President, Dr. FISHER, of Cambridge, in a few appropriate remarks introduced his successor, Dr. CHEVALLIER, who gave an address.

New Members.—The following gentlemen were proposed and elected members of the Association:—C. F. Long, Esq. (Ipswich Borough Asylum), E. C. Ling, Esq. (Saxmundham), G. Elliston, Esq. (House-Surgeon, East Suffolk Hospital), T. Pierson and J. W. Harper, Esq. (Stowmarket), F. Growse, jun., Esq. (Bildeston), A. S. Vanderbergh, Esq. (Ipswich).

Next Annual Meeting.—Dr. DURRANT proposed, Mr. SAMPSON seconded, and it was resolved that the annual meeting in 1871 of the of the Amalgamated Branches be held at Norwich, and that Dr. Eade be President-elect.

Papers, etc.—The following papers were read.—1. Dr. Eade (Norwich), The Therapeutical Action of the Hydrate of Chloral.—2. Mr. Beck (Cambridge), Hydrate of Chloral.—3. Dr. T. H. Bartlett (Ipswich), Exhibition of Case in which a portion of the Breech of a Gun was removed from the Infraorbital region; and subsequent Rhinoplasty.—4. Mr. W. Adams (Ipswich), Exhibition of a Case of Rhinoplasty after Lupus.—5. Mr. G. L. Elliston (Ipswich), Alcoholic Poisoning.—6. Dr. Durrant (Ipswich), Vertigo.—7. Dr. Elliston (Ipswich), Exhibition of a Stump after Amputation near the Knee-joint: with remarks upon the operation, and the new growth of the tibia which necessitated it.—8. Mr. W. Adams (Ipswich), on a Case of Inversion of Uterus.—An energetic discussion upon the various papers was sustained by Dr. Durrant, Mr. Smith, Mr. S. Freeman, and other members.

Pathological Specimens of two Uterine Fibrous Polypi, one weighing four and a-half ounces; of a large Polypus removed from the External Ear; and a preparation showing the Excavation in the head of the Tibia (from a New Growth and Abscess) were shewn by Dr. Elliston; and a Fibro-plastic Tumour removed from the Face, by Mr. Sampson.

Dinner.—At 6.30 the members and their medical friends dined together in the council chamber of the new Town Hall. The President (Dr. Chevallier) was supported by the Mayor of Ipswich (E. Grimwade, Esq.), the Archdeacon of Suffolk (the very Rev. R. Groome), Mr. John Birkett (London), Professor Fisher (Cambridge), Dr. Eade (President-elect), and many others.

Coffee was provided at the Henslow Museum, in order to give the members and visitors an opportunity of viewing the splendid collection of fossils abounding in the neighbourhood, which has been recently much enriched by presentations from various private collectors.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Monday, 4th July, 1870.

1. *Last Week's Mortality from Small-pox.*—2. *Hospital Accommodation for Small-pox Patients.*—3. *Vaccination Conferences.*—4. *The French Daily Press on Women-Doctors.*

LAST WEEK'S MORTALITY FROM SMALL-POX.—During the week which ended on Friday 1st July, the deaths from small-pox in Paris are reported in the *Bulletin Hebdomadaire de décès* to have been 210, which is 28 less than during the preceding week. With only three exceptions, however, this is the highest weekly mortality from the epidemic. In the week ending 27th May, the small-pox mortality was 218; in the week ending 18th June, it was 238; and in the week ending 24th June, it was again 238. The general mortality in Paris from all diseases, including small-pox, during the week ending 1st July, was 1220. The relative bearing of these figures will be seen by referring to my previous letters.

HOSPITAL ACCOMMODATION FOR SMALL-POX PATIENTS.—To *Figaro* belongs the merit of obtaining reliable and official information as to how this matter stands. In his impression of 30th June, he noticed approvingly the step taken by a young physician (Dr. Monribot) in establishing a small private hospital for small-pox cases in the rue de Montreuil, which is situated in the eleventh arrondissement, a district at present the head-quarters of small-pox and misery. M. Husson, the "directeur de l'Assistance Publique", interpreting the paragraph to which I refer as an impeachment of himself and his department, sent a reclamatory letter to *Figaro*, which appeared on Saturday, 2nd July. From the official information which it gives as to the existing hospital accommodation in Paris for small-pox patients, I translate it for the readers of the BRITISH MEDICAL JOURNAL. It is to the following effect.

"The number of *Figaro* for 30th June contains an article in which merited praise is bestowed upon a physician who has placed some beds in an empty house for the reception of small-pox patients. The writer of the article appears to attribute this proceeding to there being an insufficient number of hospital-beds destined for small-pox patients. There does not now exist, and there never has existed, any such insufficiency. To-day—28th June—the hospitals contain 778 persons affected with small-pox. Now, as 958 beds are specially set apart in the hospitals for small-pox cases, it is evident that 180 are unoccupied. The 'administration de l'Assistance Publique' is, moreover, in a position to increase the number of beds available for small-pox patients, should (contrary to all expectation) this become necessary.

"Since the end of January, small-pox patients have been separated in the hospitals from the other cases: the number of beds which could be allotted to small-pox has, therefore, been necessarily limited by the space which the construction of the respective buildings rendered available for this separation of classes. The result of this may have been that in some particular hospitals beds may have been deficient; but patients have always found beds in other hospitals. At the Hôpital Saint-Antoine, the adoption of the new plan of separation allowed only forty-eight beds to be given up to small-pox patients: from this establishment, therefore, it has sometimes been necessary to send patients to other hospitals—the nearest. I repeat, however, that never has a single small-pox patient failed to find an hospital-bed and a physician."

This, observes *Figaro*, is all very well, and may even be conclusive proof that the Assistance Publique is doing its best in its own stupid way; but it is no justification of its trying to damp much-needed private benevolence. The day before yesterday, says *Figaro*, ten small-pox cases were refused admission at the Hôpital Saint-Antoine, and carried about in search of hospital-beds. Is this not, he asks, a full justification of private benevolence daring to supplement the "Assistance Publique"? With *Figaro* I say that it is; and adopt his views as thus embodied in his remarks on the letter just quoted.

"Mais nous n'avons pas envie de contrôler les actes de l'administration. Nous nous bornerons à lui dire qu'elle aurait tort de voir dans l'initiative privée une atteinte à sa majesté, qu'il ne suffit pas de constater qu'il reste une centaine de lits dans les hôpitaux réunis, mais qu'il faut créer des secours dans le quartier même où sévit l'épidémie."

The "Assistance Publique" is, all admit, not what it ought to be. It is, however, thoroughly French; it treats all those for whom it acts as imbeciles and babies; it is paternal and supreme; it repudiates help whether given by word or deed; and, worse than all, it is entangled in the meshes of an antiquated stubborn routine. The cry for its "decentralisation" has gone forth; and no doubt it will soon be greatly changed. The fear is that it may be rudely got rid of some fine day, without anything better being provided in its place. The desideratum here is local sanitary self-government, vigilantly supervised by a central State authority. At present, public opinion and private charity are disastrously displaced by an arbitrary king whom *Figaro* calls "Sa Majesté, l'Assistance Publique".

Can anything be more astounding and appalling than to read (in the above quoted letter) that it was not till the end of January last—in spite of years of earnest remonstrance by various hospital-physicians—that small-pox cases were excluded by the "Assistance Publique" authorities from the general wards? Not more, but equally astounding and appalling, however, is the futile, the merely nominal manner in which small-pox cases are now being isolated in the hospitals. It is a ridiculous farce. It is sheer idiotic imbecility! The hospitals are at this moment the great distributors of the small-pox pestilence in Paris. From the free manner in which nurses and students pass from contact with the small-pox patients to the beds of other patients—from the loose arrangements connected with the linen—but particularly from the free manner in which persons from the town come to visit their relations affected with small-pox in the hospitals, far more is done by, or permitted by, the "Assistance Publique" to distribute the disease all over Paris than enough to counterbalance the impotent vaccination plans of the same power. Such opinions are uttered wherever physicians congregate: they therefore naturally reach the ear and meet the eye of the public. Hence, it is not remarkable that a forcible dethronement of his Majesty—"Assistance Publique"—is openly talked of as a coming, or at least as a desired, event.

VACCINATION CONFERENCES.—Another conference was held on Wednesday evening in the Gymnase Paz, rue des Martyrs. Some most interesting communications were brought before the meeting, which lasted with unabated interest from half-past eight to half-past eleven o'clock. There is to be one concluding meeting, the date of which is to be in due time announced in the medical journals. At this final meeting, a committee is expected to report upon the statistics of the recent vac-

cinations at the different *mairies* of Paris. It is said that these statistics are almost, if not altogether, valueless. No system was adapted for verifying the results of the wholesale so-called vaccinations which were practised—vaccinations which in a vast number of cases were (from a combination of causes) quite delusive and worthless. By a reasonable exercise of power, enforcing well-directed systems of isolation and vaccination, the Parisian small-pox epidemic might have been stamped out in a month. This proposition was well maintained and illustrated by several speakers at the vaccination conference of Wednesday last.

THE FRENCH DAILY PRESS ON WOMEN-DOCTORS.—*A propos* of recent letters in the *Times* by a "Curious Woman", and the announcement of Miss Garrett having been recently admitted by examination to the medical doctorate of Paris—no mean honour—the Paris newspapers have, in discordant chorus, resumed the discussion of the social question called in England the "rights of woman", in America the "emancipation of woman", and in France "l'affranchissement de la femme". One day last week, both *Figaro* and *Le Gaulois* had long and cleverly written articles on the subject of women-doctors; that in *Figaro* was in racy serio-comic vein, from the pen of Francis Maynard; and that in *Le Gaulois* (more serious in tone) was by Francisquê Sarcey, in his usual illogical, flowing, sparkling manner. Without pretending that their views have much intrinsic importance, it may prove both useful and interesting briefly to chronicle the doctrines and language which such universally read writers are at present promulgating in France regarding the modern—the distressing—apparition of *Æsculapius* in petticoats.

Figaro—speaking by the pen of Maynard—has no doubt that some women will make pretty good physicians, deputies, senators, advocates and judges (particularly in divorce cases); but he nevertheless dislikes the era of masculine women which is now being inaugurated. He plaintively concludes his article by predicting that some years hence we old-fashioned men, looking back to better days, when women—loving, loved, adorable, and adored—cheered the world and lightened its sorrows, the times which preceded female universal suffrage, female doctors, deputies, and judges, will in affectionate remembrance erect a memorial tablet to woman with this simple, touching inscription: "C'EST LA FEMME."

That is *Figaro's* sentimental view of the dawning era of men-women. He likewise, however, gives us the prosaic, matter-of-fact side of the picture. The trammels of politeness will be broken; deference to the hitherto gentler sex will cease. We men shall in future be entitled to the wing of the chicken, and take the front chairs in the box at the play. "Désormais, mesdames, il faudra vivre à la force du poignet!" Henceforth, ladies, you must work hard for your living. "Ce jour-là où vous serez devenues nos égales, rien que nos égales, tous, hommes ou femmes, citoyens d'un pays libre, nous courrons à la fortune sans pitié pour les nerfs délicats et les muscles fragiles. Tant pis pour qui tombe!"

"Vous laisser passer, madame?...Me prenez-vous pour quelque sot? Vous êtes peut-être un confrère—c'est-à-dire un rival."

M. Sarcey looks at the question from a different point of view. He sees in near prophetic vision a fantastic form of female modesty so entirely in the ascendant, that by degrees, he thinks, midwifery at least will have to be handed over to women absolutely and from necessity. The starting point of M. Sarcey's thesis is a definition of modesty. It is, he says, only the feeling of shame caused by nudity and its accessories—"la pudeur n'est que le sentiment de honte qu'inspirent la nudité et tous les accessoires qui s'y rapportent." He maintains that no pudicity can be excited by, and therefore no shock can be given to, a woman's delicacy by her dissecting as a medical student the naked body of a dead man. It is not in the fact of nudity, but in its accessories, that indecency is involved. He says "the physician who uncovers a female patient to examine her disease that he may cure it, sees a patient and not a naked woman". The picture of nudity vanishes, or rather melts into another picture which takes its place permanently. Models, before they place themselves in attitude in the artist's studio, retire behind a screen to undress. The operation of undressing would excite the idea of nudity both in them and in the painter; and therefore during it, the instinct of pudicity asserts itself. Once stripped, the model advances unabashed: the idea of the beautiful envelopes, and covers the idea of nakedness. Pudicity, says M. Sarcey, varies in different peoples and at different periods. The public gymnastic exercises of ancient Greece and Rome were (as the very word tells us) performed by naked persons. Then, again, M. Sarcey has been told on the best authority that Englishmen—"ce peuple pudibond par excellence"—bathe absolutely naked, while the women stand admiringly on the banks, not in the least degree blushing or embarrassed; because to them, under the circumstances, nudity is only an essential accessory of swimming, which they are admiring as an exercise of energy and grace! This is all very fine, M. Sarcey; but it is necessary to tell you

that the females to whom you allude are—at Brighton, Portobello, and other places, where the gross scenes referred to have taken place—looked on as degraded women, and not as modest admirers of manly grace.

The advance of modern prudery, which will of necessity eliminate men from midwife-practice, is thus depicted:—"The ancients, who set a very high value on fertility, the mother of citizens, were not ashamed publicly to represent the process of parturition in all its details. On the stage were heard the cries of women in the pangs of labour when they were appealing for succour to Lucina. In the seventeenth century, pregnancy and its consequences were an ordinary subject of conversation; and in this there was found no evil. Nowadays, in a drawing-room, in the presence of young ladies, no one would venture to speak of a woman being pregnant; and a silencing glance would be directed upon any one who asked, 'when the lady was to be confined'. The very words which represent these conditions will soon be obliterated from our language if matters go on as at present. The conception of maternity is growing feeble; and in the *femme enceinte* is no longer seen *la mère*, but only *la femme*. This is leading to a phase of pudicity which will demand the abrogation of the male and inaugurate the absolute reign of the female obstetric practitioner. If modern modesty proceed to still further extremes—if it go on as at present 'se raffinant', it will become quite essential 'peu à peu que les médecins-accoucheurs soient remplacés dans leur office par des femmes-médecins.'" He very correctly adds that midwives in Paris are, as a class, neither sufficiently educated nor sufficiently moral to supplant the male accoucheurs. But does it follow, M. Sarcey, that a phalanx of women-doctors are wanted? If so, let [us, without delay, open the subscription lists to *Figaro's* memorial tablet, and inscribe thereon and elsewhere, "CI-GIT LA FEMME."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 24TH, 1870.

H. A. PITMAN, M.D., Vice-President, in the Chair.

ON SUPRACONDYLOID AMPUTATION OF THE THIGH. BY WILLIAM STOKES, JUN., M.D., DUBLIN.

THE author commenced by referring to the importance of the operating surgeon determining whether the amputation at the knee-joint or of the thigh is the least hazardous to the patient, and also which of these operations affords the best stump for the subsequent adaptation of an artificial limb. After alluding to the opinions of Hoin, Velpeau, Syme, Malgaigne, and others, as to amputation at the knee being less hazardous to the patient than amputation of the thigh, he described a method of amputating at the knee, which was based on Gritti's modification of Carden's amputation at the knee. After discussing the objections which have been urged against amputations at the knee by surgical mechanists, and the way of obviating them, the author proceeded to point out the differences between the procedure which he proposed to term the "Supracondyloid amputation of the thigh" and the Italian modification of Carden's amputation. These differences are:—1. The femoral section is made, in all cases, fully half an inch above the antero-superior edge of the condyloid articular cartilage; 2. In all cases the cartilaginous surface of the patella must be removed; 3. The flap should be oval, not rectangular; 4. There should be a posterior flap fully one-third of the length of the anterior flap.

Having given the particulars of the cases in which he had performed this operation, and discussed its details, the author proceeded to indicate what he believed to be the advantages of the supracondyloid amputation over the amputations through the knee—viz., those of Velpeau, Blenkins, Lane, and Markoe; the amputations through the condyles; and, lastly, the higher amputations of the thigh, in which the medullary canal is necessarily involved. These advantages, many of which are in common with the other amputations through and near the knee, were enumerated as follows. 1. The stump being more useful for progression. 2. Possibility of making pressure on the face of the stump. 3. The patient not being obliged to walk as if he had ankylosis of the hip-joint. 4. The operation being less hazardous than amputation of the thigh, from being further removed from the trunk. 5. The shock less than after the higher amputation of the thigh. 6. The muscular interspaces unopened. 7. Less chance of protracted suppuration, from the anterior flap consisting, for the most part, of skin and fascia. 8. Less chance of purulent absorption, from the posterior surface of the anterior flap being covered with synovial membrane. 9. Probable advantages derived from having the cut surface of the femur covered by

the patella. 10. Advantages derived from preserving the attachments of the extensors of the thigh. 11. Impossibility of a conical stump resulting. 12. No liability to the formation of tubular sequestra. 13. Less chance of phlebitis, from the vessels being all divided at right angles to their continuity—not obliquely, as in all other flap amputations, which necessitates the wounds in the vessels being so much greater in extent.

Mr. HOLMES thought that the opportunities of performing the operation described by Mr. Stokes must be very rare. He had met with one case where Gritti's operation was performed; the stump was excellent, but convalescence was very protracted. When the operation is performed on account of disease of the knee-joint, there is a great liability to protracted suppuration in the small portion of synovial membrane which is left. An important difference between amputation through the knee-joint and that through the condyles was the removal of the patella in the latter; and its preservation in Mr. Stokes's operation and in some others was a great advantage. Gritti's operation was applicable in most cases of diseased knee, when the patella was not diseased throughout. He thought that Mr. Stokes had a little underestimated the liability to suppuration when the knee was diseased.—Dr. BAKEWELL had had, in the West Indies, a very favourable case for amputation at the knee-joint. He, however, made the flap too short, and was obliged to cut through the bone above the condyles. He did not remove the articular surface of the patella. An excellent recovery took place, under dressing with Condy's fluid. The stump was good, and the patella became quite fixed. The case was one of anæsthetic leprosy; and the disease advanced no further after the operation.—Mr. LAWSON TAIT thought there was great difficulty in the after-treatment of cases where the patella was left to become attached to the end of the bone, and that cases where this could be done were very rare. Another difficulty arose from the liability to suppuration in the synovial pouches, which might lead to pyæmia from absorption. He thought that this formed a grave objection to the plan proposed by Mr. Stokes. He would have liked more information as to the after-treatment. He had lately found Mr. Lister injecting a solution of carbolic acid (one part in forty), and applying carbolic acid and lac plaster. The carbolic acid treatment, though it prevented suppuration to a great extent, was troublesome to carry out.—Mr. HOLMES said that it was a mistake to call Mr. Lister's method the "carbolic acid" treatment. Carbolic acid was used only because it was convenient and efficacious: any agent which would destroy germs would be effectual. He (Mr. Holmes) had seen the method as carried out by Mr. Lister, and had no doubt of its great success, though he would offer no explanation as to the source of that success. Mr. Lister's treatment required much labour; and no doubt much of the want of success in London was due to want of sufficient care in the application of the plan.

FURTHER OBSERVATIONS ON STERTOR, ITS PATHOLOGY AND TREATMENT. BY R. L. BOWLES, M.D.

(Communicated by CÆSAR HAWKINS, F.R.S.)

The definitions of the three forms of stertor (palatine, pharyngeal, and mucous stertor) treated of in vol. xlviii of the *Medico-Chirurgical Transactions*, were referred to, as well as a "laryngeal stertor" in chloroform poisoning, spoken of by Professor Lister. A case related illustrated the cessation of stertor on placing the patient on her side, a gradual improvement subsequent to this, the return of stertor and impending death when she was placed on the opposite side, the instant relief on resuming her original position, and a return to consciousness coincident with the cessation of stertor. The causes of these conditions were discussed, and cases were given illustrating the necessity of always placing the paralysed side *downwards*, and of never changing it to the opposite side; for the lung of the paralysed side becomes loaded with a mucous fluid, which gravitates to the opposite lung whenever the patient is placed with the opposite (*i.e.*, sound) side downwards, and in its passage across the trachea the mucus becomes churned up into foam by the ingoing air, causing mucous stertor, great dyspnoea, and, if not removed, death. It was shown by experiment that these conditions may be induced and removed at will in apoplectic cases, and the practical applications of these principles are pointed out. Cases were related demonstrating the successful application of these principles in respect of the removal of stertor, as well as some cases of recovery from apoplexy after the stertor has been removed. Their application, also, to bronchitis, convulsions, epilepsy, hæmoptysis, drowning, chloroform poisoning, and all allied conditions, was pointed out.

Dr. HERMANN WEBER had in three cases convinced himself of the correctness of Dr. Bowles's observations.—Dr. BROADBENT agreed as to the importance of Dr. Bowles's suggestions, and referred to the value of turning the patient on the side in cases of danger from chloroform. He could not quite agree with the author of the paper that

there was in hemiplegia a special tendency to congestion and effusion in the lung of the opposite side.—Dr. LEARED thought that the condition producing stertor was deeply seated. Artificial respiration might be useful in some cases of deep coma attended with stertor.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 1ST, 1870.

GRAILY HEWITT, M.D., President, in the Chair.

The late Sir James Simpson.—The PRESIDENT said that a resolution of sympathy with the family of the late Sir James Simpson would be proposed.

Dr. TYLER SMITH said: The Council has devolved upon me the honour and duty of proposing a resolution of sympathy with the family of our late honorary Fellow, Sir James Simpson, and expressing our sense of his pre-eminent merits. His loss has of late been eloquently deplored in all quarters as an illustrious citizen, and a physician of world-wide reputation. But it falls to us more particularly to lament his death, as that of the man who has stood for many years the unchallenged head of the obstetric department of medicine, not only in this country, but throughout the civilised globe. We may be proud that it was in the line of thought belonging to obstetrics that his mind was formed and reached its noblest development. It is true that his exuberant intellect overflowed into medicine and surgery, as well as into general science; still it is as an obstetrician that he will be ultimately best known, and receive his greatest meed of fame. It was but in accordance with the fitness of things that the honoured physician-accoucheur, accustomed in his daily life through many years to witness the pangs of women in travail, should have had the largest share in the discoveries which to a great extent conquered human suffering, and gave him a motto, "*Dolore victo*", proud as any which the world can boast. Chloroform and the electric telegraph will ever stand forth as the highest triumphs of this age. We may well, therefore, be permitted to dwell affectionately and reverently on the life and memory of the man who has recently passed from amongst us in the zenith of his career. It is we who have, as it were, his ashes in our own especial keeping. It is in obstetric work, and obstetric literature, that his name and fame will be interwoven and transmitted to future ages. We may proudly add him to the roll containing such names as Mauriceau, Chamberlen, William Hunter, and Naegelé, among which his will shine not the least illustrious. I might easily dwell longer on this eulogium; but, in moving the resolution I will only add that we do him mere justice, ourselves all the honour, by recording in our annals regret for his loss and admiration for his genius. Dr. Smith proposed:—

"That the Fellows of the Obstetrical Society of London desire to express their deep sympathy with the family of Sir James Simpson on the loss they have sustained, and to record their sense of the benefits he has conferred on medicine and mankind, especially in the department to which this society is devoted."

Mr. SPENCER WELLS seconded the resolution. His acquaintance with Sir James Simpson dated from 1855, when, with great liberality, he invited Mr. Wells to operate in his Royal Infirmary of Edinburgh on a case of vesico-vaginal fistula. He (Mr. Wells) arrived in Edinburgh on New Year's Day, 1855. The night was spent with Simpson, Dr. Priestley, and others, in visiting the prison, whiskey shops, and low haunts of that city; the next day among Simpson's private and hospital work. At night, Simpson entered into a learned discussion at the Royal Society on some of the Buddhist opinions and monuments of Asia compared with the symbols of the ancient sculptured "standing stones" of Scotland. After this meeting, Simpson drove him (Mr. Wells) to a country house, the scene of the ball in *Waverley*, where patients were visited in the middle of the night; the house and grounds seen by moonlight, and Edinburgh only reached in the early morning. That day, Mr. Wells did his operations in the Edinburgh Infirmary, and returned to London in the evening, Simpson having been in bed only two hours all this time—no uncommon example, it was said, of his marvellous activity and power of work. And now he is gone, few will think that the Lord Provost of Edinburgh went too far when he called the discovery of chloroform "a great gift to mankind." Simpson never claimed to be the discoverer of anæsthesia; but he did claim, and claimed justly, the first application of sulphuric ether as an anæsthetic in midwifery, and the discovery of the power of chloroform, which discovery extended rapidly and greatly the practice of anæsthesia. Fellows of the Obstetrical Society accustomed to watch suffering women during the most trying period of their existence, are well able to appreciate the value of the discovery and the energy and ability with which he ascertained the effects of chloroform in all stages of parturition. And his convincing answers to the so-called religious objection, as well as the tact and wit with which he overcame those who thought the new

practice unnatural. "How did you come from Belfast", said he to a lady. "By steamer to Glasgow." "That was unnatural, madam; why did you not swim?" By Simpson's hard work, anæsthesia in midwifery became an established practice. He had well earned his motto—"Dolore victo". In his own last answer to Bigelow, this is the substance of his claim; and his last words should live in our memory. "I am a sad invalid just now, and quite unable to write with the force and brevity required. With many of our profession in America I have the honour of being personally acquainted, and regard their friendship so very highly, that I shall not regret the attempt, my last, perhaps, at professional writing, as altogether useless on my part, if it tend to fix my memory duly in their love and esteem."—The motion was then carried unanimously.

Dr. JUNKER exhibited two Instruments in Vulcanite. One of them was for intrauterine injections, and was modelled on an instrument of Mr. Durham's for injecting the urethra; the other was for applying caustic powders to the cervix uteri.—Dr. PLAYFAIR said that Dr. Junker's instrument for applying powders to the cervix, reminded him of one which he had seen used by the late Sir James Simpson. The syringe was open to the same objection as all means of applying intrauterine injections, viz., that they are apt to bring on very severe symptoms from retention of fluid in the cavity of the uterus, and subsequent attempts at expulsion. He (Dr. Playfair) was strongly in favour of intrauterine treatment in suitable cases, and believed that old-standing cases of uterine leucorrhœa could not be cured without it; but he thought much the best way of applying it was by means of flexible probes, round which a thin film of cotton wool has been wrapped, saturated in the alterative application.—Dr. G. C. P. MURRAY preferred Dr. Junker's apparatus to the method advocated by Dr. Playfair.—Mr. SPENCER WELLS said that Dr. Junker's method of clearing the uterine cavity, or the canal of the cervix, from albuminous fluid, added greatly to the efficacy of any applications made to the mucous membrane. For using solid nitrate of silver, the best plan was to pass some of the powdered salt on an aluminium probe, dipped in oil to make the powder adhere.

Dr. POTTER showed a specimen of an Ovarian Tumour removed after death from a patient 83 years of age. It was apparently a specimen of a dermoid cyst.

Dr. HORNIBLOW, of Leamington, read a report of a case of Complicated Labour. This was supposed at first to have been a case of placenta prævia, attended by hæmorrhage. After delivery, the soft presenting body which had been taken for the placenta, was found to be the liver of the child, which was quite exposed, and of unusual size.

Dr. WYNN WILLIAMS read a paper on Cancer of the Womb successfully treated by Bromine. The author gave full details of seven cases in which the method of treatment advocated by him had been employed, and in which the results had been extremely favourable. He concluded by saying that he considered cancer of the neck of the womb, when discovered sufficiently early, to be amenable to treatment. Superficial growths, such as epithelioma, should be treated by the application of a strong solution of bromine (bromine, twelve minims; rectified spirits, one drachm), by means of cotton wool and a caoutchouc cup. Should any stump remain, this should always be injected. The more solid growths should be injected. The best means for injecting is with a trocar and cannula, with accurately fitting syringe, such as the one handed round. The syringe made with platinum was also shown. These were manufactured by Mr. Pratt, of Oxford Street. In all cases, a weak solution of bromine (bromine $\text{m} \times \text{ij}$, rectified spirit $\text{ʒ} \text{ij}$, water $\text{ʒ} \text{xvi}$) should be used as a vaginal injection during the treatment. The effects of a strong solution of bromine on a kid glove was also shown, which was reduced to a complete jelly.—Dr. PLAYFAIR thought it seemed very questionable whether the diagnosis of cancer could be relied on. As far as his (Dr. Playfair's) experience went, it was very rare to be able to say positively that a case was malignant before fixation of the uterus had occurred.—Dr. PALFREY agreed with the doubts as to the accuracy of diagnosis, expressed by the last speaker. Dr. Williams spoke of hardness, peculiar colour, pain, discharge, etc., but he also stated that in each instance the uterus was freely moveable. Now, he considered fixedness of the uterus to be one of the most reliable signs of malignant deposit; and he would be very sorry indeed to express a positive opinion that any young woman was the subject of so grave a disease on the evidence which the author had adduced. He, Dr. Palfrey, also doubted if bromine exerted any peculiar action on the diseased mass.—Dr. CLEVELAND called attention to cases of supposed cancer of the uterus published by the late Dr. Ashwell, of Guy's Hospital, in which the topical application of iodine, by tincture and strong inunction, was thought by him to have proved curative in many instances. It was now generally considered that Dr. Ashwell's were cases of chronic congestion, hypertrophy, and induration.—Dr. G. C. P. MURRAY said that one of the cases of epithelioma

reported by Dr. Williams had been under his care, and up to this time there had been no symptoms of the recurrence of the disease. —Dr. ROGERS had, at the suggestion of Dr. Williams, used bromine in six or seven cases of uterine cancer, in all of which, however, the disease was somewhat advanced. He had found the sanious and foetid discharges diminished, and the pain and hæmorrhages considerably lessened. He had injected the bromine into a cancerous breast, with temporary benefit, but the patient had since died.—Dr. WILLIAMS having replied, the meeting adjourned.

OBITUARY.

SIR JAMES CLARK, BART., M.D., K.C.B., F.R.S.

IN Sir James Clark we have lost one of the Nestors of the profession. He had lived to commence a ninth decade; and, until within a very short period of his death, he had retained perfect vigour of mind and a very fair state of bodily health. He had published within the last year a memoir of his friend Conolly, introducing into it much of his own in reference to the history of reforms in the management of the insane. Only ten years ago, when in his seventy-second year, he had edited a posthumous edition of Dr. Combe's well known work on the *Management of Infancy*, with an introduction from his own pen. In these his last two literary efforts, we have a good clue to Sir James's character, and a fair specimen of the kind of labour which he preferred to undertake. Nor must the lesson be lost upon us, of the zealous devotion of the veteran, who now, in his eighth decade, still refused to accept the rest the right to which had been so well earned.

Sir James Clark was in one sense not a clinical physician. He never held, nor, we believe, ever sought, any appointment in our large public hospitals; and he never took upon himself in any way the office of a teacher in our schools. Most of the books which he wrote were intended almost as much for the guidance of the public as that of the profession; and the large influence which he wielded was of a directly personal character, and but little of that kind which many of our leaders exercise through those who have been their pupils. He early obtained the fullest possible confidence of his Sovereign; and through forty years he not only retained it, but ripened the connexion into one which might, we believe, be described as an affectionate intimacy. He was consulted by the Queen not only in matters relating to the health of herself and family, but on all questions in which the general interests of his profession were concerned. A man of great knowledge of the world, of cool and sober judgment, he almost always gave sound advice. Seldom or never was he accused of partisanship, or of the undue development of personal preferences. Practically, he was, we believe, the godfather of our medical baronets; and, with but little exception, the voice of the profession has ratified all the expressions of the Royal will which he prompted as to the distribution of titles to members of our profession. Almost all the appointments to posts of medical honour in connexion with the Court, made under his influence, were most judicious ones. In particular illustration, may be mentioned that of his own successor—one which, owing to the lamented death of Dr. Baly, he was twice under the necessity of supplying. On each occasion, his selection was admirable.

Sir James Clark, like the two other medical leaders whose biographies we have recently been called upon to write, was a Scotchman. He was born at Cullen; and, having received an excellent education, both general and professional, he spent some years in the Navy. He then returned to Edinburgh, took his M.D. degree, and, at the age of thirty-one, settled down to practise in Rome. He had previously travelled extensively on the Continent; and, wherever he had found himself, he had been at work in medical observation. During his residence at Rome, he published, as the result of his travels, his renowned *Notes on Climate and Disease*, which included data as to the state of medicine and of medical education in various countries. His first appointment in connexion with the special sphere which he subsequently occupied was that of Physician to Prince Leopold of Saxe-Cobourg; and, when the Prince came to England, Dr. Clark accompanied him. This led to his introduction to our own Royal Family; and, immediately on the Queen's accession, he received the appointment of First Physician in Ordinary to Her Majesty. In the following year (*anno ætatis* 50), he was created a Baronet. For many years he was our first authority in all that related to the treatment of consumption and the forms of dyspepsia which are associated with it. On this subject he wrote several papers in Dr. Tweedie's excellent *Cyclo-*

pædia of Practical Medicine; and numerous editions of his own book were called for.

We have attempted to arrange in chronological order, in the appended list, some of the chief works, etc., of the subject of our memoir; and therefore need not here repeat them.

CHRONICLE OF THE LIFE AND CHIEF WORKS OF SIR JAMES CLARK, BART., F.R.S., K.C.B.

DATE. AGE. *First and Second Decades.*

1788. Born at Cullen, in Banffshire. Educated while a boy at the Grammar School at Fordyce, and afterwards at King's College, Aberdeen, and at the University of Edinburgh.

Third Decade.

Took the Membership of the College of Surgeons of Edinburgh and of the College of Surgeons of London. Served as an Assistant-Surgeon in the Navy for several years, after which he returned to Edinburgh.

1817...29. Took the degree of M.D. of Edinburgh.

Fourth Decade.

During the early part of this decade, Dr. Clark travelled extensively on the Continent, visiting most of the Medical Schools of France, Germany, and Italy. Finally (1819), he settled in Rome, where for several years he practised as a physician. While at Rome, he published his work entitled

1820...32. "Medical Notes on Climate, Diseases, Hospitals, and Medical Schools, in France, Italy, and Switzerland; comprising an Inquiry into the Effects of a Residence in the South of Europe in Cases of Pulmonary Consumption, and illustrating the Present State of Medicine in those Countries." (Pp. 249, London.)

1823...35. Published his "Lettera del dottore Giacomo Clark al Professore Giacomo Tommasini intorno alla Letteratura Medica Inglese." (Pp. 47.)

1826...38. Became a member of the London College of Physicians.

1827...39. Published "Observations on the System of Teaching Clinical Medicine in the University of Edinburgh, with Suggestions for its Improvement; humbly submitted to the Consideration of the Patrons and Professors of that Institution."

Fifth Decade.

1829...41. Was at this time in possession of the following foreign honours:—Corresponding Member of the Royal Medical Society of Marseilles, of the Medico-Chirurgical Society of Naples, of the Medical and Physical Society of Florence, of the Academy of Sciences of Sienna, etc. Brought out his book on "The Influence of Climate in the Prevention and Cure of Chronic Diseases, more particularly of the Chest and Digestive Organs; comprising an Account of the Principal Places resorted to by Invalids in England and the South of Europe; a Comparative Estimate of their respective Merits in particular Diseases; and General Directions for Invalids while Travelling and Residing Abroad. With an Appendix containing a Series of Tables on Climate." (Pp. 328, London.)

1830...42. A second edition of "The Influence of Climate," etc. (Pp. 400.)

1832...44. Made a Fellow of the Royal Society of London.

1835...47. Published "A Treatise on Pulmonary Consumption; comprehending an Inquiry into the Causes, Nature, Prevention, and Treatment of Tuberculous and Scrofulous Diseases in General." (Pp. 399.) The greater part of this treatise first appeared in the *Cyclopædia of Practical Medicine*, under the head of "Tubercular Phthisis". Dr. Clark was at this time Consulting Physician to their Majesties the King and Queen of the Belgians, and Physician in Ordinary to their Royal Highnesses the Duchess of Kent and the Princess Victoria.

1836...48. The above work was translated into French. Dr. Clark was in this year nominated as one of the Fellows of the University of London, in the first charter of that institution.

1837...49. On the accession of the Queen, Dr. Clark was appointed First Physician in Ordinary to Her Majesty.

1838...50. Created a Baronet.

Sixth Decade.

1839—51. Sir James Clark published a statement relating to his connexion with the affair of Lady Flora Hastings, in the question of pregnancy or disease. (This statement was published, together with similar documents from the other persons concerned in the matter, in the shape of a book entitled *Lady*

DATE. AGE.

Flora Hastings: Statements of.....relating to, etc. Referring to Sir James Clark's conduct, the *Medical Gazette* was of opinion that he had been "too much under the dominion of the scandal-mongers"; and the *Lancet* considered him "at best no better than a go-between".

- 1841...53. Brought out the third edition of his "Sanative Influence of Climate". Is this the same book as "The Influence of Climate in the Prevention and Cure," etc, 1829?
- 1842...54. Letter to the Right Honourable Sir James Graham, entitled "Remarks on Medical Reform" (pp. 30).
- 1843...55. A second Letter to Sir James Graham on Medical Reform March (pp. 42).
- 1846...58. Fourth edition of "The Sanative Influence of Climate" published (pp. 412).

Seventh Decade.

- 1848...60. Case of *Clark v. Turner*. This was an application by Sir Jan. 31. James Clark for an action to restrain one Turner from selling certain pills purporting to be made from a prescription by Sir James Clark. The application was refused, on the ground that the offence did not injure Sir James Clark's reputation.
- 1849...61. Elected Honorary Fellow of the King and Queen's College of Physicians in Ireland.
- 1852...64. Sir James Clark wrote a letter to the editor of the *Lancet*, July 24. denying that any members of the Royal Family had ever been treated homœopathically during his term of office.

Eighth Decade.

- 1858...70. Was appointed one of the first six members of the General Medical Council, nominated by the Crown.
- 1860...72. Sir James Clark revised and edited Dr. Combe's book on "The Management of Infancy, Physiological and Moral: intended chiefly for the Use of Parents." Introduction by the Editor (Pp. xxi).
- August. Sir James Clark resigned his seat in the General Medical Council.

Ninth Decade.

- 1869...81. Published "A Memoir of John Conolly, M.D., D.C.L., comprising a Sketch of the Treatment of the Insane in Europe and America" (pp. 298, of which 71 pages form the appendix on "Treatment of the Insane", etc.)
- 1870...82. Died at Bagshot Park, June 30th.

His connexion with the painful affair of Lady Flora Hastings caused him much annoyance and some loss of repute, but did not in the slightest degree touch his character as an honourable man. This poor lady, a Maid of Honour to the Queen, had been observed by her companions to show symptoms which they took for pregnancy. That their suspicions were wholly baseless, was subsequently proved by her death from a malignant tumour. Sir James Clark's share in the transaction consisted in his having very injudiciously accepted the general impression, and, neglecting the cautious scrutiny due to his medical character, consented to communicate to Lady Flora the nature of the rumours, and to urge upon her that she should confess to that of which she was wholly guiltless. His intentions were good; but he should have been the last to meddle in such a matter in such a way.

During the disastrous beginning of the Crimean campaign, when our army suffered so severely from weather and from disease, which was to a large extent attributable to neglect of due arrangements, Sir James Clark took a leading share in the efforts made to repair the disaster. He was the soul of a sort of semi-official committee which undertook the *impromptu* supply of nurses, medical men, sick-comforts, and the like. His judgment and his business habits here stood him in good stead; and for some months, during the stress of the national trouble, he worked with the utmost assiduity. His waiting-rooms during this time were thronged in the early morning by nurses and others, of whose fitness for the service he was to judge.

As may be inferred from the position which he took, Sir James was in manner a polished gentleman; yet he never lost his simplicity, and never incurred the charge of ostentation. An intimate friend of his thus writes of his personal character.

"The characteristic qualities of Sir James Clark were honesty, sagacity, and strong feelings of attachment to friends and country. Although living for many years in the atmosphere of Courts, the trusted and confidential friend as well as the professional adviser of the Queen and the Prince-Consort, he was utterly unspoilt by his surroundings. The simplicity of his nature underwent no change. Even the pleasing Doric of his voice remained unmodified. In appearance, in manner, and in speech, he was the *beau-ideal* of a Scottish gentleman. In all his

prosperity, his heart clung fondly to his native land; and many a Scotchman owes his success in life to the introduction which he carried with him to Sir James. In Brook Street, and more recently at Bagshot Park, the residence which Her Majesty placed at his disposal, he exercised an unostentatious but elegant hospitality. Among his guests were to be found the most notable men in medicine and science of Britain, America, and the Continent; and frequently along with them the rising student and the hard-working practitioner from the North. Many a Scotch medical man will now remember, with the tear in his eye, the kindly and homely reception which he met with both from Sir James and Lady Clark; for the wife was the counterpart of the husband in all the qualities that tend to the happiness of domestic life, and fully did she contribute her share to the comfort and joy of their common home."

The immediate cause of his death was the rupture of a blood-vessel in the stomach, from the effects of which he sank in a few days. He had been for a considerable time in failing health; and, having of late experienced some improvement, he was preparing for his usual summer visit to Scotland. He had lost his life's companion a few years ago; but he had the happiness of being nursed in his last illness by his son and his daughter-in-law with all the solicitude of tender affection.

Sir James Clark never took any large share in the conduct of our medical societies or corporate bodies. With the College of Physicians he had, indeed, a sort of standing quarrel. At one time, he had been chagrined at not obtaining the honour of election to the fellowship; and subsequently, when the College would have been glad to enrol his name, he declined to accept the proffered degree.

The profession owes much, far more than it knows, to Sir James Clark's life. He it was who led the way in the investigation of the lesser influences upon human life which are comprised in the word climate. At a time when drug-giving was far more fashionable than now, he showed us more rational methods of influencing disease. He took a zealous interest in the reform of medical schools—in the development of sanitary science and the improvement of the treatment of the insane. We probably owe it mainly to him that we have of late known little or nothing of intrigue and scheming in the matter of medical Court appointments, and that the highest honours of our Sovereign have been distributed with justice. These are no slight claims on our grateful remembrance.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, June 30th.

MEDICAL ACT (1858) AMENDMENT BILL.

THE House then went into committee on this Bill.

The Duke of RICHMOND expressed his opinion that there were some provisions in the Bill which were calculated to be most destructive to the interests of the Scotch universities. Having been called upon to fill the office of Chancellor of the University of Aberdeen, he might observe that he had always understood that the medical standard fixed upon at Aberdeen was as high as need be. He felt that he ought to have taken the sense of the House on the second reading of the Bill, but he would merely propose an amendment defining the subjects of examination.

Earl DE GREY expressed his readiness to adopt the suggestions of the noble duke.

In Clause XIII, Earl DE GREY proposed an amendment, making it the duty of the General Medical Council to grant two licences, in place of the three Examining Boards.—This was agreed to.

The Marquis of SALISBURY objected to Clause XVII, on the ground that it would enable the Medical Council to erase from the register the name of a person accused of infamous or disgraceful conduct, in a professional respect, after a secret inquiry. There was no provision for an open court, and he thought some power of appeal should be given.

Earl DE GREY said the Clause went very little farther than the existing law, the extension consisting in the insertion of the word "disgraceful." He wished to remind the noble marquis that a man whose name had been struck off the register was only prevented from using certain titles which might mislead the public, and not from practising his profession.

The Clause was agreed to.

On Clause XVIII, Lord CAIRNS expressed his approval of the general object of the Clause, which was to prohibit the granting of licences by bodies which had hitherto had the power of giving a degree of licentiate until the licence of the state had been obtained. But he wished to except "such universities as require graduation in arts" as a preliminary

qualification for obtaining a medical degree, and to allow to those educating bodies to confer such titles as they now had power to impose upon persons who had not passed the state examination. Otherwise students who were now at the universities would withdraw from them, and the character of medical education would be seriously lowered. He proposed an amendment.

After some observations from the Duke of RICHMOND, Earl POWIS, and the Marquis of SALISBURY,

Earl DE GREY agreed in the opinion that it was important to encourage the studying of the arts and of general knowledge by men intended for the medical profession. In order to promote as much as possible a liberal education, he had inserted in Clause x the words "general knowledge," and had provided in a subsequent Clause for the registration of titles in arts. But he thought the amendment of the noble and learned lord would draw an invidious distinction between Oxford and Dublin and the other universities, and would inflict hardship upon the London and Scotch universities. He therefore should be obliged to resist it.

The amendment was negatived, and some verbal amendments having been made in the Clause, it was added to the Bill.

The remaining Clauses were agreed to after certain amendments.

The Earl of LICHFIELD gave notice that upon the report he would move the insertion of a Clause giving direct representation to the medical profession upon the General Medical Council.

The Bill was then ordered to be reported.

Monday, July 4th.

MEDICAL ACT (1858) AMENDMENT BILL.

ON the report of amendments in this Bill,

The Earl of LICHFIELD said he felt that an apology was due from him for venturing at this late stage of the Bill to introduce an amendment of considerable importance; but he believed he should be justified in doing so, even at a very short notice, if it should appear that the object of the amendment was to carry out an almost unanimous feeling of the medical profession. In asking for such a representation on the Medical Council as his amendment would give them, the profession were actuated by a desire to promote the interests of the public. He had heard several objections made to the direct representation asked for by the profession. It was said that the medical body was represented indirectly, if not directly, on the Medical Council. Now, if it had no direct voice in the constitution of the colleges and universities, it could not have an indirect representation on the Medical Council. It was urged, also, that a direct representation of the profession on the Council would not be worth the trouble and expense which it would involve; but he believed that the registration of the whole profession, established by the Act of 1858, rendered the carrying out of the object of his amendment a very easy matter. Another objection was that if eight members were added to the Council the latter would be too large. This was a matter of detail, and the difficulty might be met by linking together some of the colleges. A petition emanating from four thousand members of the profession, a memorial presented to the President of the Council, and meetings held at Oxford, Leeds, Edinburgh, and Dublin, all went to show how strong was the opinion of the profession in favour of direct representation. Even at a meeting of the General Council held to consider the clauses of this Bill, a resolution was brought forward by one of the nominees of the Government strongly recommending a direct representation, though an indirect representation. A long discussion ensued, and a decided feeling was manifested by the Council in favour of a better representation of the medical profession. (*Hear, hear.*) The clause which he proposed to insert was to the effect that the General Medical Council after the passing of that Act should always contain four representatives elected by the registered members of the medical profession residing in England and Wales, two representatives elected by the registered members of the profession in Scotland, and also two elected by the profession in Ireland.

Earl DE GREY hoped that it was not the noble earl's intention now to press his amendment, but rather to solicit some discussion. The clause could not be admitted into the Bill, inasmuch as no machinery was provided for the election of the proposed representatives of the medical profession. The noble earl had spoken as if there could be no question that the General Medical Council should be representative of the medical profession; but whether a body ought to be representative or not depended very much on the functions it had to discharge. In his view the functions of the General Medical Council might be rather called executive than properly representative. He was aware that many members of the profession desired to impose on the Council duties which

would be more likely to be properly performed by a body largely containing a representative element; but he strongly doubted the advisability of that extension of its functions, and, speaking generally and with due reserve, he did not think it would be expedient to extend the functions of the Council in a greater degree than was proposed under the Bill. With regard to the number of members on the Council, he was inclined to think it was too large rather than not large enough, and that the proposed addition of eight members would be a serious hindrance to the proper transaction of its business, which was not that of a debating society, but should be confined as much as possible to duties of an executive description. He believed, however, that the Council was fully representative of the intelligence of the medical profession. It contained not only several most eminent members of the existing corporations, but also six members appointed by the Crown, who might be taken, not merely from the profession, but from the general body of the public, whose interests were concerned in the matter as well as those of the profession. The principal duty of the Council under the Bill would be to conduct the examinations by which persons were to be admitted to the medical profession. It had another duty to perform as regarded those already in the profession—viz., that of striking practitioners off the register for proved offences; but that was a function of a strictly judicial character, and it hardly formed a ground for giving to the body which exercised it more of a representative character. With these views, while he should be ready to give his very careful consideration to any complete scheme which the noble earl might propose on that subject, he owned it did not appear to him that this was the right moment when such a change should be made, nor did he think it a change from which the public or the profession in reality would derive advantage.

The Marquis of CLANRICARDE regretted that the noble earl the President of the Council had refused his assent to this clause. Notwithstanding the objections, he thought there ought to be an element representative of the medical profession in the Council, and the requisite machinery for accomplishing that object might be easily devised. In his opinion the change made with regard to the eighteenth clause was fatal to the Bill; and, unless the measure underwent material amendment, he should feel it his duty to move its rejection on the third reading.

Earl GREY thought the President of the Council was right in objecting to make the Council too numerous. But he regretted that in effecting what was, he believed, a valuable reform in respect to the medical profession, some means had not been devised by which, without rendering the Council too unwieldy, the medical profession at large, as distinguished from the medical corporations, should be enabled to make its voice heard in the deliberations of that body.

The Marquis of SALISBURY had no doubt that in a full meeting of their lordships' House the principle of an elective body, such as that proposed in the amendment, would find but little favour. The principle of having a number of persons elected to represent them by a profession widely dispersed, having no means of communication or of forming a public opinion except through the medium of newspapers, was something so new that he should regard it with great suspicion. He had not heard that any of the more eminent members of the medical profession were anxious for the proposed change.

Earl DE GREY said the noble marquis (the Marquis of Clanricarde) was mistaken in supposing that the number of entrances to the profession would be increased by the Bill in its present shape. The fact was under the Bill there would be only a triple door of entrance—namely, the examination of the conjoint Board in the three divisions of the country. All that the eighteenth clause permitted was that the existing universities might give their degrees to whom they liked, but such degrees would confer no right to be placed on the registry, and if the holders of them called themselves by these titles for the purpose of practising, they would be liable, under the twenty-first clause, to very heavy penalties. There would, therefore, be but this triple door instead of the nineteen distinct and separate entrances which now existed.

The Earl of LICHFIELD said his object had been gained when he heard his noble friend's statement that if the amendment had been brought forward at an earlier stage he would have taken the subject into consideration. He would not, therefore, press the amendment. As to the remark of the noble marquis opposite (the Marquis of Salisbury) that the leading members of the profession were not in favour of the clause, he begged to say that there was a strong feeling on the part of the leading members of the profession, even those who were nominees of the Government, and sitting in the General Council, that the Council could not exercise the influence which it ought to possess, owing to the fact of its not sufficiently representing the profession at large.

The amendment was then withdrawn, and the report was received.

HOUSE OF COMMONS. — Wednesday, July 7th.

VACCINATION ACT AMENDMENT BILL.

MR. CANDLISH, in resuming an adjourned debate on the second reading of this Bill, said that he would withdraw it if he received an assurance from the Home Secretary that a select committee should be appointed early next session to inquire into the whole subject of vaccination.

Sir M. BEACH had come down to the House prepared to argue against the Bill. It was, in his opinion, neither more nor less than a Bill which would sell indulgences to parents to break the law at the price of £3.

Mr. BRUCE did not understand that his hon. friend who had brought in the Bill objected to the system of compulsory vaccination. What he said was, that unfortunately there were a number, not only of poor and uneducated people, but of persons who ought to know better, who were opposed to vaccination. He thought that it would be wise to appoint a select committee to consider the point, and if possible to suggest a remedy. There were subjects connected with vaccination which were well worthy of the consideration of a committee, and vaccine matter was one of them. [*Hear, hear.*]

Dr. PLAYFAIR was quite startled that the Government should have agreed to appoint a select committee upon the subject. The appointment of the committee would cause the people of the country to think that some practical or scientific evidence was required as to the efficiency of vaccination. He thought that such a result would be disastrous, and by way of obviating if possible the formation of such an opinion, he would quote some figures to prove the good that had been done by vaccination. The number of deaths from small-pox had been vastly reduced since the compulsory law was introduced into England, and he had no doubt that were proper precautions taken the disease could be altogether destroyed. Many objections were urged against vaccination, but for the most part they were the objections that had been urged in the days of Jenner, and they had been refuted by the labours of scientific men. The advantages of vaccination had been incontestably attested, and that being the case he could not see any necessity for a committee of inquiry.

Mr. GILPIN maintained that the opposition to vaccination was much stronger and deeper than was generally believed, and that many of those who objected were men of enlightenment and knowledge, who based their objections upon conscientious grounds.

After some remarks from Dr. D. Dalrymple, Dr. Brady, Colonel Sykes, Mr. Mitford, and Mr. Hibbert, the order for the reading of the Bill was discharged.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.

A SPECIAL meeting of the Council of the Royal College of Surgeons of England was held on Monday, July 4th, for the election of an Examiner in the place of Mr. Hilton, whose term of office had expired, but who offered himself for re-election and for a representative to the Medical Council in the place of Mr. Cæsar Hawkins, who retired, and was not desirous of re-election.

The result of the ballot for an Examiner was as follows. Of the 18 members of Council present, 12 voted for Mr. Hilton, 3 for Mr. Hancock (the next Councillor on the list), 2 for Mr. Savory, and 1 for Mr. T. Holmes. The election consequently fell on Mr. Hilton.

The election of a representative to the General Medical Council was deferred until the next meeting of Council on the 14th instant.

THE COLLEGE OF SURGEONS DINNER.

THE annual dinner of Fellows of the Royal College of Surgeons took place at the Albion Tavern, Aldersgate Street, on Thursday last; John Hilton, Esq., F.R.S., in the Chair. Ninety metropolitan and provincial Fellows and visitors were present; among whom were Dr. Lush, M.P. for Salisbury; Dr. Armstrong, Director-General of the Medical Department of the Navy; Dr. F. Wetzig, formerly Staff-Surgeon in the Hanoverian Army; Dr. Dalrymple, M.P. for Bath; Mr. De la Gardie, Exeter; Mr. S. Wood, Shrewsbury; Mr. T. Turner and Mr. G. Southam, of Manchester; Mr. Bartlet, Ipswich; Mr. Swain, Devonport; Mr. Paget, Leicester; Mr. Wiblin, Southampton; Dr. Morris, Spalding; etc. After the usual loyal toasts, the toast of "The Army, Navy, and Volunteers," was responded to by Dr. Mackenzie for the Army, Dr. Armstrong for the Navy, and Mr. P. H. Bird for the Volunteers. "The Medical Council" was proposed by Dr. Lush, M.P.; "The Provincial Medical Schools," by Mr. Solly. Among other toasts, that of "The Chairman" was proposed by Mr. Paget.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received his certificate to practise, on Thursday, June 30th, 1870.

Willmore, Frederick William, Walsall

The following gentlemen also on the same day passed their first professional examination.

Fordham, John William, London Hospital
James, Cyrus, London Hospital
Richards, John Edward, University College
Stafford, Thomas, St. Bartholomew's Hospital
Tudge, James McDougal, Guy's Hospital
Wilson, Samuel, Newcastle-upon-Tyne

MEDICAL VACANCIES.

THE following vacancies are announced:—

ANDERSON'S UNIVERSITY, Glasgow—Professor of Scientific Chemistry: applications, 15th.
BASINGSTOKE UNION—Medical Officer and Public Vaccinator for District No. 5: applications, 14th; election, 15th.
BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Resident Medical Officer: applications, 21st; election, 25th.
BIRMINGHAM LUNATIC ASYLUM—Assistant Medical Officer: applications, 14th.
BRIGHTON AND HOVE DISPENSARY—Physician.
BRIGHTON AND HOVE PROVIDENT DISPENSARY—Consulting Medical Officer.
CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road—Assistant-Surgeon: applications, 14th.
CHARING CROSS HOSPITAL—Assistant-Surgeon: applications, 12th.
HOSPITAL FOR WOMEN, Soho Square—Surgeon: applications, 9th.
INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, Margaret Street, Cavendish Square—Visiting Physician: applications, 20th.
LEEDS PUBLIC DISPENSARY—Surgeon: applications, 16th.
LINCOLN GENERAL DISPENSARY—House-Surgeon.
LIVERPOOL ROYAL INFIRMARY—House-Surgeon: applications, 19th.
LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Demonstrator of Anatomy: applications, 9th.
MALE LOCK HOSPITAL—House-Surgeon: applications, 15th; vacancy, Aug. 1.
MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: August 25th.
NORTHAMPTON GENERAL INFIRMARY—Assistant House-Surgeon: applications, 9th; election, 19th.
OSWESTRY DISPENSARY—Secretary and Dispenser: applications, 11th.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Two Medical Officers: applications, 15th.
ST. PETER'S HOSPITAL FOR STONE, etc.—House-Surgeon.
STANLEY HOSPITAL, Liverpool—Physician; Surgeon: applications, 11th; election, 13th.
WORCESTER INFIRMARY—House-Surgeon's Assistant and Dispenser: applications, 14th.

MEDICAL APPOINTMENT.

Names marked with an asterisk are those of Members of the Association

*ADAMS, T. Rutherford, M.D., appointed Surgeon to the Convalescent Hospital at Croydon, in connection with the North Eastern Hospital for Sick Children, London.

BIRTH.

WATSON.—On June 27th, at Tottenham, the wife of *W. Tyndale Watson, M.D., of a son.

MARRIAGES.

*ELLIS, Joseph Rhodes, Esq., Surgeon, Mirfield, to Harriet Wooler, daughter of the late Charles WOOLER, Esq., of Mirfield, on June 30th.
GEORGE, the Rev. Hereford Brooke, eldest son of *R. F. George, Esq., of Bath, to Alice Bourdillon, youngest daughter of W. Cole COLE, Esq., Highfield, Exmouth, on June 30th.

DEATHS.

*INGRAM, W. G. L., Esq., Surgeon, of Midhurst, Sussex, on board the *Celt*, bound to the Cape of Good Hope, aged 47, on April 4th.
*LAMBDEN, Henry, Esq., Surgeon, at Rippingale, aged 46, on June 25th.

TESTIMONIAL.—A handsome silver claret-jug and salver were presented lately to Mr. Holman of Hurstpierpoint, by the Chairman of the Board of Guardians of the Cuckfield Union, on behalf of the members of the Board and those interested in the welfare of the poor. Mr. Holman has resigned the care of the poor of District No. 4 of the Cuckfield Union, whom he has attended for more than fifty years.

BEQUESTS, ETC.—Miss Emma Lea, of Dublin, bequeathed £100 each to the Adelaide Hospital, the Meath Hospital, and the Hospital for Incurables in that city.—The Marquis of Westminster has given £100 towards the reduction of the debt of £621 owing by the Chester General Infirmary.—John Penn, Esq., has given 200 guineas to the Royal Kent Dispensary, Greenwich.—The Norwich Society for the Relief of the Sick Poor has received a legacy of £200 under the will of Miss Brownson.—The Earl of Rosebery has given £50 to the Norfolk and Norwich Hospital, £25 to the Jenny Lind Infirmary for Sick Children of Norwich, and £25 to the Norwich Dispensary.—Mr. Chas. Meeking has given £50 to the Farringdon General Dispensary and Lying-in Charity.

CLINICAL LECTURE

ON

A CASE OF HYSTERIA; "TEMPER-DISEASE",
HYSTERICAL(?) CONGESTION OF THE
LUNGS, AND PERSISTENT VOMITING.By JOHN W. OGLE, M.D., F.R.C.P.,
Physician to St. George's Hospital.

GENTLEMEN,—Amongst the various puzzling and anomalous symptoms presented by those who are the unhappy subjects of that condition which we term the hysterical one—"the most profitable and safe of diseases in the catalogue of the ills that flesh is heir to"—none are more difficult to contend with, none more apt to give trouble in diagnosis,† than those which the insight of Dr. Marshall Hall included under the designation of "temper-disease". In this form of ailment, the mental disposition or temper becomes perverted; there is disturbed equilibrium of the naturally well balanced moral faculties. As that writer observes, "its object is frequently to excite and to maintain a state of active sympathy and attention, for which there is, as it were, a perpetual morbid and jealous thirst. It was," he observes, "rather aptly designated by the clever relative of one patient an ego-mania. One patient cannot articulate; another cannot walk; a third cannot eat, cannot swallow, or, if deglutition have been performed, does not retain the food on the stomach, but, without nausea, and apparently without effort, returns it, as it were, by an act of easy rumination." He relates instances in which spasmodic action of the muscles of different parts persisted for several hours, keeping attendants on the watch all night; instances of ptosis and various forms of paralysis of limbs, of dysphagia, of inability to write properly,‡ inability to retain or pass the feces or urine; examples of abdominal tumour, etc.—all occurring in connexion with the "temper-disease"; and observes that, though these cases occur chiefly in young females, yet males,§ and in some instances children, may be the subjects. I propose, in the present lecture, to bring before your notice a case which lately occurred in the hospital, and which some of you may have watched, in which, from sheer obstinacy, the patient refused food to a considerable extent, in illustration of this temper-disease. But please to bear in mind that this affection obviously is not (again to quote Dr. M. Hall) altogether a feigned disease, but a perversity, an insaniola, originating in bodily disorder or mental affection, and perpetuated by a morbid indulgence of temper and desire for sympathy and attention.

* Billing. It may be observed, in passing, that deaths even from hysteria may happen. Thus Sir B. Brodie quotes cases of its occurrence.

† Most observers have noticed that we may have in men every variety of general symptom included under the term hysteria. The affection is certainly not one necessarily dependent on any disorder of the sexual organs, womb, or ovaries—structure or function. Sir B. Brodie, who had great experience of a certain class of hysterical female patients, specially lays stress on its being a disease of the nervous system, and not one peculiar to the female sex, not belonging indeed to the uterus; as he says, the strongest man may become hysterical after a long illness, quoting the cases of Pentonville prisoners. Some would, however, refer all so-called hysterical conditions to the uterus. Dr. Billing relates the following anecdote. "A well known surgeon consulted Sir Astley Cooper about his heart: offended at Sir Astley's opinion, that he was hysterical, he in his will left his heart to St. Thomas's Hospital, and to Sir Astley bequeathed his uterus." There can be no doubt that any physician who has seen much of hospital practice will agree that cases of true hysteria are to be met with in men; and in one of the most recent and best accredited works on Mental Diseases (Griesinger), the following passage occurs:—"Fully developed hysteria occurs also, although more rarely, in young men (besides many other cases, I have recently observed such a one with distinct globus and convulsions in a young married, very anæmic man, whose wife was pregnant). I do not know whether hysterical insanity has ever been observed in man." Sydenham also says that the uterus is undeservedly blamed as the cause of hysteria. Romberg, on the other hand, defines hysteria to be a reflex neurosis dependent on sexual irritation, and supposes that, if a similar irritation occurs in the male sex, it will induce like phenomena. He observes that the chief difference in the hysteria of the two sexes is this: "In the male sex it is a transitory affection, which does not acquire so firm a hold as to establish the important psychical relation. In the female sex, on the other hand, the source of the disease is permanent." More recent writers, Bernutz and Goupil, take a different view. Alluding to the opinion of Scanzoni, who, like them named, looks on the uterus as the seat of hysteria, these writers remark that "it is impossible, indeed, to localise the affection; it is one *totius substantiæ*, an abnormal physiological condition which modifies all the organic actions, and reveals itself rather by dynamical disturbances of the general functions. It may therefore disturb the genitalia in common with the rest, though it need have no necessary or constant connection with them."

‡ Thus one patient would only write in a zigzag form.

§ Witness the frequent difficulty in determining the pathology of hæmatemesis, or other varieties of hæmorrhage, in women who present what we term hysterical symptoms; or again, in many cases, in assigning the value of loss of power in any part of the muscular system, or of perversion of sensibility, in such conditions. How ten are obscure manifestations of serious disease of the nervous system attributed to "mere hysteria"; and how cautious ought we to be in giving unqualified opinions of prognosis in many cases of this sort.

Sarah G., aged 20, rather delicate and interesting looking, was admitted into Crayle Ward, St. George's Hospital, October 6th, 1869. According to her statement, she had been ill for twelve months with "cold and cough", attended during almost the whole of that period by vomiting, which had been pretty constant. Until four months before admission, it was affirmed that *the catamenia had never appeared*. It was also stated by herself that she had been an in-patient at Christmas 1868, at St. Mary's Hospital, and also in University College Hospital in June 1869, where she had been treated for pain at the lower part of the left side of the abdomen, and for vomiting, which came on directly after eating food. At that time she was blistered. The above information was elicited from herself. Upon inquiry, I could not find out anything about her having been at University College Hospital; but Dr. Cheadle told me that she had been under Dr. Handfield Jones's care at St. Mary's; and that, according to the Registrar's account, the case was entered as "bronchial catarrh and deficient menstruation." It is stated that she had been ill three months, with cough and vomiting, having previously been in good health; and that, whilst in the Hospital, she complained of pain in the left side, worse after eating and at night. Dry wheezing inspiration was heard to the right of the left nipple; otherwise the breathing was good all over. She was troubled with night-sweats and headache. The pulse was 96; urine of specific gravity 1015, and free from albumen.

Upon admission into St. George's Hospital, the face was much flushed, the tongue yellow and coated, and the bowels confined. Vomiting was persistent, and the ejected food sometimes blood-stained. The abdomen proved to be much distended, but not hard, forming a palpable smooth swelling. Great pain, and tenderness on the slightest pressure, were apparently felt at the pit of the stomach, and in every part of the abdomen or chest. Subjective pain at the lower part of the left side of the thorax was also complained of, increased on deep inspiration; and there was cough in the morning, accompanied by brown viscid expectoration, at times containing blood-streaks. On physical examination, dulness on percussion was discovered at the base of the left lung behind, and coarsish respiratory murmur at the apex of the right lung in front. The catamenia had appeared three weeks before admission. No vaginal discharge was complained of; and no local pain or morbid sensibility, etc., existed, which could be referred to the uterus or ovaries.* The pulse was soft and weak, and quiet; and the axillary temperature 98.5°. Her manner was somewhat sly and hysterical. She was fed with beef-tea, and milk with lime-water; and constipation was met by blue pill and the compound extract of colocynth, and subsequently by senna draught. The infusion of calumba, with compound spirit of ammonia and bicarbonate of potass, was given twice a day.

On the 9th, she was much the same, vomiting all food and medicine. The pulse was very feeble, and 100 per minute; and the respirations 24 per minute. Calomel and senna were given; and later on, as no effect resulted, scammony and calomel and castor-oil enema were administered. Afterwards, calomel and jalapine, and then enemata with sulphate of magnesia and confection of rue, were resorted to. On the 13th, the urine was found to be very albuminous; the tongue coated; and the vomiting worse, the vomited matter being occasionally streaked with bright-red blood, as if it came from the pharynx. The patient was very low and feeble. To ease pain and vomiting, I prescribed a draught to be taken every three hours, containing a quarter of a grain of extract of belladonna,† and one drop of hydrocyanic acid, with syrup of ginger; and allowed fragments of ice to suck. Three ounces of brandy with water were ordered in twenty-four hours. On the 16th, the pain had continued very great in the hypogastrium; and the urine,

* It is important to bear in mind, as it has been pointed out, that the uterus is not the only part of the genital system which may be connected with the hysterical condition. Romberg remarks, on the authority of Schützenberger, that in many cases of hysteria we find one ovary swollen. He quotes the experience of Schützenberger, who, in an essay on the Organic Causes and Mechanism of the Production of Hysterical Affections (see *Gaz. Méd. de Paris*, 1846, p. 749), relates the singular case of a patient in whom, by pressure upon a sensitive ovary, the whole series of hysterical symptoms could be induced.

† In practice, I have known few remedies so serviceable in neuralgia, connected with the stomach or in irritability of its walls, as belladonna. A good illustration of its use occurred quite lately in the person of a young woman who was under my care in the hospital in Rosebury Ward some time ago. She suffered excruciating pain at the epigastrium, both when food was taken and when it was not. Tenderness was so great, that she could bear no pressure at the part; nor could she straighten herself in walking owing to it, always walking and lying in a crouching position. She was said to have perforating ulcer of the stomach, and had been long ill and in other hospitals. Regular and increasing doses of extract of belladonna alone appeared by degrees to relieve pain and tenderness and vomiting; and eventually she left the hospital comparatively well. I have also recently had the case of a man under my care, in King's Ward, with constant vomiting and pain at the epigastrium, both of which were eventually checked by extract of belladonna pills persistently given, and increased in quantity. Though no positive proof existed, yet I was inclined to look upon his case as one of organic disease of the stomach or neighbouring part. He is now again in King's Ward, but not under my care.

which was very scanty, contained blood-corpuscles, but no "casts" of uriniferous tubes. Hydrocyanic acid in three-drop doses was given in effervescing draught; and lime-water, and calomel, and jalapine, and subsequently croton-oil, as aperients; and, as but little ease followed, I ordered to the epigastrium a blister, of the size of a five-shilling piece. On the next day (the 20th), the urine was found still to contain albumen, but to be acid, and was "smoky" in colour. The face was flushed; and the pulse 84, and small. Still she had a cheerful appearance, and from the first no positive emaciation had been apparently produced. The day following, the blister was dressed with a quarter of a grain of meconate of morphia. Subsequently, one-fifth of a grain of morphia was injected subcutaneously in the arm, much pain being complained of along the œsophagus. On the 23rd, a drachm of saccharated solution of lime was given in peppermint-water every two or three hours; and a quarter of a grain of morphia, with one-sixtieth of a grain of atropine, injected subcutaneously; and on this day the urine was found free from albumen, which was looked for, but was never found in it again. Morphia was again injected subcutaneously, and beef-tea and milk were given as enemata, as she refused to take any nourishment by the mouth. Belladonna liniment was rubbed over the abdomen; but she indignantly refused to have this used, and also resisted the enemata. On the 27th, the respiration was 36 per minute; the pulse 84; and the axillary temperature 98.2 deg. Want of sleep was greatly complained of, and attempts to meet this were made by repeating from time to time the morphia injections. The patient greatly disturbed her neighbours in the ward by much noise, groaning, etc.; becoming irritable and angry, if checked or thwarted. The pain and vomiting and constipation went on in spite of treatment; and her condition was looked upon as that termed hysterical, all physical indications of disease in the lungs having entirely cleared off. Dyspnoea was, however, still complained of. The epigastrium was again blistered, and morphia applied, and the foetid spirits of ammonia given. On December 6th, whilst the girl was apparently suffering in the same manner, the Queen passed the hospital, on her way to open Blackfriars Bridge; she rose in bed to watch her out of the window, having been thought utterly unable to move, owing to pain. Whatever doubts one had previously entertained were now more or less* removed; and I at once ordered her to be dressed, and to lie outside the bed. Dr. Pitman, as one of our Consulting Physicians, saw the patient with me, and agreed with me respecting the case. She still refused food, or vomited what was given to her. On the 25th, a letter was picked up on the floor, in the girl's handwriting, addressed to another patient in the same ward, and begging for food to be brought to her; and about this letter she greatly prevaricated. The epistle, a curious one, with the original spelling, is given in a foot-note.† She continued to abstain from food offered to her, and lay groaning and moaning; being very impertinent, or, as the nurse said, "saucy", to those around her. On the 31st, she passed a *healthy and ample evacuation* by the bowels; and this was observed on several occasions, by the nurse. Subsequently, the noise she made was so disturbing, that she had to be moved into a separate room, and to have a nurse provided who should carefully watch her. She then took food such as arrowroot better. I also at that time for some days prohibited friends coming to visit her. The bowels were kept open by senna and oil enemata; and the hydrate of chloral was given in thirty-grain doses, with good effect at night on several occasions. One day, friends having been again admitted, I found the girl sitting up in bed, trying on a new coloured frock. Valerian and ammonia, with aloës, etc., were given; and shower-baths for a week, on alternate days. She was also Faradised along the back and limbs from time to time by Mr. Laking.

The baths were again omitted, owing to the appearance of the catamenia. As she became much quieter, she was allowed to return to the wards upstairs, but not to the same ward in which she was previously, as she had contracted a dislike to the nurse, who may have been a little impatient with her; and by degrees she was compelled to walk

about, being repeatedly led into the middle of the room by herself, and left there to find her way back to her bed. She entirely ceased to complain of pain and to vomit; and gradually she ate ordinary food. I then ordered her to resume the shower-baths; but she so resisted this, that, upon my determining she should have them, she one day walked out of the hospital, and left it altogether. We have made inquiries about her since; and she wrote to Mr. Laking, saying that she only suffered from pain in her left side, and at times in the head; and that she would like to come up and see her friends at the Hospital: at the same time expressing great regret at having "gone on so as she did".

Such is the case which I wish to bring before your notice; and you will recognise in it a good example of that perversity of will, that determination not to adopt means for recovery, and obstinate desire to be considered an invalid, which may be termed "temper-disease", associated with, and complicating, so to say, symptoms of a graver character. The aspect and mien of the patient, the history of her previous symptoms, the constipation, tympanitis, the exquisite morbid impressionability, the deficient catamenia, and the constant vomiting without any ascertainable cause for it, and this vomiting *unaccompanied by nausea*, in addition to the fact of the *temperature* being always found to be *natural*, conspired to mark the case as one embracing, at any rate, much of the hysterical element. The forgetfulness of all her ailments on the occasion of the Queen passing the hospital and the affair of the new dress, and the result of treatment also, evidently bore out this view. At the same time, the cough, the expectoration (considering its character), and the physical signs met with on examination of the lungs, indicated that we had something more than ordinary hysterical symptoms to deal with, which probably had long been going on.*

Possibly the history of the case may have been as follows. The girl, being by nature self-willed, with a "naughty" disposition, badly trained, too well pleased to attract and receive attention, of an hysterical temperament, and of a weakly physical frame, may have "caught cold", which produced catarrh and some pulmonary congestion. This state, under the injudicious and capricious care of attendants, with the above antecedents, may have originated† that exaggeration of self-consciousness which developed into the condition spoken of as "temper-disease", accompanied by other symptoms of an hysterical character. [I have adverted to the character of the vomiting, alluding to the fact that it was not accompanied by nausea. This I would have you take notice of, as probably, when it is doubtful how much is hysterical in a given case, the absence of nausea may aid you in arriving at a right judgment.]

At the same time, although other symptoms drew our attention to the condition of the lungs, and made us careful in not overlooking any serious mischief that might exist, you will observe that, regarding the characters of the temperature of the body and other circumstances, I did not lay too much stress (in the illness) upon the lung-symptoms, as being distinct from the general condition. I could not help reflecting that, after all, the lung-trouble might be part and parcel of the general hysterical condition—one of its manifestations. We know well that affections of the pharynx and larynx, attended by cough, exaggerated secretion—in some cases, discharge of blood and local hyperæsthesia—may attend the hysterical state. I think there is no doubt that irritative symptoms of the respiratory organs of a character allied to the hysterical have before now been mistaken for indications of phthisis, and treated accordingly. We have proof that in this condition we may not only have pain more generally diffused, but also concentrated, as it were, in isolated parts; and, in addition, local redness, heat, and swelling, and all appearances so often presented in inflammation. I could adduce a multitude of instances;‡ but here, at St. George's Hospital, it will at

* I say "more or less", because in some cases, even of acute and painful disease, a temporary excitement may for the time give energy, and produce inattention to symptoms in a remarkable way; reminding one of the disease and injury which insane people will tolerate. Of this inattention to pain caused by emotion, I may here mention the case of another patient, now in Queen's Ward, under my care, suffering from extreme and constant neuralgic pain within the thorax, probably owing to some intrathoracic growth or aneurysm, who, to the surprise of those around her, suddenly rose from bed, and looked out of the window, and watched some sight of interest which was occurring in Hyde Park.

† "My dear Mrs. Evens, —I was very sorry you should take the trouble of cutting me such a nice peice of bread and butter yesterday. I would of taken it, but all of them saw you send it, and then they would of made enough to have talked about; but I should be very glad if you will cut me a nice peice of crust and put it in a peice of paper and send it or else bring it, so as they do not see it, for they all watch me very much, and I should take to be your friend and you to be mine. Mrs. Winslow (the nurse) is going to chapel. I will make it up with you when I can get as far. Do not send it if you cannot spare it. Good by and God bless you."

* It is generally acknowledged that many cases of hysteria, whatever forms they may assume, are originally connected at the onset with some bodily ailment, under the weakening influence of which, or owing to the injudicious treatment of which, a state of nervous excitability, or, as it has been termed, mobility, has been set up: a condition in which the will and the nobler functions of the nervous system appear, so to say, to have abrogated their high prerogative in favour of those which are properly and naturally subordinate. Some time ago (January 1867), I had a school girl, aged 12, under my care at the Hospital, troubled with pains, supposed to be rheumatic, in the right knee and left wrist, of one month's standing. She had always been in good health previously. Along with these pains, she declared she was unable to straighten the right knee; but, when attention was diverted, she could do so quite readily. Under the use of bark, ammonia, and spirits of chloroform, occasional aperients, and a little Dover's powder at bedtime occasionally, she soon regained power to walk about, and in a week was discharged.

† Sydenham speaks of hysteria (which, he says, constitutes half of all chronic diseases) as being in his time the most frequent of diseases next to fevers.

‡ Illustrations of a more striking kind I might bring before you (if space permitted), showing the dependence of local inflammations and other changes in the tissues of the body, etc., on nerve-influence, especially such as result from affections (irritative or paralytic) of the roots of the nerves or the nervous centres themselves; such, for example, as disease of the joints consequent upon affections of the spinal cord or central ends of the nerves. In some lectures which I gave at the Royal

the moment suffice to remind you of those observations of Sir Benjamin Brodie (with whose works, as St. George's men, you ought to be especially conversant) regarding certain hysterical affections. For example, you will call to your recollection those highly interesting cases of the results of nerve-irritation which he adduced. In one case, pain and inflammation in the testicle were caused by a calculus in the ureter; in another, effusion of serum took place into parts supplied by the trifacial nerve in cases of *tic douloureux*; in another, pain, redness, and tumefaction of the toes came on, as a result of neuralgia, alternating with neuralgia of the face; in another, local pain and inflammation attended neuralgia, and were amenable to the action of quinine; in another case, local pain and swelling, supposed to be of scrofulous character, in reality were referable to hysteria, and conjoined with hysterical attacks. He also mentions painful swelling of the skin, like aggravated urticaria, arising under hysterical influence.* You may all remember cases of hysterical knees, mimicking organic alterations in those parts. Possibly you may have yourselves seen cases of the swelling of inguinal glands from irritation of the urethra. All such instances show that, under certain nerve-influences operating from a distance, we may have great vascular, nervous, and other disturbance in individual parts of the body, simulating ordinary inflammation; so that it must not be considered far-fetched if we suppose that, under certain conditions of the nervous system occurring in hysterical people, we may have such interference with circulation, secretion, and nutrition in the substance of the lungs, as in other parts of the body, as shall give rise to cough, expectoration, pulmonary crepitation, and a condition in which there is dullness on percussion over the chest. And, if so, may we not entertain the supposition that in the case before us we have an instance of the kind; the more so, as the whole of these symptoms gradually cleared off?

As regards the presence of *albumen* in the urine in the case, this was only transitory, but of course demanded attention. Yet, as blood was found, and as I could discover no urinary casts by aid of the microscope, the albumen seemed to be simply owing to the presence of blood. This might have been from menstrual discharge, but it did not appear to be so on inquiry. From its transitory character, I was inclined to think that the blood may have been added to the urine by the patient. This would have been quite in keeping with her disposition, and a thing which, no doubt, has often been done by "designing" patients. Sir B. Brodie mentions the case of a young lady who "attracted the notice of her family, leading them to believe that she was the seat of some desperate disease, by mixing ink with her urine."

In my patient's case, I entertain no doubt that the constipation, vomiting, tympanitis, and other special symptoms, were attributable to hysteria as ordinarily met with. The obstinate refusal to take food, and, if taken, to keep it down, and the rejection of the enemata, whether purgative or nutritive, were, I feel assured, the outcome of the "temper-disease"; and with this were conjoined prevarication and the cunning attempts, not unsuccessful, to obtain food on the sly from others, either from patients in the ward, or from friends who brought it with them into the hospital. The proper, solid, and abundant fecal evacuations at times seen by the nurse confirmed the idea that at one time she was taking food surreptitiously; and of course the discovery of the note regarding the bread supplied to her (under the rose) made the whole matter clear. In this girl, I believe that deceit, in the ordinary immoral sense, existed, and accounted more for her conduct and condition than is wont in such cases; for I should be far from condemning all cases of design and deceptive ways in hysteria as indications of guilt or depravity deserving of moral condemnation, as distinguished from perversion of mind and natural disposition. And here I would say a few words on the moral responsibility of such cases in general. I fully concur with Dr. M. Hall in supposing that we really have, in these cases of "temper-disease", aberration of intellect, but short of insanity—"fictitious, factitious, and real, at the same time;" and this may go so far as even to lead a patient to undergo at the hand of others painful operation,† or to submit themselves to distressing and painful agents, as did a woman whose skin was blistered over in many parts, the cause of which was only discovered when, the skin being carefully examined, a little black matter was found, scraped off, and determined by the microscope to contain fragments of the wing-cover of the blistering-fly.‡ As

College of Physicians last year, regarding Certain Effects of Modifications of Nerve-Influence in Disease, I adduced many such, citing from the works of others, and adding several which the practice at this Hospital afforded me.

* This tumefaction was attributed by Sir B. Brodie to a turgid state of the blood-vessels, and not to an effusion into the areolar tissue, as the parts do not pit or remain indented after pressure.

† Dr. M. Hall relates the case of a woman who was marked by herself extensively by leeching, cupping, and setons; "and it was proposed to extract a supposed diseased ovary, and to this operation the patient pretended to be ready to submit."

‡ This discovery reminds one of the discovery of theft made by means of the

Dr. M. Hall showed, very often patients of this kind do not attempt to do what they really can; and he most ingeniously illustrates this by an interesting case.* As Sir B. Brodie said, with such cases "it is not that the muscles are incapable of obeying the acts of volition, but that the function of volition is not exercised." This is very observable in those hysterical patients who will not exert the will to empty the bladder, in which cases so much harm is done by the use of the catheter. Dr. M. Hall ignores the idea of hysteria being a *feigned* disease; he says it is *real* enough, but generally *exaggerated*. Sir B. Brodie evidently agrees in this, as he observes: "If it be true that, in aggravated cases of hysteria, there is actually some original defect in the organisation of the nervous system, we cannot but feel that we ought to make some allowance for these vagaries"—meaning the tricks which hysteric patients often play; and remarks that these vagaries are occasionally met with in persons whose "moral qualities are otherwise of the highest order." He also, however, says that, in making allowance for a peculiar state of mind as depending on a peculiar organisation, it is also certain that, "in the majority of cases, the disease is to a considerable extent under the control of the patient." Romberg observes that, of the psychical condition in hysteria, the main feature is indecision, an absence of resistance to extraneous influences. "The hysterical motto, 'I cannot help it,' appropriately expresses the condition. In every other respect, the mind is free, provided the disease be uncomplicated."†

Such being the case, what Dr. Billing states of hysteria in general is especially applicable to instances of "temper-disease". He observes of it, "There is no disease which requires so much *discrimination, skill, and patience*, as obstinate hysteria, unless it be that with which it has been too often confounded—*insanity*." This being so, it may be well questioned whether every case of "temper-disease", and even of ordinary hysteria, is treated to the best advantage in our general hospitals, where, from the nature of the case, congenial inspiring pursuits and means of diversion are only accidentally present. Of course, in the majority of instances, owing to circumstances, such cases can only procure treatment at our hospitals; but I think it frequently might very well be a question (or rather I might say there is *no* question at all), had we the choice, whether we would prefer some retreat where the required firmness (often abrupt, rough, and ready, but not necessarily unkind or harsh) of a shrewd hospital-nurse might be qualified by the persuasive and sympathetic gentleness of the intelligent sister; amidst suitable modes of entertainment, and in fresh air; and, if possible, amidst scenes of country life. Even in a hospital in a town, much good might be done by occasional removal into another ward, or changing the attendants. As respects St. George's Hospital, our country convalescent branch might prove an admirable place in which to treat hysterical cases. You will remember, in the above related case, the plan which was adopted after a time, of regularly walking out the patient into the middle of the ward, and leaving her to scramble back to her bed—at first, by help of the hand; afterwards, without assistance, as she best might. This I believe to be a measure of much utility in these cases, especially when such a patient, especially in the wards of a hospital, is "the observed of all observers"; not only in exercising the various muscles of locomotion—a very important object, and one attainable in some measure by galvanism, as in this case—but also as having a beneficial moral effect in rousing the will. I have long thought that at public hospitals we ought to be provided with fitting appliances for mechanical and artificial exercises, useful as well in treating hysteria as in furthering the recovery from paralysis of various kinds. Sir B. Brodie, referring to the treatment of hysterical affections of joints, speaks of the agency of moral causes, "especially of those which compel the patient to make much physical exertion, often leading to recovery." The celebrated Dr. Jephson of Leamington was cur-

microscope many years ago by Ehrenberg. It is related of him, that, on the occasion of some cases or boxes being robbed whilst in transit on a railway, their contents being exchanged for earth dug out of the ground at some station, he was enabled, by means of microscopical examination of the soil, to determine the exact part of the line where the exchange was made, and so lead to the conviction of the thief.

* The case of a lady suffering from wounded pride, who was apparently incapable of utterance, and suffering from incessant cough. When the attention was fairly engrossed, the cough would cease. It was difficult to convince an affectionate father of the nature of the case. "But I adopted a measure which eventually succeeded most perfectly. I said: 'Your daughter cannot speak, cannot articulate; but you will admit that she can *try*. Well, to pronounce, or to attempt to pronounce the letter *b*, or *p*, we must bring the lips together; to pronounce the letter *d*, or the letter *t*, we must bring the tongue in contact with the anterior part of the palate, or with the front upper teeth. Your daughter will do this, if she *tries* to articulate. Let us go and observe.' We went. I said to her: 'Try to speak, try to pronounce *b*; try to pronounce *t*.' There was a ridiculous movement of the lips, but no attempt at articulation."

† He also cynically remarks: "Besides the psychical character which marks the disease, the peculiarities of the sex also come into play, and the natural vanity, coquetry, whimsical tendency to exaggeration and deception and gossiping communicativeness of the female become more prominent."

rently reported to have carried this line of treatment to some extent. "He was wont" (I understand from an old friend and patient of his, not, however, suffering from temper-disease) "to invite certain of his patients to drive with him; and then, at a certain distance from home, according to their capacity for walking, to request them to alight and walk back."* Romberg gives the case of a Parisian physician who compelled his hysterical patients to polish the floors of their own rooms, and this successfully.

The fact cannot be too strongly enforced that, after all, in the treatment of all forms of hysteria, whether those of the ordinary type or those exhibiting what may be called "temper" symptoms, the moral treatment is of the greatest importance. Of course, as regards *materia medica*, attendance to the state of the secretions, and especially to the general tone and strength, must be our aim (independent of removing reflex irritation, when its source can be determined); and, with regard to the latter point, preparations of steel of various kinds are, for the majority of cases, chiefly to be relied on. Though Romberg is very bold in giving his opinion that "the time may not be far distant when the analysis of the blood itself will be required to establish a complete diagnosis", there is no doubt that an anæmic state prevails in hysterical cases; and that, as he observes, a continued use of steel renders the blood a normal stimulus for the nervous system.

Whilst on this point, I cannot withhold referring you to some interesting observations made by Feuchtersleben (in his learned and interesting work on *Medical Psychology*, published by the Sydenham Society, p. 175) upon the action of blood upon the nerves, whereby it acquires a psychological importance. He quotes, among other matters, some very curious experiments of Denis upon animals and man, showing the psychological effects of the transfusion of blood. Wilder animals, into which the blood of tamer ones had been transfused, became more timid, and *vice versa*; and men who had been lethargic and indolent, in one case with convulsions, having calf's blood injected, became lively and conscious. One was cured of insanity by transfusion, and another of paralysis and mental debility. He observes that repletion and increased action of the vessels stimulate to activity the centripetal nervous filaments, which encompass these vessels, and thereby heighten the facilitated affections and reactions; and that increased plasticity and predominant arterial action lead to the same results.

I have in my hospital note-books several cases of various forms of hysteria of great interest, chiefly of hysterical paralysis and of hysterical vomiting. I hope shortly to bring before your notice a summary of these cases.

NOTES ON THE TREATMENT OF A FEW OF THE LESS COMMON COMPLICATIONS OF SCARLET-FEVER.†

By JOHN KENT SPENDER, M.D.Lond.,

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IN the days of old pathology, nearly every disease was supposed to have its *complications* and *sequela*; like troublesome satellites, which were, however, most useful when absent. The words are defined by their etymology; and a complication was described as a pathological accident which went along with a disease; and a sequel was something which came afterwards, though obviously flowing out of the bad blood or bad tissues which the disease induced. Now, it is easy to trace out diagrammatic outlines like these, but less easy to make Nature always follow them. Look into that storehouse of medical erudition, Dr. Copland's *Dictionary of Practical Medicine*, and we shall find scarlet fever handled according to the fashion I have indicated; but the pattern is indistinct and even confused. What is technically termed a "complication", may, if deferred, become in point of time a "sequel"; and, similarly, a "sequel", if hastened, is changed into a "complication." Some of the phenomena thus designated are, of course, essentially different; but many others are separated purely by the matter of chronology.

In this paper, then, I neither desire nor pretend to draw a hard line between so-called complications and *sequela* as they occur in the clinical

* This lady remarks: "He had to train me to regain walking powers; but this he did by ordering me to commence the process very gently, three minutes in the hour, and this increased gradually, till I could manage a quarter of an hour or twenty minutes three times a day, walking as briskly as possible. He had no occasion to cheat me into using my legs, so glad was I to be enabled to do so. Dr. Jephson was something of a philosopher, and greatly depended upon the natural means system for restoring health; and thus he would make the studious and intellectual work for their living, and gain an appetite by physical exertion."

† Read before the Bath and Bristol Branch.

history of scarlet fever. I venture to select three morbid incidents, or accidents, of high interest and often of dangerous gravity; and to make a few remarks on their pathology, in order the more fully to elucidate their treatment.

1. My first illustration refers to the *pyæmic inflammation of the joints*. This has been noticed by nearly every systematic writer on scarlet fever, though by many in such an imperfect way as to suggest that its importance was scarcely recognised. But the fact of morbid anatomy is, that not only may there be a transitory inflammation of synovial membrane, but an inflammation prolonged and intense, leading to suppuration in the interior of a joint, and ultimately to erosion and destruction of the cartilages. In short, the joint no longer exists as such for physiological purposes; and, under the most favourable circumstances, the patient recovers with dislocation or deformity. The wrist-joints seem particularly liable to disease, and next to them the knee-joint and the hip.

In the summer of 1863, I attended a scrofulous child severely ill with scarlet fever; the pyrexia was mild, but the wrists and right hip-joint became early and gravely involved; and, after a time, I discovered complete and irreducible dislocation of the head of the femur on the ilium. Besides these serious external lesions, a pulmonary abscess formed, which in a little while became a gangrenous vomica, and caused the incessant expectoration of foetid puriform matter. The poor child lived on in emaciation and suffering for nearly five years, and was killed at last by exhaustion and anorexia.

Very lately I have attended another case of scarlet fever in the person of a young woman, the daughter of a wealthy tradesman, and nursed with every comfort. The illness appeared to be proceeding in a most favourable way, when, one morning, I found that the temperature had risen a degree and a half since the preceding evening. The wrists were swollen; and here I may speak of the importance of distinguishing a *bonâ fide* joint-swelling from that cutaneous œdema which often accompanies specific fevers; further, the hands could not be flexed without pain, and there was more general pyrexia. The treatment was so successful that in four days the local symptoms had entirely gone away, and the disease went on to a quick and happy termination.

I have not noticed any special disturbance of the nervous system previous to the inflammation of the joints coming on. The thermometer affords a safe criterion of danger; it tells us that something approaches, the nature of which our sagacity must discover at the earliest possible time. And now that a good and practical paper (by Mr. Goodhart), in the last number of *Guy's Hospital Reports*, liberates us from the supposed necessity of keeping a thermometer in the armpit for fifteen or twenty minutes before a correct result can be secured, there is no reasonable apology for neglecting the daily use of the thermometer during attendance on a case of fever. In the majority of instances, "the mercury, at the end of three minutes, will be found, for all practical purposes, to be steady;" this is surely good news. And when we call to mind how we are puzzled sometimes over an obscure case, we ought to be grateful to a little instrument that often relieves an obscurity which has survived an anxious and frequent counting of the pulse, and an inspection of the tongue at least twenty times.

The two trustworthy means in the treatment of the intercurrent affection of the joints in scarlet fever are: (a) the local application of heat and moisture, and (b) the administration of quinine. Foment the joint or joints with some hot medicated fluid; surround each with a layer of cotton wool; and place over this, again, a piece of oil-silk, which should be tied securely down above and below the joint, so as to protect it from all inquisitive draughts of cold air. Let this process be repeated morning and evening; in short, do just what you would do for a joint afflicted with acute rheumatism. Then, without discussing the large question whether quinine is a so-called "specific" in scarlet fever, or whether it may be safely trusted as the chief medicinal factor in pulling a patient through a dangerous adynamic stage, one thing appears certain—that this articular disease may with great advantage be treated with quinine, administered punctually and perseveringly. Here, again, we see a close analogy between scarlet fever and acute rheumatism. In the latter of the two cases which I have rehearsed, I began the use of quinine without delay; one grain was given in an ounce of acidulated water every three hours, night and day; and, the bowels having been previously moved with castor oil, no other medicine was prescribed. The fall of temperature was the first notable fact, and this was distinct and abrupt on the day after the treatment was begun; and, again, in twenty-four hours after this, the heat of body did not exceed the normal standard. Simultaneously, the development of local symptoms was arrested. A grain of quinine was administered every four hours for two days more, and so gradually left off. The convalescence was rapid and complete.

Now, when we study the action of quinine in a case of this kind,

we see how well it exemplifies the most recent ideas and facts of quinine-therapeia. The two new cardinal points about quinine are: (a) that it is an *antiseptic*, as shown by Dr. Binz in its power to prevent and arrest putrescence and fermentation; and (b) that it is an *antipyretic* or *antiphlogistic*, as demonstrated by Cohnheim in his experiments on the influence of quinine in inflammation of the mesentery of the frog. Further, the unquestionable power of quinine in acute rheumatism suggests the inquiry whether all inflammatory joint-affections may not be connected in a remote causal way with central nerve-lesion.

If it be true that scarlet fever usually requires abundant support with a fair auxiliary amount of alcohol, this doctrine has special force when the joints are inflamed. Tissue-repair is gravely interfered with during the fevers of childhood; and when that interference is greatest, those structures suffer most in which growth is most active during health. It has been well said that "in the treatment of children's acute diseases the overwhelmingly important consideration, both which reference to present recovery and the avoidance of disastrous sequelæ, is *nutrition*." (*The Practitioner*, May 1870, p. 298.)

2. *Delirium* is the second clinical phenomenon to which I beg attention. It is a valuable aphorism of Heberden's (quoted with approval by Dr. Gairdner in his *Clinical Medicine*, Edinburgh, 1862, p. 193), that there is no disease in which the patient is more apt to be delirious, and with less danger, than in scarlet fever. Speaking broadly, the delirium which may happen in scarlet fever is of two distinct orders: (a) the delirium of adults, occurring early in the history of the disease, and usually an index of high fever; (b) the delirium of children, occurring later in the disease, and often arising out of some sudden impairment or stoppage of renal function. Now, the delirium of the adult fever, always excepting that which is associated with the puerperal state, may be left pretty much alone, so far as concerns the maddensomeness of starving, purgatives, and antimony. In the case of a married lady who, in the spring of 1864, caught scarlet fever from an only child whom she nursed with most affectionate zeal, active delirium lasted for nearly sixty hours. I supported her with frequent small injections of milk and beef-tea, each injection containing ten drops of laudanum. When the patient suddenly rallied from her delirium, she seemed, *quoad* fever, nearly well. If a similar case were to come under my care now, I should cautiously try the subcutaneous injection of morphia, or, at least, try to get the patient to take hydrate of chloral, dissolved in a large bulk of water.

The delirium of children is often of much more serious import. It may be epileptiform in type, and may merge into coma with very little warning. The narrative of a very apposite case will probably be better than any dry description. On March 9th, 1865, I began attendance on a case of scarlet fever in a young lady, 10 years of age. The case was moderately severe, but everything went on absolutely well until about the twenty-fourth day, when I first noticed that the urine was very red. Remember Dr. Andrew Anderson's axiom, that it is "of more importance to examine the urine than to feel the pulse of a convalescent from scarlet fever." During the week ending Saturday, April 8th, the urine was very red every day, but it was not scanty, and the small amount of albumen in it was sufficiently accounted for by the presence of the blood. There were no symptoms of any other kind announcing danger; and unfortunately in those days one did not use the thermometer as a daily companion as we do now, or doubtless it would have told its tale. The weather was beautifully warm and fine, as it was, indeed, all through the month. Early on Sunday morning, April 9th, I was suddenly called to see the child, and I found her insensible, and strongly convulsed; the breathing stertorous, and the extremities cold. I adopted, without a moment's delay, an old-fashioned treatment, but it was perfectly successful. The head was shaved, and a small blister placed on the scalp; as soon as enough consciousness returned to allow deglutition, half a drachm of compound scammony powder was given every six hours until ample purgation resulted; and a hot bath was administered in the evening. On Monday, April 10th, consciousness had partly returned, and there had been no convulsion since the previous evening. Only milk food was allowed, with abundance of toast and water as a drink. Absolute rest in bed was enjoined for a week, when the urine had become normal in colour and specific gravity, and was quite free from albumen; occasional hot bran poultices were applied to the loins. There was no subsequent interruption to perfect recovery.

This was an instance of tubal nephritis, of a subacute type, but involving so much of the secreting-tissue of the kidney as to hinder the passage of urinary excreta; hence the uræmia and its usual consequences. In the early management of these cases, there is probably no better plan than to give that simple and powerful diuretic, copious draughts of cold water.

3. I propose to say a few concluding words on *cervical abscess*. The glands of the neck become enlarged in the early stage of the disease, apparently owing to septicæmic absorption from the throat; Trousscau called it *scarlatinal bubo*. But now and then this enlargement of external glands assumes a diseased entity of its own; and a broad patch of erysipelatous redness appears. Presently suppuration occurs, matter points here and there, and the patient suffers much from the hard brawny swelling which extends more or less around the whole of the front of the neck, though commonly more severe on one side. This affection is rarely observed after puberty.

Directly abscesses form in an unmistakable way, I puncture each with a lancet laid flat on the skin, so as to make a valvular opening looking downwards. If incisions be delayed too long, there is a possibility of pus burrowing among the muscles of the neck, and causing gangrene of the connective tissue. Both Trousseau and Graves relate examples of this. After the necessary incisions have been made, a long broad piece of lint may be soaked in some warm Condy's fluid and placed around the neck; over this, again, a strip of oiled silk should be tied, and the dressing may be renewed two or three times a day. The patient should swallow chiefly liquid food, and be kept mainly in the semi-recumbent posture. The chronic enlargement of the glands which is left behind must be dealt with according to the constitutional powers and necessities of the patient.

CLINICAL NOTES.

(Reported from the Practice of Dr. WILKS, at Guy's Hospital.)

VII.—TUMOUR OF BRAIN: CONSIDERABLE IMPROVEMENT BY MEDICINE.

THE following case is reported by Mr. Murphy.

Elizabeth S., aged 19, was admitted January 26th. The patient was a housemaid, and always enjoyed good health until about ten weeks ago, when she began to experience pain in the forehead. Shortly afterwards it was observed that the pupil of the left eye was larger than the right. About a month ago, she also began to feel pain at the bottom of the sternum of the same character as that in the head—both occurring in paroxysms. She had also been becoming thinner, and her eyesight impaired.

On admission, she was seen to be well-formed and well-nourished; her face was flushed, and she had strabismus. The pain in the head compelled her to keep her bed. She described the pain as commencing over the left brow, extending across the forehead around the right side of the head to the back; it came on every half hour, and was of the most lancinating character, and the pain in the sternum frequently occurred with it; she also had occasional pain at the back of the neck. She had slight convergent strabismus; and, on testing the movements of the eyes, she appeared to be unable to move them outwards, as if the external recti were partly paralysed. Both pupils were dilated; the left was somewhat larger than the right. On requesting her to close and screw up her eyes, it was found that she could do no more than simply close them, as if the orbicularis palpebrarum had lost its power. In the same way she had difficulty in contracting the orbicularis oris to show the gums. It was thus inferred that both facial nerves were partially paralysed, as well as both the sixth nerves. Mr. Bader was requested to examine the eyes, and he reported that both optic discs were swollen and ill-defined; the veins of the retina unequally dilated, and several clots in them. The arteries were barely visible. There was no paralysis in any of the limbs. A blister was applied over the left side of the forehead, but without relief. At the end of a week the symptoms were somewhat more marked; the diplopia continued; the pain was very severe; and the face presented the same partial paralysis as before. The bromide of potassium in ten-grain doses three times a day was ordered. On February 14th, the symptoms were much the same; she had convergent strabismus; the pupils were dilated; there was ability merely to close the eyelids, without being able to screw them up; she was also unable to move the lips so as to show the gums.

It was believed that she must have some organic disease of the brain; and Mr. Bader suggested a tumour which obstructed the flow of blood into the cavernous sinus. Dr. Wilks said it was difficult to conceive how any accidental growth should involve at the same time and equally both facial and abducent nerves; and if paralysis of these nerves were the only symptoms presented, it might have been supposed that a very small spot of disease existed in the fourth ventricle which involved the centres of both pairs of nerves—an interesting deduction, seeing that Dr. Lockhart Clarke had shown their adjacent origin. These symptoms suggested a central seat for the disease, whilst others denoted a more superficial cause.

Towards the end of the month (February 25th), she expressed herself as feeling better; the paroxysms of headache had been less severe, and she was able to sit up a short time. The strabismus was the same; but ophthalmoscopic examination showed the optic discs less swollen and more defined, and the retina paler. She then left her bed and gradually improved, the pain being less and her health altogether better; and on March 26th, she left off the bromide of potassium. She walked about the ward looking very well, but the strabismus remained in some degree; and, although the face exhibited no paralysis, yet it showed the want of power before mentioned, when the muscles were tested. She occasionally had returns of the pain in the head. She then left the hospital; but was seen on April 10th, free from pain. The case was thus a most difficult one in which to form an accurate diagnosis.

CASES OF DELIRIUM TREMENS RAPIDLY CURED BY HYDRATE OF CHLORAL.

By J. CORBET FLETCHER, M.B., C.M., Tottenham.

Miss E. B., aged 33, showed symptoms of a second attack of delirium tremens on June 12th, the first having occurred last summer. Her rest at night, prior to this date, had been often disturbed by frightful dreams; but on the night of the 12th, she frequently came to her father's bedroom, declaring that the house was on fire, etc. This state continuing on the 13th, I was called to see her on the evening of the 15th. She was not in bed on my arrival, but was running about in her room with her eyes directed to the ceiling, where she declared she saw a variety of visions. The wonderful rapidity with which her hallucinations, and also her attitudes, changed at once suggested Watson's busy delirium. Pulse 90, weak. Though her face was suffused with perspiration, her skin felt cold and clammy. The tongue was furred; the breath was mawkish, with a vinous odour; her hands trembled, the tongue only slightly. A purgative was given, and a warm bath. Beef-tea was ordered to be given regularly; the nursing to be kind, but firm.

Early on the 13th I was called, as her condition was much worse. She had not slept during the night; the visions were wilder than ever; pulse 120. She seemed exhausted and anxious; the lucid intervals were few. She saw ugly animals on my coat and on her bed, and tried to catch them. The bowels had not been opened. Another purgative was given. To secure sleep, she got half-drachm doses of bromide of potassium every hour. At 9 P.M., the excitement and hallucinations had increased; the bromide had no effect. Remembering Dr. Gairdner's suggestion to try hydrate of chloral as a tentative remedy in delirium tremens, and being unwilling to give opium except as a *dernier ressort*, I gave half-drachm doses of hydrate of chloral every two hours until sleep was secured. The first dose was given at 10 P.M. The patient became slightly drowsy soon after its administration, but it did not produce sleep. The second dose was given at 12. In ten minutes she fell into a sleep—light and often disturbed at first, but gradually deeper. At last she slept soundly until 8 A.M.

June 16th, 11 A.M. Pulse 76. She felt muscularly tired. The excitement and hallucinations were all gone. She talked quite sensibly. There was nothing to indicate her former condition except an unsettled stare in her eyes, and slight fidgetiness of manner.

June 17th. To-day she was in her right mind, and enjoyed a walk with her sister. Truly, the effects of chloral in this case were almost miraculous.

CASE II.—Mr. N., aged 54, who had frequent attacks of delirium tremens, sent for me June 18th, at 3 A.M. His present attack began thirty-six hours before my arrival. He was in great pain, with cramps in his legs and painful spasms in his abdominal muscles, which caused him frequently to double up as if suffering from slight tetanic emprostotonos. The hands twitched; the tongue was very shaky; the breath was very disagreeable, with a strong alcoholic odour. He had very marked hiccough. There was no mental alienation. A purgative was given, and half-drachm doses of hydrate of chloral. The first dose was given at 4 A.M. In a short time he fell into a sleep, which was not very sound. After the second dose, at 5.30 A.M., he slept soundly until wakened at 11.30 A.M., when he said he felt ready for beef-tea. The muscular twitching was not wholly gone; but the painful spasms and all the worst symptoms of his case had disappeared. After getting some food, he fell soundly asleep again.

On June 19th, pulse was 84; he was much better. To secure rest, he had half a drachm of hydrate of chloral the previous night, after which his sleep was unbroken. He had no headache nor other bad symptom attributable to chloral. He took his food well.

On June 20th, he was so well that further attendance on him was almost unnecessary.

CHLORAL IN CASES OF INSANITY.

By G. B. WADSWORTH, Esq.,
Assistant Medical Officer, Suffolk County Asylum.

HAVING read many inquiries and suggestions as to the best mode of administering the hydrate of chloral, I beg to offer the following cases taken from the case-book of the Suffolk County Asylum, within the last three months, and shall be happy to see them inserted, if of sufficient value.

CASE I.—H. M., male, aged 51, was admitted May 21st, for the fourth time, in a very excitable state from recurrent mania. With ordinary diet, and attention to his general health, he improved sufficiently to go to work. On the 18th of June, I was called to him, as he had suddenly, when dressing in the morning, tried to jump through the window. I found him in every way suffering from acute mania. He would take no medicine; but, when asked to take a glass of porter, said that he would. Sixty grains of chloral were administered in porter; and fifty minutes afterwards he was in a calm sleep, which continued nine hours. At seven o'clock, he awoke and wanted something to eat; he took meat, bread, and porter, with forty grains of chloral. This was followed by a good night; he slept ten hours, awoke hungry, and took food plentifully. His bowels acted well. He has since continued quiet, and is now approaching convalescence, and again commencing work.

CASE II.—M. A. B., female, aged 19, was admitted June 9th. She was cruelly bound hands and feet, and was immediately released, and placed in the padded room. She was suffering from acute mania. She refused food with obstinacy, but after some little time called out for water. She was induced to drink a glass of porter which had sixty grains of chloral dissolved in it. In forty minutes she was in a calm sleep, which lasted ten hours. She awoke hungry, and had beef-tea, and another glass of porter with forty grains of chloral. She has continued taking the chloral in porter three times a day, in doses gradually decreasing to fifteen grains, with marked improvement, and is now recovering.

CASE III.—R. B., female, aged 59, was admitted June 22nd. She had all the symptoms of melancholia canina. On my entering her room, she was crouched in one corner, but came towards me on her hands and feet, barking savagely. Seeing the nurse with a glass of medicine in her hand, she rushed at her. As I could make no examination, I could only judge the pulse to be over 150 per minute. On the partial subsidence of violence, she was induced to take a glass of porter with sixty grains of chloral dissolved in it. In fifty minutes, she was in a calm sleep, which lasted eight hours; pulse 84, respirations 18 per minute. She was then willing to take support in sufficient quantity, and had porter, with forty grains of chloral dissolved in it. This produced a good night's sleep, which has continued uninterruptedly each night, the chloral being repeated in decreasing doses to fifteen grains three times a day. She is now gradually improving, the unnatural noise not having been heard since the third day from her admission, and she now converses rationally.

I trust that these short notices may be of some service in shewing a means of preventing the excitement produced by the endeavour to administer medicines, when refused by the patient, which must, in cases of acute mania, materially deteriorate from the desired effect.

OBSTETRIC MEMORANDA.

SPONTANEOUS EVOLUTION.

By W. M. WHITE, M.D., Lavenham.

THE following case of spontaneous evolution, occurring in my practice, may be interesting.

J. M., aged 22, single, in labour with her second child, sent for me on June 16th at 10 A.M. The membranes ruptured as I entered the house. A pain immediately followed my arrival up stairs, during which I made out a shoulder-presentation. Another pain, before I could leave the bed, brought the right elbow and hand into reach, when I determined to turn, and dropped out forty drops of laudanum to still the violent pains. Whilst doing this, a great pain produced the hand. I then gave the laudanum; and, while I was rolling up my sleeve to turn, the woman called out that the head was born, which I knew to be unlikely; and so it proved, for the body and one arm lay in the bed, and the head and left arm in the vagina. I drew down the funis, passed the child's hand over the face, and extracted immediately.

The woman was not supposed to have gone her full time ; but the foetus weighed over five pounds. It was dead.

The whole affair, placenta and all, was over in less time than it has taken to write out the case.

PROFESSOR FLOWER'S HUNTERIAN LECTURES ON THE COMPARATIVE ANATOMY OF THE MAMMALIA.

Delivered at the Royal College of Surgeons of England.

LECTURE XVIII.—Friday, March 25th.

THE lower extremity exists in a well developed form in all Mammalia except the Cetacea and Sirenia. There is no trace of the limb in existing Sirenia ; but an extinct form had a large rudimentary femur. The Odontoceti among the Cetacea have no hinder limb, so far as we know at present ; but it is present to some extent in the Whalebone Whales. The great Greenland Whale has a club-shaped piece of bone attached by fibrous tissue to the outer side of the ischial bone ; and in some examples there has been found also a small nodule attached at the end of this. These have been supposed to represent the femur and tibia. The Fin-Whales were formerly supposed to have the pelvic bones alone ; but, in a large Whale which was stranded near Hastings, Mr. Flower found on the outer side of the ischial bone a nodule of cartilage corresponding in situation with the femur in the Greenland Whale. This has also been found in other Whales of the same species.

All other Mammalia have a lower limb consisting of three segments—thigh, leg, and foot. The femur or thigh-bone has a rounded head and two trochanters or tuberosities, and at the lower end a hinge-like articulating surface for the knee. There is not much variation in the femur : some Mammals, as Perissodactyla, Edentata, and Rodentia, have a third trochanter. In some Marsupialia, the patella is not ossified. Two small sesamoid bones are often present at the posterior part of the knee-joint ; and very often, as in Rodentia, there is a wedge-shaped piece of bone within the joint.

The next segment always consists of two bones—tibia and fibula. The tibia is always the larger bone, both above and below. In a few instances, as the Horse, the fibula is almost entirely aborted at the lower part. In Ruminants, there is a rudimentary portion above, and below there is a small but distinct portion of bone attached to the tibia. In some Rodentia and Insectivora, the fibula is blended with the tibia at the lower end.

The foot consists of tarsus, metatarsus, and digits. There are never more than five digits, with their metacarpal bones ; and the number of phalanges is three, as in the hand. There is no instance of indefinite multiplication, as in the anterior limb of the Cetacea. The mode of ossification is generally the same as in the hand. The tarsus consists of an upper row of two bones, a lower of four bones, and an intermediate bone belonging to neither row. Gegenbaur's arrangement of the bones in the typical foot, with their representatives in the osteology of the Mammalia, is as follows.

Tibiale	} First row.	{	Astragalus.
Intermedium			
Fibulare			
Centrale			
Tarsale 1	} Second row	{	Cuneiform 1
" 2			" 2
" 3			" 3
" 4			Cuboid
" 5			

The bone representing the intermediate bone in the first row of the carpus is either suppressed or is united with some other bone. Gegenbaur believes that it is joined with the tibiale, to form the astragalus, while the fibulare forms the calcaneum. There is something like this in the formation of the scapho-lunar bone in the carpus of some Mammals. The cuboid is formed by the coalescence of the fourth and fifth tarsals, just as, perhaps, the unciform bone is formed of the fourth and fifth carpals. As to the scaphoid or navicular bone, Gegenbaur supposes that it is the os centrale of the foot displaced to the inner side.

The foot among the Primates presents a difference from that of Man in having the first digit shorter than the others, and capable of being opposed like the thumb. This is effected by a change in the articular surface of the cuneiform bone with which it is connected. In some, as the Tarsius, there is a curious modification. Between the ankle-joint

and the origin of the toes are two long bones, somewhat like a tibia and fibula ; there are elongations of the anterior portion of the os calcis and of the scaphoid bone. This is found, but in a less degree, in some other allied Lemurina.

The modifications of the hind foot in Ungulata, both Perissodactyles and Artiodactyles, correspond with those in the fore foot.

Among Rodentia, the Jerboa has three middle metatarsal bones united. The three corresponding toes, however, are separate.

Comparison of the Anterior and Posterior Extremities.—There is obviously a very considerable correspondence between the anterior and posterior limbs, as well as between their muscles and nerves. It is rather difficult, however, to know how far we can go in tracing the analogy ; because the general plan is much modified to suit the functions of the parts ; and there are some points which still require to be worked out by examination of the muscles, nerves, etc. There has been much difference among anatomists as to some of the most fundamental points ; and it is only lately that there has been any agreement as to general principles. And, even now, Professor Jeffries Wyman enunciates an opinion quite different from that generally received.

The suggestion was first made by Humphry, and carried out by Huxley, that in the comparison of the limbs we should go back to their primitive condition when first developed, and trace the changes which they undergo. The limbs—as was shown by means of preparations and drawings—appear first as little buds or outgrowths, both anterior and posterior being similar. After a time, they undergo certain changes.

In their primitive position, the limbs may be supposed to stand straight out from the trunk, presenting an upper or dorsal, and a lower or ventral surface. These have also been called anterior and posterior ; but the terms præaxial and postaxial—with reference to the axis of the body—are preferable.

The foot is obviously analogous to the hand. The præaxial digit of the foot has only two phalanges, like the thumb ; and there is little doubt that the back of the hand and the back of the foot correspond.

In comparing the bones of the arm and of the leg, the differences between the ulna and the tibia, in regard to the size of their two ends, appear at first striking ; but these differences nearly disappear in some of the lower Mammalia.

The femur and humerus each present a rounded articular head at the upper part, with tuberosities on each side, and an articular surface below. The greater trochanter of the femur and the lesser tuberosity of the humerus denote the postaxial surfaces of these bones.

Assuming the limbs standing straight out, as above described, the first change is flexure at the two joints. Next, at a very early stage, the femur is bent forwards by the side of the body, and the humerus is in a corresponding manner bent backwards. This is the position retained in most Mammalia ; the outer side of the femur corresponding to the inner side of the humerus. Consequently, the hand is turned backwards. This position is retained in the Sea-Bear and Walrus ; but in most Mammalia it is remedied by the radius and ulna being made to turn round each other, *i.e.*, pronation.

In the Seal, the hind limbs are carried backward and stretched out ; the little toe and the little finger being turned upwards. In the Cetacea, the radius and ulna preserve their ordinary relations to the end of the humerus.

As to the shoulder and pelvis, there is a great want of agreement with regard to their analogies. But, on placing a limb in its primitive condition, we may arrive at certain conclusions as to the comparison of the parts. This comparison is given in the subjoined table.

Shoulder	Pelvis
Scapula	Ilium
1. Supraspinous	1. Articular
2. Subscapular	2. Gluteal
3. Infraspinous	3. Iliac
Ischium	Coracoid
Pubis	Acromion
Cotyloid	Glenoid

When the limbs are placed in their primitive position, and a line is carried up so as to divide the præaxial and postaxial surfaces, we see the subscapularis muscle in the upper limb and the gluteal in the lower, both attached to the postaxial tuberosities. Thus, in the normal position, the outer side of the ilium corresponds to the inner side of the scapula.

The coracoid bone runs out from the scapula like the ischium from the ilium ; and the strong ligament which passes from the acromion to the coracoid is in some animals quite ossified, so as to form an obturator foramen like that resulting from the junction of the ischium and os pubis. The only difficulty in assuming that the acromion represents

the os pubis is, that the latter is apparently developed early as an independent bone, while the acromion is formed as an epiphysis at a late period.

In concluding his course, Mr. Flower expressed his satisfaction at the interest which was taken in comparative anatomy, as appeared from the attendance on the lectures.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

A VISIT TO THE SHEFFIELD INFIRMARY.

[BY AN OCCASIONAL CORRESPONDENT.]

THE Infirmary stands in the midst of a large field, with ample space around it. The staff consists of three Physicians and three Surgeons. In company with Dr. Patton (Assistant House-Surgeon) I saw many interesting cases, principally males; only two wards being devoted to females. The walls are painted, with lofty windows on both sides of the ward, and the floors are washed. Linseed poultices on tow are held in high repute; charcoal powder being added in cases of sloughing sores and wounds. The style of amputation in most general use is that by circular skin-flaps, with lateral slits. One case which I saw was that of a stout woman, aged 43, for whom the thigh had been amputated in the lower third by one long oval flap of skin, as in the operation of excision of the knee, with a short posterior flap, including muscles, as if for amputation at the knee-joint. It was nearly sound at the end of five weeks. In this case, torsion of the femoral artery had been resorted to with a beneficial result. It seems to be the ordinary method of arresting hæmorrhage here; and Dr. Patton had only seen one case in which it had failed during the six months he had been at Sheffield. Another case of amputation in the same style, in the upper third of the forearm, was also doing well.

No fever, scarlatina, or syphilitic cases, are admitted. There are no special wards for children, nor for burns, which latter are very common in Sheffield. I saw many very bad fractures and smashes. Long splints are used for fractured femur; gum and plaster of Paris cases for fractured leg. Hey's amputation of the foot, of which I saw two cases, seems to be in favour; both stumps looked rather sloughy and had had erysipelas, which is very common, though not often fatal. The erysipelas is treated with nitrate of silver. Mr. Barber said that when practicable he preferred Hey's operation to that of Syme, as it preserved the length of the limb much better, and made a more useful stump, after division of the tendo Achillis. Carbolic acid is freely used at the time of amputation, and afterwards, with some good results.

There was, in one of the men's wards, an interesting case of Paraplegia, the result of a blow on the spine in the cervical region from a heavy piece of timber. The accident had happened eight weeks ago. The bladder was not affected, but there was entire loss of motion and partly of sensation in both legs; the arms were also slightly affected, the right more so than the left. A lump had appeared between the shoulders immediately after the accident, but without any formation of pus. Galvanism and iron had been used, and the man was gradually improving.

I saw, also, a case in which Ovariectomy had been performed on the previous day. The patient was aged fifty-one. The tumour was very large and multilocular, being full of pus-like matter. Mr. Parker made an incision four inches long near the pubes. He broke down all the adhesions, which were very numerous in the vicinity of the uterus. The pedicle sprang from the broad ligament, and was very short; it was tied with silver wire and was returned into the abdominal cavity; some vessels were twisted, others tied and also returned into the abdominal cavity. No mischief had followed the operation; pulse and temperature were moderate; ice and brandy were being given, and the patient was kept in a separate warm room. Mr. Parker had once before operated in a similar way, returning the pedicle with success.

The following cases of interest were also in the wards.

Dislocation of the Femur upon the Dorsum Ilii, in a boy aged 6, caused by a fall in consequence of a bigger boy jumping on to his back. It was reduced by manipulation under chloroform. Pulleys are seldom used here.

Fungus Hæmatodes in a woman aged 40, of healthy family. It grew

from the right side of the back, just above the crista illi. It was removed by deep oval incisions above and below the tumour.

Aggravated Psoriasis in a middle-aged woman, treated successfully by fifteen-minim doses of Donovan's solution three times a day, with tar ointment; neither remedy having been successful when used alone.

Lupus non Exedens in a robust well-made young woman (a farm servant.) There was no history of struma or syphilis. The lupus had first destroyed partly the cheeks and chin, but was then arrested by the application of a fresh compound of sulphate of zinc and sulphuric acid. It had reappeared, and was now attacking the tip of the nose. It was being treated in the same way as before.

KING'S COLLEGE HOSPITAL.

ANEURISM OF THE EXTERNAL ILIAC ARTERY.

(Under the care of Mr. HENRY SMITH.)

J. M., aged 33, compositor, a strong healthy-looking man, was admitted into Albert Ward on May 2nd, under the care of Mr. Henry Smith. The patient was in the Royal Marines, and stationed on the West Coast of Africa, and was invalided from the service for palpitation of the heart. He had been a moderately temperate man. He had had gonorrhœa, but not syphilis. Otherwise, he had always enjoyed good health. Twelve months ago, he first noticed a small swelling in the left groin, just above the centre of Poupart's ligament, which, he said, throbbed. The tumour afterwards gradually increased in size until Christmas, when it rapidly became larger and more painful. There was no history of a blow, no "arcus senilis," and the temporal and radial arteries had the normal feel. There was a hard pulsating tumour, of an oval shape, extending from within an inch of the root of the penis to within two inches of the anterior superior spine of the ilium, having its long diameter parallel to Poupart's ligament, and rather above it. It measured six and a half inches in length, vertically five inches. The fold of the groin was pushed downwards, and the tumour seemed gradually to disappear beneath Poupart's ligament. The leg was livid and œdematous, swollen to almost twice its natural size. The patient complained of numbness in the upper two-thirds of the thigh, and said that there was a sharp stinging pain confined to the centre of the tumour. The heart-sounds were distant and feeble. The patient had consulted one or two surgeons; but the tumour had evidently been mistaken for a bubo, being covered with iodine paint when he was first seen at the out-patient department.

May 13th. The swelling of the limb had almost disappeared, from rest; but the aneurism had not diminished.

May 14th, 2.30 P.M. *Operation.*—Under chloroform, Mr. Smith made a semicircular incision about six and a half inches in length; its lower three-fourths were parallel to Poupart's ligament, its upper fourth, more vertical, reached an inch and a half above the level of the anterior superior spine (to allow the common iliac being tied, if necessary). After carefully dissecting down, the peritoneum was reached, and stripped back from the artery, which was found quite healthy; the ligature was placed close to the bifurcation. This immediately arrested the pulsation. The wound was closed with four sutures, and a pad of lint was strapped on. The patient was slightly sick on his return into the ward. On being placed in bed, the left foot was bandaged in cotton-wool, and cans of hot water were applied. The patient suffered considerably from shock, the surface of the body and extremities being very cold for three hours after the operation. The temperature, however, rose rapidly after this time, and at 10 P.M. was found to be, in the axilla, 99.6 deg., between the first two toes of the aneurismal leg, 92.8 deg., between the first two toes of the sound leg, 99.4 deg.

May 15th. He had slept fairly during the night. There was no return of sickness. He complained of slight pain; this, however, was not increased on pressure. Pulse 108; temperature 101.4 deg.

May 16th. He had a good night. Pulse 112; tongue slightly furred. There was no tenderness about the abdomen. The temperature went up to 101.8 deg. this evening.

May 21st. The sutures were removed. The wound discharged freely. The patient had no pain. The tumour was free from pulsation. The bowels were not open. Pulse 84. He slept well.

May 29th. The ligature came away this morning, and a slight quantity of blood passed. He was very comfortable; there was no bad symptom.

June 8th. There was less discharge from the wound. He complained of numbness in the left foot.

June 27th. The patient was almost well. He had been up. There was numbness in the foot, which passed off after a walk in the ward. The appetite was good. There was no pulsation in the tumour, which was diminishing in size.

The chief interest in this case lay in the fact that, before the operation was undertaken, it was impossible to say whether it might not be necessary to apply a ligature to the common iliac artery. The size and situation of the aneurismal tumour rendered this a doubtful matter; and, as Mr. Henry Smith remarked after the operation, it was impossible beforehand to determine to what extent the aneurism had involved the external iliac artery above the precise locality of the tumour. He was prepared to find that the disease had implicated the whole extent of the artery; or, at all events, he thought that not unlikely, as in a case where Sir William Fergusson had operated in that theatre, the glands in connexion with the vessel might be so enlarged: not diseased as to form an almost insurmountable obstruction to a proper exposure of the external iliac; and thus he had so framed his incision as to permit the application of a ligature to the common iliac, if necessary. But, fortunately, it was found that the upper part of the external iliac was healthy, and that the ligature could be applied well below the bifurcation of the common iliac.

Although, from the large size of the aneurism, and from the patient being very fat, it was thought that the operation would be unusually difficult, the proceeding was accomplished with great facility; this, probably, was mainly due to the fact that the operator, by his very free external incision, gave himself plenty of room.

LONDON HOSPITAL.

CASES OF PLEURITIC EFFUSION, WITH REMARKS BY DR. SUTTON.

THE treatment of all diseases that are very common must always be of interest to the profession; and there are few diseases more common than pleurisy. If we compare the treatment of pleurisy as advised in standard works on medicine with what is seen in daily hospital practice, we cannot but be struck with the activity recommended in books, and with the mild, cautious, and, in many cases, expectant system pursued in several of our hospitals. In pleurisy, as with many other diseases, the rule would now appear to be to treat each case on its own merits; and this must necessarily be the case when we consider that the attack must vary with the cause of the disease; for instance, pleurisy excited by pyæmia will run a very different course from pleurisy supervening in the course of rheumatic fever. Pleurisy excited by tubercular abscess near the surface of the lung, tends to run a different course from pleurisy coming on at the end of scarlatina.

Case of free Pleuritic Effusion: Influence of Rest: Recovery.—There have lately been at the London Hospital several cases of pleuritic effusion which appear to us to be very instructive. In illustration of the expectant treatment of pleuritic effusion, we may mention a case that was recently under the care of Dr. Sutton. The patient, a man about forty years of age, was admitted into the London Hospital with large pleuritic effusion on the left side. He was ordered to remain in bed; and, with a view of satisfying him, half a drachm of a solution of acetate of ammonia was administered three times a day. The patient had no other medicine, nor any applications to his chest. The treatment was absolute rest, and he recovered remarkably well. This patient had been ill about two weeks before coming into the hospital. He complained of cough and shortness of breath. On examination, he was found to have a very large effusion into the left pleural sac. There was absolute dulness in the lower three-quarters of the left chest. Respiration was inaudible, excepting close to the spine and over the apex of the lung. Tactile vocal fremitus was absent. The heart's apex-beat was felt close to the right nipple; the other organs appeared normal. He remained in bed one month; and, at the expiration of that time, the effusion had entirely disappeared. Respiration was audible very distinctly all over the left side, accompanied by a friction-sound; the dulness had disappeared, and the heart had returned to its normal position. This patient left the hospital about five weeks after admission, convalescent.

Pleuritic Effusion: Treatment by Rest: Recovery.—A second case was a male, aged 16 years, who was in the London Hospital with well-marked evidence of one pleural cavity being almost full of fluid. The heart was very much displaced to the opposite side. With the exception of this effusion, the patient appeared healthy. He was ordered to remain in bed; no medicine was administered; nothing was applied to his chest; and the effusion entirely disappeared. In the course of six weeks he was discharged cured. Dr. Sutton has seen this patient several times since, going about quite well.

Pleuritic Effusion: Treatment by Rest: Recovery.—The third case was that of a middle-aged man in the Hospital, under the care of Dr. Ramskill. There was a large effusion on one side. He was ordered to remain in bed, and a little coloured sugar and water was administered. In a month he was convalescent, the effusion having disappeared.

REMARKS.—There have been other cases in the hospital of a similar kind. Dr. Sutton remarked that pleuritic effusion of recent origin which has come on within the last two, three, or four weeks, has thus been observed to disappear when treated by absolute rest, unaided by medicine or any external application; and the same thing has been seen where there was considerable but recent effusion into other serous cavities. Ascites due to cirrhosis of the liver disappeared in a patient who was in the hospital, and treated by rest only; and the patient was convalescent, and left the hospital in the course of a month. The same favourable result has been witnessed with pericardial effusion during the course of rheumatic fever. Dr. Sutton further said that, when we see that patients having recent pleuritic effusion may entirely recover in the course of a few weeks, without the aid of medicine or treatment excepting rest, it is a strong argument against the operation of tapping the chest, and this operation is very rarely required when the effusion is recent and consists of serous fluid. It is, however, urgently demanded, and must be done to save life when the effusion consists of pus.

The presence of pus is accompanied by difficult and frequent breathing; and experience has shown that the state of respiration is one of the best guides as to whether this operation is required or not. It is considered advisable to tap the chest when there is a large effusion and urgent dyspnoea; and, in Dr. Sutton's experience, it is sometimes requisite, in order to prevent death, to perform this operation when the breathing is very much embarrassed, although the effusion into the pleural cavity may be moderate in quantity. Dr. Sutton remarked that he had more than once been misled in being guided by the quantity of fluid, and not by the state of the breathing.

Moderate Effusion: Sudden Death: Question of Tapping.—Dr. Sutton related the case of a female, aged 43 years, who was admitted into the London Hospital on January 3rd, 1868. There was dulness in the lower half of the left side, with absence of respiration and tactile vocal fremitus. The heart was displaced. In the upper part of the lung, the respiration was puerile, and percussion clear. The patient was able to raise herself readily, and sit up in bed, but she seemed anxious to lie down. Breathing was quick and laboured; the face was not livid; the intellect was clear; pulse quick and soft. Seeing that the pleura was only about half full of fluid, it was not considered requisite to tap the chest. A linseed-meal poultice was applied to the side, and a small dose of opium was ordered, to procure sleep. During the night, the patient suddenly and unexpectedly died. The autopsy showed about forty ounces of pus in the left pleural cavity, and granular kidneys. The remainder of the body was healthy.

Small amount of Empyema: Great Constitutional Disturbance: Paracentesis: Recovery.—Great constitutional disturbance and difficulty of breathing may be caused by a small effusion of pus into the pleural cavity. This was seen in the case of a sailor under the care of Dr. Ramskill. He was very ill; the breathing was quick and laboured; his pulse was very quick. The patient was seen day by day propped up in bed, in a dreamy semi-delirious state, with sordes about the lips, and a high temperature. Each day he seemed to be growing worse. The physical signs showed slight effusion over the lower part of the left lung. There was dulness, with diminished tactile vocal fremitus and feeble respiration over the lower third of the left lung. The heart was a little displaced, but it was not to the right of the sternum. As this patient was almost daily becoming worse, it was considered advisable to tap the chest, and about fifteen ounces of pus were withdrawn. The patient improved after the operation; his breathing was very much relieved; and he expressed himself, after a few days, as feeling very much better and stronger. In the case of the female aged 43, as the physical signs did not show any great amount of effusion, it was not considered requisite to tap the chest. The case, however, showed that difficult breathing is a guide much more to be relied upon than the physical signs; therefore, in the second case, seeing that the breathing was very much embarrassed, although the physical signs showed a small amount of effusion, the patient was tapped, with marked and decided benefit. When there is great difficulty in breathing and constitutional disturbance, with a small effusion, and no other disease to account for such dyspnoea, we are led to conclude that the fluid in the pleural cavity is pus. In such cases, Dr. Sutton has a grooved needle passed into the chest, to ascertain if the effusion consists of pus; and when found to be so it is evacuated.

REMARKS.—*Empyema and Sudden Death: Hydrothorax: Disappearance of Effusion: How long Fluid should be allowed to remain.*—It is in cases where the effusion is purulent that death is seen to occur suddenly and unexpectedly. Death caused by acute and recent effusion of serous fluid in the pleura, is very rare excepting as a secondary affection coming on in the course of Bright's disease, or some other organic change. Dr. Gairdner, *Clinical Medicine*, page 374, states that, during eleven years' Hospital practice, he had only seen two

persons suffering from acute pleuritic effusion die. Experience, therefore, appears to show that in some cases a large pleuritic effusion will entirely disappear in the course of five or six weeks, and leave the patient, so far as we can estimate, sound. In other cases, the absorption of the fluid is very slow, and at the end of six or eight weeks there is very little change. In such instances, the question arises, Is it safe to allow the fluid to remain longer, for it may act as an irritant, and excite in the pleura a renewal of the inflammation; the lymph effused may become organised, contract and compress the lung; and in this manner the patient may be permanently damaged. In the treatment of pleuritic effusion, therefore, the most important question is, how long is it safe to allow a large quantity of fluid to remain in the pleural sac without irreparably injuring the lung? The cases referred to as having been under the care of Dr. Sutton, were examples of acute pleurisy with effusion of a few weeks' standing. There was no other appreciable disease of the body. Such are the cases that do well by rest. It will probably be admitted that no one can define what length of time a quantity of fluid may lie in the chest without injuring the lung; for it is remarkable that a large quantity may exist for three or four months, and, after this time, the fluid may gradually disappear, the lung expand, and the patient apparently recover. While recording that such is the fact in a case now and then, it will, perhaps, be allowed that the pleura more frequently becomes greatly thickened when fluid has remained in the chest several months.

Question of Paracentesis.—Considering that the pleura is very liable to become thickened, and the lung bound down in these chronic effusions, some physicians have strongly advocated tapping in an early stage of acute pleurisy. Other physicians, considering that great danger might arise in consequence of air being admitted into the pleural sac, strongly oppose the operation of letting out the fluid. To what extent this danger really exists, has never been clearly defined; and there is strong evidence indicating that the pleura may be tapped and air admitted without any ill effects following. There are the well-known cases of Dr. Hamilton Roe. He operated in twenty-four cases, and a considerable quantity of air entered during the operation in several of them, and in not one case did any evil effects follow. Dr. Bowditch operated in twenty-six cases in which the fluid was serous, and twenty-one made good recoveries.

A Remarkable Case of Pleuritic Effusion: Paracentesis performed eight times: Remarks.—A very instructive case is recorded in the *Post Mortem Register* of the London Hospital. A patient was on several occasions under the care of Drs. Davies, Ramskill, and Sutton. This patient was a policeman, and was treated by Mr. Rolfe, who very kindly sent the case to Dr. Sutton, at the Chest Hospital, Victoria Park. The pleura, in this case, was eight times tapped. About one hundred and fifteen ounces were removed on the first occasion; and, on the six subsequent tapplings, from 115 to 130 ounces of fluid were removed; on the eighth occasion, 150 ounces were drawn off. The fluid removed on the first occasion was turbid serum, which, on allowing it to stand, and placing the sediment under the microscope, was found to contain pus-corpuscles; and, on the eighth occasion, a similar fluid was withdrawn. An ordinary trochar was used in the operation, and air entered freely each time; yet, this turbid serum did not become converted into thick pus, nor did the admission of air alter the fluid. It was the same when last withdrawn, as on the first occasion, before any air had entered the pleura. For the sake of brevity, we refrain from giving the details of the case, and confine ourselves to the following observations of Dr. Sutton.

When a large quantity of fluid has been present in the pleural cavity for many months, the parietal and visceral pleura usually become much indurated and thickened. In the case of this patient, who was tapped eight times, both these layers of the serous membrane were converted into a firm, hard, tough, fibroid substance, an inch in thickness. This was the case immediately under the ribs over the lung, and the pleural sac was converted into a large cavity with thick indurated walls. In consequence of this induration and thickening of the pleura, the lung was bound down, and it was impossible for it to expand; therefore, in such cases there is no hope that the lung will ever be able to resume its functions; and it is useless to let out the fluid with the hope that it may do so. The fluid accumulates—and it was so with this patient—in such large quantities that it displaces the heart, encroaches upon the opposite lung, and threatens death by apnoea; therefore, it is necessary to tap the pleural cavity to relieve most urgent distress, and often to ward off immediate death. It is difficult to say how many times a chest may not be tapped. It was, however, observed in this patient, that the fluid increased in quantity, more was removed at each operation, and his power of endurance became each time more feeble; so that the operations distressed him more and more, and it was evident that to go on in that course would certainly lead soon to his death. It

was deemed, therefore, advisable to keep the pleural cavity continually open, and by this means to prevent the fluid from accumulating; and it was hoped that the walls of the sac would gradually contract, and the empyemic cavity be closed. Before this occurred, however, the patient died. It may be instructive briefly to consider what this case appears to show, should be our proceedings in any future similar case. It is clear that, in order that the empyemic cavity may be closed, one of two things must occur; either the lung must expand—which in this case was impossible—or the chest-wall must fall in. To bring about the latter, the cavity must be emptied of fluid and air, and then the pressure of the external atmosphere would gradually press in the ribs, and the walls of the cavity would be brought together, adhesions would probably take place, and in this manner the sac would be occluded. It is, therefore, necessary to create a vacuum. If, however, the cavity be filled with air—that is, air allowed to enter in the act of tapping—then the external pressure of the atmosphere is counterbalanced by the internal pressure of the air in the sac. It would then appear that we ought to draw off a portion of the fluid, and not let in any air; then, a week or so afterwards, draw off another portion; and thus by degrees the ribs would be pressed inwards and the cavity be closed. It was hoped that with this patient the indurated pleura would contract, and that this would be promoted by preventing the fluid from accumulating. It is clear, however, that contraction sufficient to obliterate an empyemic cavity having very thick walls must be a very slow process indeed, and may probably take many months, for we know that fibroid tissue contracts very slowly. In the meantime, the presence of air excites chronic suppuration on the internal surface of the sac, and the patient, worn out by a very exhausting discharge, may die of asthenia before the sac is obliterated.

REVIEWS AND NOTICES.

A TREATISE ON THE DISEASES OF THE EYE. By J. SOELBERG WELLS, Professor of Ophthalmology in King's College; Ophthalmic Surgeon to King's College Hospital; etc. Second Edition, with Coloured Plates and Wood Engravings. J. Churchill and Sons. London: 1870.

WE congratulate the author on the form in which this book is presented to the public. The print is remarkably clear; the woodcuts are fairly numerous and well selected.

The way in which the former edition was welcomed, as shown by its rapid sale, almost renders any commendation from us unnecessary. It has not only had a large circulation at home, but the author tells us that the work is in course of translation into French and German. This second edition follows the former one in a little more than twelve months, so that there has been comparatively little to add in the way of new material. We see, however, that Mr. WELLS has thoroughly revised the whole; and we recognise greater completeness and clearness as a consequence. Rather more than fifty pages have been added, and about a dozen new woodcuts.

Under the head of Sympathetic Ophthalmia, a very interesting case is introduced, which occurred in the author's practice, and in which an interval of twenty-six years intervened between the loss of the one eye and the "sympathetic" affection of the other. The blind eye was removed, and a piece of metal was found imbedded on the inner surface of the sclerotic, in degenerated retinal tissue. The patient appears from the narrative to have had an attack of sympathetic iritis seventeen years after the accident, for which iridectomy was performed. He then followed his employment till the subsequent attack, nine years later. After the excision, the remaining eye became quiet.

At page 268, an account of Dr. Weber's plan of linear extraction of hard cataracts, without iridectomy or the use of a traction-instrument, has been added.

Embolism of a branch of the central artery of the retina within the eyeball has received notice at page 358. This is met with in certain cases of total loss of vision over a part of the field only.

Besides the optic neuritis from mechanical obstruction to the circulation, and that due to a secondary inflammation of the optic nerve, Benedikt suggests another form (p. 403), arising from neurosis of the sympathetic. Galvanism of the vaso-motor nerve has been found useful in such cases.

At page 407, an account of Leber's views on a form of retro-ocular neuritis attended with circumscribed central scotoma is given. The changes described are occasionally met with in this country in the so-called tobacco-amaurosis, being limited to the outer half of the disc. Leber says they are met with in drunkards and smokers; very rarely in women.

Among other additions, as evidence of careful revision, we note at

page 417 an interesting case of injury to the optic nerve; at page 46, views as to the cause of colour-blindness. At page 571, Mr. Couer's test for the diagnosis of mixed astigmatism by the aid of the mirror alone is fully noticed. In such cases, an erect image can be obtained in one meridian, and an inverted one in the other.

A successful case of removal of exostosis from the frontal sinus is given at page 709.

We have purposely restricted our attention to the changes introduced into the new edition. Of the work as a whole, we may unreservedly say that for English students and practitioners it is certainly the standard book on its subject. It is very complete, and the descriptions are clearly and interestingly written.

NOTES ON BOOKS.

Twenty-fifth Annual Report of the Medical Superintendent of the Lunatic Asylum for the Counties of Salop and Montgomery. 1869.—We learn from this Report that the Asylum arrangements generally are in a fairly satisfactory condition. The number of admissions in 1869 was unusually high; and the Resident Medical Superintendent complains of the dislike of friends to send patients in the early stages of insanity as a great cause of permanent overcrowding of asylums. He considers that only 13 per cent. of last year's admissions are curable. One patient, an epileptic idiot, had been treated in a horribly barbarous manner by his parents. Criminal proceedings were begun against the father, but not carried through to any adequate result. Of the admissions last year, 22 per cent. showed inheritance as a predisposing cause; and in several cases the parents or relatives of insane patients had previously been inmates of the same asylum. Earth-closets have been partially introduced; and Mr. Ley speaks in terms of high approval of the plan, as free from the annoyances caused by constant blocking of pipes, etc., with rubbish thrown into the pans by mischievous patients.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

DR. RANSOME'S CHEST-RULE.

MESSRS. WOOD of 74, King Street, Manchester, have sent us a description of Dr. Ransome's chest-rule—a simple and portable little instrument by means of which the distance, in inches, of any part of the surface from the median line and from the top of the sternum (or other point) may readily be ascertained. It is intended to accompany Dr. Fairbank's clinical note-book, the measurements being marked off on the diagram-plates (Dr. Bright's) of the body contained therein.

A NEW INHALER.

MESSRS. MAW & SON have supplied us with a description of Dr. Corell Mackenzie's new "Eclectic Inhaler". It is believed that this apparatus combines, in a manner hitherto unattained, the qualities necessary for a perfect inhaler. It holds a considerable quantity of water, and has a large chamber for mixed air and medicated vapour; it can be kept at a nearly uniform temperature for a considerable time; it requires but little effort on the part of the patient, and it may be employed either in the sitting or recumbent posture.

The inhaler will probably be exhibited at the annual meeting of the Association, when members will, no doubt, be able to inspect it.

TESTIMONIAL TO DR. WARD, OF HUNTINGDON.—On June 23rd, Dr. Ward was presented with a testimonial, consisting of a silver taret-jug, four silver egg-cups and spoons, and a purse of two hundred and sixty-five sovereigns, together with a handsomely bound and illuminated list of subscribers. The jug bears the following inscription:—Presented to Wm. Ward, Esq., M.D., with a purse of two hundred and sixty-five sovereigns, by his patients and friends, as token of their regard and esteem on his retirement from a practice of upwards of forty-five years in the county of Huntingdon. June 10th, 1870."

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Monday, 11th July, 1870.

1. *Increased Mortality from Small-pox.*—2. *Mortuary Statistics of Paris and London compared.*—3. *Diarrhoea in Paris and London.*—4. *Increased Hospital Accommodation for Small-pox Patients.*—5. *Proposed Medical and Scientific Club for Students.*—6. *French View of the Edinburgh Midwifery Job.*

INCREASED MORTALITY FROM SMALL-POX.—With deep regret—not with surprise—I have to state that there was last week an increase in the mortality from small-pox, the deaths for the week being more numerous than during any previous week since the beginning of the epidemic. In the week ending Friday, 8th July, 267 persons died in Paris from small-pox. The total mortality, however, for the week showed a decrease of 101 from that of the previous week: it amounted to 1119, having been 1220 the preceding week.

MORTUARY STATISTICS OF PARIS AND LONDON COMPARED.—Subjoined is a comparative view of some features in the mortuary statistics of Paris and London for the latest weeks.

Cause of Death.	Paris : Week ending 8th July.	London : Week from 26th June to 2d July.
Small-pox	267	12
Scarlatina.....	19	80
Measles	13	42
Typhoid Fever	19	12
Typhus.....	—	8
Erysipelas	4	6
Bronchitis	47	56
Pneumonia	73	41
Diarrhoea.....	27	192
Dysentery	2	2
Cholera	4	12
Membranous Sore-throat ...	7	6
Croup	5	5
Puerperal Affections	9	6
Other causes	623	879

Total 1119 1359

DIARRHOEA IN PARIS AND LONDON.—Though diarrhoea has lately been very much less fatal in Paris than in London, it is at present a decidedly prevalent malady here. During the last few days, I have seen and heard a great deal of diarrhoeal cases, some of which were very severe, and accompanied by cramps and algide fits. They were generally of short duration, recovery being completed in two, three, or four days. A solution of camphor in chloroform, administered in a mucilaginous vehicle, formed a prominent, and, I think, signally useful part of my treatment of some cases of this description, which for a short time had a rather alarming aspect. Purging, vomiting, and cramps, seem all to moderate after from three to six hours' administration, at intervals of half an hour, of such a potion as I refer to.

INCREASED HOSPITAL ACCOMMODATION FOR SMALL-POX PATIENTS.—The superior powers are not of accord with M. Husson as to there being an abundant supply of hospital accommodation for the victims of the present epidemic. It has been officially announced that, "in consequence of the insufficiency of hospital accommodation for small-pox cases", the Minister of War has placed at the disposal of the "administration des hospices" three military stations in the line of the fortifications which encircle Paris. These stations are in airy situations; and each of them is capable of containing 130 beds. The significance of this announcement will be better understood by considering it in conjunction with some remarks on hospital arrangements contained in my last letter. (See JOURNAL for July 9th, p. 49-50.)

MEDICAL AND SCIENTIFIC CLUB FOR STUDENTS.—An admirable antidote to folly and turbulence is being concocted in the Latin Country. There is a project of forming for the benefit of the medical students of Paris an institution with aims and tendencies very similar to those which characterise or did characterise the "Royal Medical Society of Edinburgh," by far the oldest, as well as by far the best, medical students' society which ever existed. To a certain extent I must be held as speaking of the past, and of "the Society" as I knew it when a student. No doubt it is an admirable institution still; but I am told by recent Edinburgh students that it is not what it used to be, before in-

ordinate compulsory attendance on lectures and cramming for weekly class examinations on Saturdays obliged the student to devote his Friday nights—not, as of old, to renovation of mind and body and sober sociality—but to dismal grinding. Thirty-five years ago, the old hall in Surgeon Square was on Friday nights, from November to May, the social and scientific arena of the thinking, hard-working medical students of Edinburgh. Downstairs, for those who wished a comfortable meal of tea and cake seasoned by scientific argument, puns, songs, and frisky fun of infinite variety, there was the coffee-room—admittance, one shilling! Upstairs there were the “private business” of the Society, “communications,” and the debate of the night. There was, in fact, something attractive for all sorts and conditions of men and moods. Many, many of the joyous young fellows who, from 1834 and onwards for some years, made these Friday nights so charming, so deliciously renovating, became useful and great men, did life’s work right well, and then died: some of the old party are still tugging at the oar. But, alas! where are John Reid, James Duncan, James Y. Simpson, John Goodsir, Mortimer Glover, Martin Barry, and the brothers Newbigging? “Down among the dead men,” solemnly to recall words which they have all often listened to in the joyous chorus of masters and fellow-students. Yes, they are all down among the dead men; but they are not really dead to some at least of the living residuc, and this is the point for which I have been making. To have intimately participated in social and scientific condiscipular fraternity with them and other such men dead and living, when life in them and us was young and bright with sunny dreams, is something for which to be profoundly thankful. Those who sympathise in these reminiscences of the dear old hall in Surgeon Square will understand how much benefit may be conferred upon the rising race of French medical men by the project now being matured among a few of the *élite* of the medical students of Paris, to form “un cercle médical et scientifique”—a medical and scientific club—for the medical students of Paris.

The temporary offices of the proposed club are at No. 2, Carrefour de l’Odéon, where M. Lhéritier, student of medicine, attends daily from two to four. The following is the translation of a statement of the objects contemplated, as published by M. H. P. Leclerc, student of medicine.

“1. To afford to students facilities for mutual instruction; means, for example, for holding classes preparatory for the various graduation examinations, the competitive examinations for the *internat* and *externat*, and for meeting to discuss the scientific questions of the day.

“2. To form a library, to contain new books and periodicals as soon as published.

“3. To organise a large waiting-room, where students may be able to ascertain what are the cases of greatest interest in the different hospitals and in private practice; where, at all hours, physicians and surgeons may find students ready to watch patients and assist in operations.

“4. To constitute a scientific society, before which any member can bring a discovery, a new idea, or a question of interest.

“5. To create a centre of scientific emulation, as a counterattraction to the gaming-house and the *café*.”

Should M. Leclerc and his friends succeed in their enterprise, they will unite under one roof an intellectual gymnasium, a resort for study, and a centre of solidarity, which will tend more effectually than any governmental scheme which could be devised to elevate student life in Paris, and purge it of its worst humours.

FRENCH VIEW OF THE EDINBURGH MIDWIFERY JOB.—After announcing the scandal recently perpetrated at the expense of the University of Edinburgh by the famous four municipal magnates, the *Journal des Connaissances Médicales* adds: “L’opinion médicale avait pour candidat le docteur Mathews Duncan, très-célèbre professeur libre d’accouchement. Mais on est à notre époque très-heureux d’être le neveu de son oncle; cela sert des deux côtés de la Manche!” In the same paragraph, the newly elected professor of Midwifery is spoken of as “un jeune homme très-peu connu, le docteur Alexandre Simpson, neveu de son oncle, feu baronet Sir James Simpson.” Thus four stolidly daring Edinburgh shopkeepers have made the University of Edinburgh a laughing-stock here as elsewhere. Butler was quite right in rhyming that—

“Authority intoxicates,
And makes mere sots of magistrates:
The fumes of it invade the brain,
And make men giddy, proud, and vain.”

Ergo, Edinburgh magistrates ought not to be patrons of Edinburgh University chairs.

THE PROPOSED BANBURY INFIRMARY.—The donations now amount to £960 : 5 ; the annual subscriptions to £401 : 13.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 16TH, 1870.

BRITISH THERAPEUTICS.

III.—COLD AND COLD-BATHING.

FOR practical purposes, it is convenient to say that the human body is made up of three elements—nerves, blood-vessels, and cells. Through any of these disease may be originated; and by acting on any one of these the physician may alter or control the morbid process: but he must never forget that, although fairly good examples of disease resulting from one only of the three may with search be found, yet it is more common to have all of them involved at once. Their mutual relations are most intricate. The man who attempts to explain all disease on exclusive doctrines of humoral pathology, or neuro-pathology, or cell-pathology, commits a manifest absurdity; and the danger of error is but less in degree when we allow ourselves even in individual cases to believe that only one of these three essentials of the organic whole is implicated.

Still this rough analysis is very useful, and will help us to clear views not only of many diseases, but of the action of many remedies. In all inflammations, cells, blood-vessels, and nerves, are factors; in most cases one more than the others; and in all it is to these that our remedial measures must be addressed—in most to one more than to others. To no therapeutic agents do these remarks apply more strongly than to that giant influence known as HEAT; one which may be made to work the most diverse and seemingly contradictory effects by special modifications in the mode of its application.

We have to say a few words to-day respecting the employment of its apparent opposite, COLD; and in doing so shall have to speak of it as a repressor of cell-growth, a restrainer of blood-supply, and an agent enjoying special influence on nerve-function.

The revival of the cold-water treatment of fevers, which has recently occupied so much attention on the Continent, has been discussed twice during the last few months in our own pages, and at considerable length. Although originally of English origin, it does not appear as yet to have secured many advocates amongst our present race of physicians. It is here used chiefly as a refrigerator, to abstract the heat which is such an important agent in the pyrexial processes. We do not purpose now to advert to it. Nor shall we say much more respecting the local employment of cold for the prevention or control of the inflammatory process. In 1861, the New Sydenham Society translated an able practical paper by Esmarch on this subject, and for a time the use of ice was very fashionable indeed. To a considerable extent it has held its ground; and there can be no doubt that the Kiel Professor has the credit of having drawn our attention to a very useful method of cure. We do not mean that the whole credit is due to him, but he certainly may take a large share. In most of our hospitals, ice-bags are now in constant requisition. We believe we may report that they

are now employed chiefly for wounds of joints, wounds of the abdomen or pleura, injuries to the head, and for the reduction of hernia. In all these cold is used continuously; and in all, excepting the last, the object in view is to prevent, by refrigeration, the tendency to excessive cell-growth. A secondary object, which also itself helps to the same end, is to keep blood-vessels empty. With these designs, the ice-bag is often kept directly on the inflamed part for weeks together. Experience has shown that this plan is not without its special dangers in some cases. In compound fractures, it may cause the skin to slough; and in large herniæ in thin persons it may chill the intestines and produce fatal collapse. In a majority of cases, however, it acts admirably, and not a few joints have probably been saved from destructive suppuration by its employment.

The application of heat and cold to the spinal column, with the object of influencing the vaso-motor nerve, and thus regulating the supply of blood to inflamed, congested, or irritated parts, has been earnestly advocated by Dr. Chapman. We may presume, however, that the profession has for the present obtained as much information as it desires in this important part of our subject. We hasten to one of yet wider interest, and which especially concerns us at the present season.

The uses of cold-bathing simply as *cold-bathing* are probably not rated amongst us at nearly their true value. It is very widely believed that whilst sea-bathing invigorates, bathing in fresh water is merely a hot weather luxury, and does little or nothing for health. So strong and almost universal is this creed that we cannot much wonder that it has led to the neglect of many natural conveniences for the employment of cold fresh water. This has possibly resulted from some misapprehension as to the reason why sea-bathing is such an excellent tonic. Is it not probable that the salt in the water has less to do with its efficiency than has its temperature? The sea, whilst it never gets very cold, so also rarely gets really warm; and its saline constituents probably at all temperatures increase its power as a conductor of heat. We make no dispute that the effect of salt on the skin is useful, that it probably acts as a gentle excitant of the gland-functions, and that its presence increases the after-glow of a bath; but we cannot still resist a suspicion that the cold has, after all, more to do with the result. Sea-bathing at midsummer and on shallow coasts where the water becomes positively warm, does no sort of good in comparison with that taken in autumn, or still better, for those who can stand it, in winter itself. In summer, it is a luxury; in autumn, it is life-giving. If it be true that it is the cold which chiefly helps, then it seems a great pity that for the thousands who cannot get to the sea-side, we do not systematically utilise the numerous cold springs which abound in many parts. We speak on behalf of those who bathe really for the sake of invigoration, not for other objects. Many of these might, with a little management, secure near to their own homes and all the summer long most of the advantages which sea-bathing would give them. The erection of baths in suitable positions for securing coldness of water is all that is wanted. In many hilly districts, such could easily be made near to the rise of streams without resort to artificial means; and in many others, probably nothing more would be wanted than ordinary well-sinking.

The effect of cold immersion as a tonic is probably mainly on the blood-vessels and nerves, and principally on the former. It secures the temporary contraction of all structures to which it is applied; and amongst others, of the coats of the arteries. This effect is well exemplified in the contraction of the dartos of the scrotum and of the erectile tissue of the penis, which invariably follows its use. If it be too prolonged, the skin is left pale, with its follicles prominent (*cutis anserina*); the lips, nose, and hands, are mottled or blue with venous congestion. In further proof of the existence of arterial spasm, we may note the dilated pupils, the small and feeble pulse, the sense of discomfort, and finally the tendency to shiver. All these are met with also during the well-marked rigors which occur in pyæmia, in ague, and the like. The circulation is clearly placed under great difficulties, in part from the shutting up of the arteries by muscular spasm, and in part perhaps by the benumbed

condition of the peripheral cell-elements which no longer supply their usual *vis a fronte*: hence the effect displayed by the veins. By no means let us forget that this contraction of the arterial trunks is brought about in part through the direct influence of the cold, but mainly, probably, indirectly through that of the vaso-motor nerves. Now to many of us a slight degree of this influence is just what we want. Our arteries have become relaxed, our vaso-motor nerves out of tone; various parts of our nervous system, from too long use, are fatigued and blood-laden, and a resultant sense of lassitude and discomfort, with local aches, is experienced. Upon such a state, a cup of strong tea will (provided none have been taken for a considerable time) act like a charm, removing at once the sense of weariness, the aches, and the desire to sleep, and restoring in fact "the balance of the circulation". But it will not do it with the same efficiency, nor with the same good after-results, which a cold plunge will attain; and if it have recently been resorted to, it will be useless to try it again. Nor is the effect of the bath so transitory as would be that of the tea. It invigorates permanently; and the more frequently it is repeated, in reason, and with reason, the more good it does. Perhaps we might venture to consider that cold thus used is a sort of gymnastics to the vaso-motor nerve and to the structures supplied by it. Perhaps successive temporary contractions and relaxations of the arterial system increase the vigour and nutrition of the muscular fibres concerned. Such an explanation would account for the fact that cold-bathing long persisted in is the very best means of improving "a feeble circulation". Thousands suffer through life from the inconveniences of cold hands and feet without adequate cause, inability to bear slight exposures, liability to take cold, and a state of general unfitness for half the enjoyments of life, who might get rid of a large part of their troubles by a systematic perseverance with the cold-bath.

It is needful to recollect that it is the shock which does the good. It is upon the blood-vessels and nerves that you want to act; and nothing would be more hurtful to such states than refrigeration carried to the extent of depressing cell-growth. You must not attempt to substitute chilling for shock. To gain the full benefit of the shock, several points require attention. It should be sudden, and it should be considerable. It should never be applied excepting when the body has been previously heated either by exercise or by external means. Nor should it ever be used excepting when there is a certainty that reaction can be secured. Every one who has tried sea-bathing on warm shores must have found that he could in no way make prolonged immersion serve the purpose of shock. No doubt the time during which it is desirable to stay in must be regulated somewhat by the temperature. Even in very cold water a strong person does not get enough by a momentary plunge; and if it be only moderately cold, a few minutes may be absolutely necessary. But all beyond this is for enjoyment and not for health. After a long swim, however pleasant it may have been, you come out limp and relaxed, and experience little if any bracing effect. If really cold-bathing be attempted in the open air, it should be in midsummer weather or after vigorous exercise; and either free exposure to sun-heat or more exercise should follow it. To the fairly vigorous these precautions are less necessary; to the feeble they are essential. Cold-bathing in doors should be conducted with the same precautions. The room should be very hot, the water very cold, and under such conditions the most weakly may, with management, be brought to derive benefit from the shock.

As regards sea-bathing for those of feeble power of reaction, it is much to be regretted that no better provision has as yet been made than the uniformly comfortless bathing-machine. Confined in one of these damp sunless boxes, the invalid but too often loses, during the process of dressing, the slight reaction which had at first been attempted, and finally creeps down the steps with chattering teeth and blue lips. Surely in these days of enterprise in behalf of health, it is not too much to hope that some one will devise means of artificial warmth during dressing for those who like to pay for it, or perhaps for the admission of the sun without loss of privacy; or, failing these, it would be an

excellent plan to serve out coffee on the beach, a cup of which taken hot before dressing would often turn the corner as regards good reaction. As a last resource, we have alcohol. As cold contracts blood-vessels, so alcohol relaxes them. They are for some purposes direct antagonists. Nothing so efficiently relieves the effects of intoxication as cold; and conversely, nothing so certainly arrests the shivering, etc., of arterial spasm as alcohol. The provision of a little brandy-and-water for use before dressing would be a very legitimate expedient in exceptional cases.

If very cold water be not obtainable, the good effect of shock may sometimes be obtained by using the water by way of affusion instead of immersion. There is no more luxurious mode of bathing than sitting under a waterfall; and even when the water is only moderately cold, the head and spine may in that way be quickly and very thoroughly cooled. Many a hill-stream in England might easily be utilised in this way, and at little expense. Baths might be constructed which ladies and children, as well as men, might use with the greatest benefit to health. In midsummer a temperature of from 50° to 54° is not too low.

Nor is water the only medium by which cold may be brought into useful contact with the body. We are accustomed to neglect also far too much the bracing influence of cold air. In the English climate, cold so often includes damp and wind, that there is perhaps some excuse for the general neglect of its virtues. The Canadian, who enjoys a dry still atmosphere, thinks nothing of walking out from his room into a temperature 100 deg. Fahr. lower without increase of clothing, and finds it bracing rather than hurtful. With us there is little room to doubt that much constitutional debility might be benefited by habitual exposure occasionally, and for short periods, to low temperatures, care being taken that the body is first well warmed. Again, it is the shock of sudden change which is wanted, not the effects of real chilling. Franklin recommended the use of the cold-air bath—that is, of exposure naked to the external air, or in a cool room; and, did not decency too often forbid, it is not improbable that his example might have obtained more imitators.

THE MEDICAL BILL.

THE Bill was read for the first time in the House of Commons on Wednesday, and the second reading was to take place on the following evening. We shall give the result next week.

The opinions of reformers will be divided as to the expediency of accepting half a loaf or none. Almost all approve the Bill so far as its main principle goes; and almost all disapprove of its great omission—the absence of reform of the Medical Council. Further, very many regard the object of the Bill as practically neutralised by the changes made with regard to the eighteenth clause. Those who are sanguine as to the speedy introduction of another Bill, if this be rejected, will be in favour of opposing it. The latter course has been decided upon by the leading members of our Association, as will be seen by the appended letter. Others, less hopeful of getting the Government to again undertake the work, or of success for the attempt in private hands, will prefer that the present defective measure should pass now, and that a separate one for reform of the Council should follow it. The following is the letter to which we have above alluded.

“13, Newhall Street, Birmingham, July 13th, 1870.

“DEAR SIR,—A crisis, as you are doubtless aware, has arrived in regard to medical reform, when the action of the British Medical Association is imperatively required, if the great object of Direct Representation in the General Medical Council is to be attained.

“‘The Medical Act (1858) Amendment Bill’ has passed the House of Lords, leaving the composition of the Medical Council untouched, although several of the Bodies now represented in that Council must necessarily become *effete* under the working of the Act, while the registered medical practitioners, as a body, have no voice whatever in the election of its members.

“Under these circumstances we urge upon you the importance of petitioning the House of Commons to prevent the passing of this or any Bill which does not recognise this great principle.

“With that view we forward a form of Petition for your guidance, which must be written on one side only of a sheet of paper; and we shall feel further obliged if you will kindly obtain as many signatures in your neighbourhood as you possibly can.

“The Petition should be presented by one of your local Members of Parliament; or if you prefer it, you may forward it to the General Secretary. Not a day should be lost in taking action.

“CHARLES CHADWICK, M.D., President of the Association; EDWARD CHARLTON, M.D., President Elect; W. D. HUSBAND, F.R.C.S., President of Council; R. W. FALCONER, M.D., Treasurer of the Association; EDWARD WATERS, M.D., President of the Direct Representation Committee; T. WATKIN WILLIAMS, F.R.C.S., General Secretary.”

“To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

“The humble Petition of the undersigned Registered Medical Practitioners residing in ——— and its neighbourhood—Sheweth:

“That a Bill has been brought into your honourable House intituled ‘The Medical Act (1858) Amendment Bill,’ and that no provision is therein made for the Direct Representation of the Profession in the General Medical Council; your Petitioners pray your honourable House not to pass that or any other Bill unless provision be therein made for such Direct Representation of the Profession in the Medical Council; as a Medical Council otherwise constituted will not possess the confidence of the Profession, without which the efficient working of the Medical Act will not be possible.”

THE EDINBURGH MIDWIFERY CHAIR.

THE large and influential attendance at the meeting held in London on Monday last must be a matter of gratification to those interested in the welfare of the Edinburgh University. From the circumstances of the case, it was feared by a few that the meeting would develop itself simply into an indignation meeting and nothing else, and that the speakers would be led to make personal statements foreign to the real objects for which they were called upon to attend. This, however, proved not to be the case, few personal allusions being made, further than was necessary to shew that an injustice had been done to the University by the Court of Curators in refusing to appoint the best candidate. The business transacted was simply an unanimous protest against the present mode of election by the Court of Curators constituted as it now is, and the expression of the urgent necessity for reform. The meeting wisely limited itself to this, and did not discuss the various suggestions offered for the reconstitution of the elective body. This is a question which is naturally engaging very great attention, and will no doubt be fully discussed before and at the next meeting of the University Council. It is one which affects not only Edinburgh, but the other Universities in Scotland. Could we always depend on a good and independent Crown official, one responsible person on whom all wrath might be centred should he fail to exercise his power in the best interests of the University, no doubt the best possible appointments would generally be made; but this we could not always depend upon, and it is better to secure a Court as representative of various interests as possible, sufficiently numerous to prevent cliqueism, but at the same time limited, so as to make each individual member feel himself responsible to the public. We hope to return more fully to this subject at an early date.

ST. MARY'S HOSPITAL has been presented with a second donation of £1000 by D. T. H.

THE Queen has been pleased to appoint Dr. G. Burrows one of the Physicians-Extraordinary to Her Majesty.

MR. WEEDEN COOKE has resigned his appointment as Surgeon to the Royal Free Hospital.

MR. THOMAS STONE has resigned his office as Resident Surgeon at Christ's Hospital, after having held it thirty-five years.

A TRUE bill has been returned against the father and mother of the Welsh Fasting Girl.

THE French journals announce the probability of a very abundant chestnut harvest, and that it will go far to supply the expected deficiency of corn.

DR. GIBB of Newcastle-on-Tyne has resigned his office in the acting staff to the Infirmary of that town, and has been elected to the post of Extra Consulting Surgeon in recognition of his long and much valued services.

HOSPITAL RELIEF.

THE Committee appointed to inquire into hospital out-patient administration have advanced so far in their work that they will be in a position to present their report on Tuesday.

"SCIENTIFIC OPINION".

THE last number of this journal, which has been ably edited by Dr. Lawson, has appeared. It is now incorporated in the *English Mechanic and Mirror of Science*.

UNIVERSITY COLLEGE HOSPITAL.

THE male accident-wards of University College Hospital are about to be completely dismantled, and the walls and ceilings re-covered with Parian cement. The alterations will cost nearly £300, the greater part of which has been most liberally presented by Sir Francis Goldsmid.

ST. ANDREW'S MEDICAL GRADUATES' ASSOCIATION.

THE summer session of this association was held at Windsor on Thursday, July 7th. After transacting the business of the Association, the members went over the Castle, and then visited Eton College, where the Provost (Dr. Goodford) most courteously received them, and pointed out the many objects of interest in the library. At the dinner in the evening, Dr. Richardson was in the Chair.

ROYAL COLLEGE OF SURGEONS.

PERHAPS few Presidents of this institution have passed through such an eventful year of office as the gentleman whose term expired on the 14th instant. Mr. Edward Cock has seen great changes within and outside the walls of the College, and the commencement of still greater parliamentary changes likely to affect that and kindred institutions. During Mr. Cock's presidency, the College has been for the first time freely opened to its Fellows and Members for the discussion of "momentous questions". When more than one speaker has indulged in language calculated to ruffle the equanimity of any chairman, how courteously and how gentlemanly Mr. Cock acquitted himself is known to all. On his laying aside his presidential robe on Thursday, the whole body of the Council felt how much he had deserved the vote of thanks conveyed to him. Sir William Fergusson, Bart., F.R.S., was elected President, and Messrs. George Busk, F.R.S., and Henry Hancock, Vice-Presidents, for the ensuing year. Mr. S. A. Lane, of St. Mary's Hospital, expressed a wish not to be put in nomination.

MEDICAL CLUB.

AN Extraordinary General Meeting of Members was held on Wednesday last in order to consider two projects for increasing the subscription paid by the original members of the Club. Sir W. Fergusson, Bart., was in the Chair; and the attendance was large. After a long discussion, it was unanimously resolved—"That for the future the subscription payable by members shall be five guineas and three guineas for town and country respectively. Members whilst abroad shall pay only one guinea a year, but on their return to this country shall pay the full subscription of ordinary members; or, in lieu thereof, half a guinea a month for each month, or portion thereof, during which they may make use of the Club." The new terms will come into force next year; and the subscriptions, payable on 1st January, 1871, will therefore be, for all town members, five guineas, and for all country members three guineas.

A HOSPITAL FOR BOLTON.

THE late Mr. Stephen Blair, of Bolton, formerly M.P. for that borough, has left a sum of £20,000, to build and furnish a hospital for sick persons of any domicile, on condition that a site within the area of the Bolton Union be provided within a period of three years. He leaves that sum to trustees, who are empowered to build the hospital, and are instructed to provide nurses to tend the patients in the night. He also leaves to the same trustees a sum of £10,000, to be invested so that the income may form an endowment for the hospital, and desires that the hospital may be called "The Blair Hospital".

THE HEALTH OF THE WIMBLEDON CAMP.

HITHERTO the Camp sick returns have been very light. A few cases of diarrhoea have occurred, as usual. Two Volunteers who were injured by the railway accident at Carlisle on Sunday morning, one cut slightly in the hand, and the other suffering from concussion, were admitted into the Hospital, but have been discharged. Two markers were slightly wounded at the butts on Wednesday by bullet-splashes from the targets. A boy was also scalded on the arm and face, but is doing well.

PHTHISIS IN AUSTRALIA.

THE Melbourne newspapers contain not unfrequent protests against an alleged English habit of sending consumptive patients thither. They fear for the health-reputation of their district. They assert that the climate is excellent, but that it will not cure consumption, and that a large number of the deaths there are imported cases, which never ought to have been sent. Thirty-three per cent. of the deaths in the Melbourne Hospital are reported to be from phthisis. A discussion on the subject has occurred in the Medical Society of that place. Whatever the sanitary advantages of the Australian climate may be, it seems clear that it is not specially advantageous in tuberculosis. At the same time, we must allege ignorance of the fact that any habit of advising patients to go thither has as yet sprung up in England, and our suspicion that those on the spot make the most of it as an excuse for high mortality.

EXPOSURE OF INFECTED CLOTHING FOR SALE.

LAST Saturday, at Ashton, two men named Bennett and Barnes were brought before Dr. S. D. Lees, justice of the peace, under the accusation of having exposed for sale the clothing of a person who had died of small-pox. The son of the deceased had intrusted the clothing to Bennett, an *employé* of the undertaker, in order that it should be buried. How Bennett came in possession of certain articles which he had pawned, did not appear. The men were fined two guineas each and costs, or two weeks' imprisonment. We notice the case only to approve strongly the vigilance of the members of the Local Board by whom the transaction was brought to light. It is at present extremely desirable that full penalties should be inflicted for carelessness of this kind.

HOW TO SPREAD SMALL-POX.

THE *Staleybridge News* contains the particulars of a case in which the inhabitants of Dukinfield have been much alarmed and annoyed by a tramp-woman who chose to call at various cottages, begging money, with a baby ill of the small-pox. Surely some law might be contrived which, without too much interfering with individual liberty, would prevent or punish the wilful exposure of others to danger which such conduct as this involves. Yet it is common enough. Patients with small-pox sometimes suffer but little, and are quite able to go about. It is sometimes necessary at out-patient hospital departments to insist that they should absent themselves. As we are to have a government inquiry as to vaccination, perhaps it might be made to include an investigation as to whether other means could not also be taken to prevent the spread of small-pox. Government or parochial aid in the providing of isolation-homes would do much in this direction; but a law imposing penalties on exposure after due warning, would, it appears to us, be very desirable.

DEATH OF DR. COPLAND.

DR. COPLAND died on Wednesday morning in his eightieth year. We shall give a biography with a portrait of this distinguished member of our profession next week. The cause of his death was hæmaturia in connexion with enlarged prostate. He had been ill only about ten days. A fortnight ago he was at a *conversazione* at the College of Physicians and was in his usual health. Three years ago he had a similar and more prolonged attack, from which he eventually recovered. His fatal attack began on July 2nd, and on the following day he consulted Dr. Cleveland, a medical friend and neighbour of his. Subsequently, he was seen once by Sir H. Thompson, who introduced a catheter. Very violent rigors followed the use of the instrument, which was employed only once. A day or two afterwards the hæmorrhage ceased, and symptoms of uræmic poisoning set in. During the last three days the urine was almost suppressed; the perspirations were urinous; the pupils contracted; and the patient was in a state of semi-coma. Coffee-ground vomiting occurred, and was very troublesome. No autopsy has, we believe, been made or is intended.

SCOTLAND.

FORFARSHIRE MEDICAL ASSOCIATION.

THE twelfth annual meeting of this association was held at Arbroath, on Thursday in last week. There was a good attendance of members of the association, and some very interesting papers read. The members met at dinner in Cloudsley's Hotel.

SURGEONS' HALL, EDINBURGH.

THE lecturers, at a meeting held last week, passed the following resolutions, moved by Dr. Arthur Gamgee, and seconded by Dr. Mac Adam: "1. That it is expedient that lecturers in this medical school should be free to lecture to female as well as to male students. 2. That no restrictions be imposed upon lecturers as to the manner in which instruction is to be imparted to women."—We understand that Dr. Keiller has resolved to deliver a winter course of lectures on Midwifery and Diseases of Women.—Dr. John Wyllie has been elected Lecturer on General Pathology and Pathological Anatomy, in the room of Dr. Grainger Stewart, resigned.

THE SIMPSON MEMORIAL.

AT a meeting of the London Committee, held at Stafford House on Monday last, it was unanimously resolved by those present, "That, in deference to the strongly expressed views of the Edinburgh Committee, the London Committee accede to their proposal of the erection of an hospital in Edinburgh for the Diseases of Women as a memorial of Simpson, but regard it as essential that its erection be in accordance with the most recently expressed views of the great professor; and they would suggest that the benefit of the memorial be extended to other cities, as London and Dublin, if the funds collected be sufficiently large." It is also likely that a monumental bust of the late Sir James will be placed in Westminster Abbey.

THE TRANSMISSION OF SENSATION.

AT a meeting of the Royal Irish Academy, on Monday evening, May 23rd, the Rev. Professor Jellett, F.R.S., President, in the Chair, a paper was read by Dr. ROBERT McDONNELL, F.R.S., on a New Theory of Nervous Action as regards the Transmission of Sensation along the Nerves. The author, having alluded to the view hitherto entertained by physiologists that there exist in every nerve groups of distinct conductors, each adapted to convey along them distinct nervous impressions (a view which was first broached by Thomas Young with reference to the sense of vision so far back as the commencement of the present century, and afterwards developed by Helmholtz and Brown-

Séquard), stated that he had long felt that the ingenious idea of distinct conductors was not in all respects satisfactory. Some years ago, Dr. McDonnell pointed out the shortcomings of this theory of Brown-Séquard in words to the following effect. "Just as we must require of phrenologists to determine psychologically what are, or what are not, the fundamental faculties of the mind, before, as physiologists, we can venture to assign to each its local habitation, so, before we can assign different conductors to each variety of sensitive impression, must we determine what are the various sensitive impressions which are fundamentally distinct from one another. We may incline to admit the general truth of Dr. Brown-Séquard's view with reference, for instance, to the appreciation of weight through muscular action, as distinct from the feeling of heat, while we regard touch, tickling, ordinary pain, as mere phases of one more general sensation, depending, perhaps, in their varieties upon the texture of the skin, the hair, etc."

The author then proceeded to the consideration of the new theory of nervous conduction proposed by him, which consists in an application of the theory of wave-propagation to the passage of various sensations along nerve-conductors. In accordance with this view it is assumed that the different peripheral expansions of sensitive nerves take up undulations or vibrations, and convert them into waves capable of being propagated along nervous tissue. Thus the *same* nerve tubule may be able to transmit vibrations differing in character, and hence giving rise to different sensations. Dr. McDonnell advocated this undulatory theory of sensation in preference to that of distinct conductors, for the following reasons. 1. Because it was simpler as regarded anatomical detail; 2. Because it was strongly supported by analogy, when compared with wave-propagations in other departments of science; and, 3. Because it appeared to be in harmony with a large number of recognised physiological facts, which were otherwise almost inexplicable. Respecting the first of these reasons, the author showed that the highest microscopic powers failed to discover any anatomical difference between various nerve-tubules, a fact which was clearly opposed to the idea of the existence of different conductors. As regarded the analogy between the author's theory of nerve-action and the wave theory of light, it seemed to lie chiefly in this: as various solid and liquid bodies exercise a selective absorbent power for both heat and light, in virtue of which certain rays are stopped, while others are allowed to proceed, so various nerves exercise a so-called selective power, which permits certain undulations so pass, while those of a different wave-length are intercepted. As the rays of heat, light, and actinic spectra differ in refrangibility, so might the undulations produced by heat, cold, pain, tickling, etc. The *unfelt sensations* correspond to the invisible and cold *actinic rays*. The author illustrated his third reason of preference for this undulatory theory by an allusion to the phenomena of complementary colours, to the peculiar tinting of objects gazed at by a person who had just taken *santonine*, and to the effects of lead-poisoning upon sensation. He concluded a novel and most interesting paper by stating that he hoped hereafter, in several communications, to elucidate the applicability of this theory to the transmission of the sensations peculiar to the special senses.

THE new Building Fund of the Sheffield General Infirmary now amounts to nearly £6000.

THE PENZANCE DISPENSARY is to be converted into an Infirmary. It has been determined to purchase the old poor-house at St. Clare for the purpose.

THE SWANSEA HOSPITAL.—During the last year, considerable additions have been made to the Swansea Hospital, the accommodation for in-patients having been increased by forty beds. The erection of salt-water baths for the hospital is contemplated.

AT THE MEETING OF THE FRENCH ACADEMY on the 4th instant, Professor Brandt was elected a Correspondent of the section of Anatomy and Zoology. In the final election he received twenty-two votes out of thirty-eight, the remaining sixteen being in favour of Mr. Darwin. In the first ballot Professor Huxley received three votes, and M. Loven one.—*Nature*.

EDITORSHIP OF THE BRITISH MEDICAL JOURNAL.

THE office of Editor of the BRITISH MEDICAL JOURNAL is about to become vacant. Gentlemen desirous of being appointed to the same, are requested to forward their applications to the President of the Council, W. D. HUSBAND, Esq., York, on or before the 30th day of July, 1870.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
ANNUAL MEETING.

THE Thirty-eighth Annual Meeting of the British Medical Association will be held in Newcastle-upon-Tyne, on Tuesday, Wednesday, Thursday, and Friday, the 9th, 10th, 11th, and 12th of August next.

President—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

President-elect—EDWARD CHARLTON, M.D., Senior Physician to the Newcastle-upon-Tyne Infirmary.

An *Address in Medicine* will be delivered by FRANCIS SIBSON, M.D., F.R.S., F.R.C.P., Physician to St. Mary's Hospital.

An *Address in Surgery* will be delivered by G. Y. HEATH, M.B., M.R.C.S., Surgeon to the Newcastle-upon-Tyne Infirmary.

The business of the meeting will be conducted under *six* Sections:

Section A. *MEDICINE*.—*President*: Dr. Embleton. *Vice-Presidents*: Dr. Simpson and Dr. Lyons. *Secretaries*: Dr. H. Barnes, Carlisle, and Dr. Morell Mackenzie, 13, Weymouth Street, London.

Section B. *SURGERY*.—*President*: Professor Lister. *Vice-Presidents*: Charles Trotter, Esq., and Timothy Holmes, Esq. *Secretaries*: Dr. Arnison, Newcastle-upon-Tyne, and W. H. Favell, Esq., Sheffield.

Section C. *PHYSIOLOGY*.—*President*: Dr. A. Clark. *Vice-Presidents*: Dr. Sanderson and Dr. Hayden. *Secretaries*: T. C. Nesham, M.D., Newcastle-upon-Tyne, and J. G. McKendrick, M.D., 29, Castle Terrace, Edinburgh.

Section D. *MIDWIFERY*.—*President*: Dr. Robert Barnes. *Vice-Presidents*: Dr. Gibson and Dr. G. Hewitt. *Secretaries*: Luke Armstrong, Esq., Newcastle-upon-Tyne, and J. H. Aveling, M.D., Rochester.

Section E. *PUBLIC MEDICINE*.—*President*: Dr. Rumsey. *Vice-Presidents*: Dr. Druitt and Dr. Morgan. *Secretaries*: Anthony Bell, Esq., Newcastle-upon-Tyne, and Dr. A. Ransome, Bowden, Cheshire.

Section F. *PSYCHOLOGY*.—*President*: Professor Laycock, M.D. *Vice-Presidents*: Dr. Sankey and Dr. Maudsley. *Secretaries*: Grainger Stewart, M.D., Borough Asylum, Newcastle-upon-Tyne, and T. Harrington Tuke, M.D., 37, Albemarle Street, London.

TUESDAY, August 9th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Council Chamber, New Town Hall.

3 P.M.—MEETING OF COUNCIL—Council Chamber, New Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—The retiring President, Dr. CHADWICK, will resign his office.—The new President, Dr. CHARLTON, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Any motions of which notice may have been given.

WEDNESDAY, August 10th.

8.30 A.M.—SHERIFF OF NEWCASTLE'S BREAKFAST to the Association in the New Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Council Chamber.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—Appointment of Place of Meeting for 1871 and President-elect.

12 NOON.—Address in Medicine by Dr. SIBSON, F.R.S.

2 P.M.—MEETINGS OF SECTIONS.—Adjourn at 5.

9 P.M.—PRESIDENT'S SOIRÉE—New Town Hall.

THURSDAY, August 11th.

10 A.M.—THIRD GENERAL MEETING—Lecture Room of Literary and Philosophical Society.—Reception of Reports of Committees.

11 A.M.—Address in Surgery by Dr. HEATH.

12 NOON.—SECTIONAL MEETINGS.

6 P.M.—PUBLIC DINNER of the Association—New Town Hall.

FRIDAY, August 12th.

9 A.M.—SECTIONAL MEETINGS.—Adjourn at 12.

12 NOON.—CONCLUDING GENERAL MEETING.

2 P.M.—SPECIAL CONVOCATION OF THE UNIVERSITY OF DURHAM for granting Honorary Degrees.

4 P.M.—SPECIAL SERVICE in Durham Cathedral.

Reception Room.—A room will be opened in the New Town Hall as a reception room on Tuesday, August 9th, at 10 A.M., and on the following days at 8 A.M., for the issue of tickets to members; for the supplying lists and prices of lodgings, and other information.

Members and others requiring information with regard to the meeting are requested to make application in this room.

Gentlemen are requested to proceed to this room immediately on their arrival, to enter their names and addresses, and to obtain the tickets necessary for admission to all the proceedings.

Letters, parcels, etc., may be left in this room in the care of the clerks. Arrangements will be made for the receipt and postage of letters in this room.

Gentlemen intending to visit Newcastle during the Meeting, are requested to send their names, without delay, to Dr. Arnison, 45, Northumberland Street, Newcastle upon Tyne.

The *Local Secretaries* are: G. H. Philipson, M.A., M.D., 1, Saville Row; W. C. Arnison, M.D., 45, Northumberland Street; Luke Armstrong, Esq., Clayton Street West; T. C. Nesham, M.D., 43, Northumberland Street; R. J. Banning, M.D., 136, High Street, Gateshead.

Hotels.—The principal hotels are: the Station Hotel; the Queen's Head, Pilgrim Street; the Turk's Head, Grey Street; the Turf Hotel, Collingwood Street; the Central Exchange, Grey Street; the Royal Exchange, Grey Street; the Neville Hotel, Neville Street; the Adelphi (Temperance), Clayton Street; the Norfolk Hotel (Temperance), Grey Street. Any information respecting hotels or lodgings will be willingly furnished by Dr. Nesham, 43, Northumberland Street, Newcastle-upon-Tyne.

Post-office and Telegraph-office.—Royal Arcade, Pilgrim Street.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary at their *earliest* convenience. All papers must be in the hands of the General Secretary, or one of the Secretaries of the Section to which the paper belongs, on or before Monday, August 1st.

Authors are requested to prepare beforehand short abstracts of their papers for publication. The papers (and abstracts) read in the different Sections are to be handed to the Secretaries of the Section for publication in the JOURNAL of the Association.

No paper shall occupy more than *twenty* minutes in delivery. All subsequent speakers not to exceed *ten* minutes.

Annual Museum and Annual Library.—It is intended to exhibit objects of interest belonging to the following classes. 1. New Instruments and Appliances in Medicine, Surgery and Midwifery. 2. New Drugs and Preparations. 3. New Books, English and Foreign. 4. Pathological, Physiological, Anatomical, and Microscopical Specimens. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions, relating to Public Health, etc. 7. New Preparations of Food, etc. Rooms will be provided at the Newcastle Infirmary, for the Museum, which will be opened on Tuesday morning, August 9th, and closed on Friday evening, August 12th. All the objects intended for exhibition must be addressed, "Care of Dr. Page, Infirmary, Newcastle-upon-Tyne," be delivered on or before Monday, August 2nd, and be removed on or before Monday, August 15th. Every object must be accompanied by a written or printed description, together with a short reference, for insertion in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects will be provided, but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the exhibitors. Intending exhibitors are requested to apply to Dr. Banning, Gateshead-upon-Tyne, for any information that they may require, and to inform him, as early as convenient, what they intend to exhibit, and how much space they are likely to require. Exhibitors who may prefer personally delivering their Specimens, are earnestly requested to forward a short description, on or before Monday, August 2nd, in order that the Catalogue may be complete.

Notices of Motion.—The following notices have been given.

The Rev. Dr. BELL: That a Committee be appointed for the purpose of inquiring into the present constitution and operation of the Com-

mittee of Council; and whether it might not be better to have only one well constituted Council, consisting of a limited number—say fifty—to be elected by the general body of members through the medium of voting-papers: and that the Committee report to an ordinary general meeting, or to a special general meeting convened according to law.

Dr. STYRAP: That, considering the nature of the duties of the office of General Secretary, the great assistance rendered by the Honorary Local Secretaries, and the financial position of the Association, the increase of his original salary of £100 to £250 in 1866; £313 in 1867; £370 in 1868; and £364.9 in 1869, has been excessive.

That, in the opinion of this meeting, a stipend of £250 (inclusive) would be ample.

Dr. ELLIOT: That a volume of *Transactions* be annually published by this Association, to contain such essays or communications as are either too lengthy for admission into the JOURNAL, or may be deemed worthy of a more permanent record than a hebdomadal serial can secure.

Papers.—The following papers have been promised.

D. Embleton, M.D. On the Shoulder-tip Pain in Liver Diseases.

J. Henry Bennet, M.D. On the Climate of Algeria. On the Influence of Inflammation in the production of Uterine Displacement.

E. J. Tilt, M.D. On Uterine Pathology at the Change of Life and after the Menopause.

J. Althaus, M.D. On the Treatment of Rheumatic Gout by Galvanisation of the Cervical Sympathetic.

W. Adams, F.R.C.S. On the Subcutaneous Division of the Neck of the Thigh-bone, as compared with other operations for rectifying extreme distortions at the hip-joint with bony ankylosis. Illustrated by a successful case of the subcutaneous division.

A. E. Sansom, M.D. The Sulpho-carbolates; and the Antiseptic Method in Medicine.

G. Y. Heath, M.D. On the Rapid Pressure Treatment of Aneurism.

W. H. C. Tessier, M.D. Remarks upon an Epidemic of Intermittent Fever in the Mauritius, during 1866-7-8.

J. C. Murray, M.D. On Snuff-taking; its utility in preventing Bronchitis and Consumption.

G. H. Philipson, M.A., M.D. On the Health and Meteorology of Newcastle and Gateshead during 1868 and 1869. Notes of a Case of Biliary Fistula.

J. Hutchinson, F.R.C.S. On Xanthelasma Palpebrarum as a Symptom of Diathesis. On Syphilitic Rupia.

W. Spencer Watson, F.R.C.S. On the use of the Seton in the treatment of Vascular Ulcers of the Cornea; with illustrative cases and drawings. Cases of Traumatic Ophthalmitis.

Anthony Bell, M.R.C.S. Notes of a case of Epilepsy of Sixteen Years' Duration, from Parietal Depression of Cranium: Trephining: Recovery.

W. F. Teevan, F.R.C.S. On Spermatorrhœa. Twenty cases of Stone in the Bladder.

J. W. Eastwood, M.D. On Intemperance in its Medical and Social Aspects.

Robt. Elliot, M.D. Lobelia Inflata; its Action as a Poison: evidence and autopsies at eighteen inquests.

R. H. Meade, F.R.C.S. On a case of Ovariectomy, in which the tumour was removed by enucleation, without the necessity of the application of either clamp or ligature to the pedicle.

B. Foster, M.D. The Murmur of Mitral Stenosis.

D. De B. Hovell, F.R.C.S. On the Treatment of Paralysis.

John Couper, F.R.C.S. The Diagnosis of Astigmatism by the Ophthalmoscope.

W. Fairlie Clarke, M.A., F.R.C.S. On some rare forms of Opacity of the Cornea.

J. H. Aveling, M.D. On the Advantages to be Derived from Curving the Handles of Midwifery Forceps.

J. M. Fothergill, M.D. On the Preservative Agency of Lowered Vitality.

F. Waterhouse, M.R.C.S. On a New Form of Elevator for Depressed Cranium in Childhood.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, June 6th, 1870.

MIDLAND BRANCH.

THE annual meeting of the above Branch will be held at Lincoln, on Thursday, August 4th, at 2 P.M. *President*, Dr. MITCHINSON.

Gentlemen wishing to read papers, are requested to communicate, as early as possible, with the Secretary.

Lincoln, July 12th, 1870.

C. HARRISON, *Hon. Secretary*.

SOUTH WESTERN BRANCH.

THE annual meeting of the above Branch will be holden at the Bath Saloon, Torquay, on Wednesday, July 20th, at 2 P.M. *President*, C. BARHAM, M.D., Truro; *President-elect*, W. POLLARD, Esq.

Dinner at the Torbay Hotel, at 5 P.M. Tickets (dinner and dessert, exclusive of wine), 7s. 6d. each.

STONARD EDYE, F.R.C.S., *Honorary Secretary*.

Exeter, July 8th, 1870.

METROPOLITAN COUNTIES BRANCH.

THE eighteenth annual meeting of this Branch will be held at the Castle Hotel, Richmond, on Friday, July 22nd, at 3 P.M. *President* for 1869-70, GEORGE JOHNSON, M.D.; *President-elect* for 1870-71, T. HECKSTALL SMITH, Esq.

Dinner at the Hotel at 5.30 P.M. Tickets (exclusive of wine) 10s. 6d. each.

A. P. STEWART, M.D.

ALEXANDER HENRY, M.D. } *Honorary Secretaries*.

75, Grosvenor Street, June 22nd, 1870.

READING BRANCH.

THE annual meeting of the Reading Branch, and of the Reading Medico-Chirurgical and Pathological Societies, will be held in the Council Chamber, Reading, on Wednesday, July 30th.

The business of the Medico-Chirurgical Society will commence at 3.45 P.M.

The President of the Pathological Society will take the chair at 4 P.M. Dr. Shettle will read the annual address.

After the address, Mr. Young (the President of the Reading Branch) will take the chair.

Dinner at the George Hotel at 6 o'clock. Tickets, 15s each (comprehending the entire charge).

WM. B. YOUNG, }

GEORGE MAY, jun., } *Honorary Secretaries*.

Reading, July 4th, 1869.

CUMBERLAND AND WESTMORLAND BRANCH: ANNUAL MEETING.

THE second annual meeting of this Branch was held at the Whitehaven and West Cumberland Infirmary on Wednesday, June 29th, at 1 P.M. There were present, M. W. TAYLOR, M.D., President, and about twenty members.

The minutes of the preceding meeting were read and approved.

New Members.—J. Shannon, M.R.C.S. Eng., House-Surgeon to the Whitehaven Infirmary, and W. Somerville, M.D., of Gosforth, Whitehaven, were elected members of the Association and Branch.

Report of Council.—The SECRETARY read the Report of Council, as follows.

"The Council of the Cumberland and Westmorland Branch, in presenting their second annual report, have great pleasure in being able to congratulate the members on the continued prosperity of the Branch. At the beginning of the year, the Society numbered seventy members. Six new members have been elected, two have died, and five have left the district; thus leaving, at the commencement of our third year, a total of sixty-nine members.

"*Meetings held.*—During the past year, two general meetings of the Branch have been held—one in October, at Cockermouth; and the other at Carlisle, in April last. Both of these meetings were very successful and well attended; and several papers of great interest were brought forward, some of which have been published in the JOURNAL.

"*Direct Representation of the Profession in the General Medical Council.*—At the last meeting, the Branch again unanimously adopted a petition to Parliament in favour of direct representation of the profession in the General Medical Council. This petition was signed by the President and Secretary, on behalf of the Branch. A similar petition was also prepared and signed by the registered members of the profession practising in all the large towns of the district, some of whom are not as yet members of the Branch. As the Branch numbers more than two-thirds of those in actual practice, these petitions, which were presented to the House of Commons, may be looked upon as embodying the wishes of almost the entire profession in the two counties. All local members of Parliament have had their attention directed to this fact, and several have already promised their support to the prayer of the petition. Your Council would respectfully urge upon those mem-

ers of the Branch who may have influence with their representatives in Parliament the necessity for making them fully acquainted with the merits of this question, and securing their co-operation.

Committee on Clubs and Benefit Societies.—This Committee, which was appointed at the last annual meeting, have not been able to present their report.

Statement of Accounts.—The Council have examined the Treasurer's books, and find that the income, including a balance in hand at the commencement of the year of 12s. 7d., has been £8:8:7; and the expenditure, £3:3:3; thus leaving a balance in hand, on June 8th, 1870, of £5:5:4.

(Signed) M. W. TAYLOR, M.D., *President*.
HENRY BARNES, M.D., *Secretary*.

On the motion of Dr. TIFFIN, seconded by Dr. LOCKIE, the report was unanimously agreed to.

Office-bearers.—The following gentlemen were elected office-bearers: *President-elect*: Robert Elliot, M.D., M.R.C.P., Carlisle. *Members of Council*: T. S. Clouston, M.D.; R. Tiffin, M.D.; M. W. Taylor, M.D.; H. Dodgson, M.D.; W. Reeves, M.D.; and W. T. Greaves, Esq. *Honorary Secretary and Treasurer*: Henry Barnes, M.D. *Representatives in the General Council of the Association*: T. F. I'Anson, M.D.; M. W. Taylor, M.D.; and R. Tiffin, M.D.

Alteration of Rules.—Dr. TAPLIN had given notice that he intended to move an alteration in the Rules, to the effect that only one meeting be held annually, in place of three, as at present. Owing to illness, Dr. Taplin was unable to attend, but he requested that the matter be considered in his absence. The motion was put on the table by the President, but an amendment, proposed by Dr. SOMERVILLE, and seconded by Dr. DICK, that the number of meetings remain unchanged, was agreed to unanimously.

Dr. CLOUSTON had given notice of a new Rule: That those gentlemen who had fulfilled the office of President should, on their retirement, have the office of Vice-President conferred upon them for life. The motion was seconded by Dr. Dickson, and carried. In accordance with this law, the office of Vice-President was conferred upon Dr. Taylor, and also on Dr. T. Barnes, the first President of the Branch.

Votes of Thanks.—Votes of thanks were then accorded to the retiring President, the Council, and Secretary, for their services during the past year.

Inaugural Address.—The retiring President then introduced the new President, Dr. I'ANSON, who, after a few prefatory remarks, proceeded to give a brief *resumé* of what had happened of notoriety in the domain of physic since the formation of the Branch two years ago. Under the head of physiology, he first passed in review the different and newest definitions of what we term life. He then spoke of the spectroscope and its use in detecting the presence of blood in dilute solutions; of the thermometer, as the best means of recognising a sound constitution, and as the most subtle indicator of disorder. He pointed out, at the same time, those diseases in which its use was of the greatest value to the physician. From physiology he passed to medicine, and showed how we had improved, in treating man as greater than his maladies, and in considering his general condition as of greater importance than his local ailments, and in looking upon disease as a change in him rather than in some part of him. He next reminded his hearers of the effects of the perchloride of iron in the treatment of rheumatism and other spreading inflammatory diseases, as used by Dr. Russell Reynolds. An able review of the labours of British and foreign pathologists in the vast field of tuberculosis next followed, in which he particularly noted the opinion of Waldenburg, who says that those diseases of the heart and great vessels which hinder the outflow of blood from the pulmonary veins confer an immunity from phthisis; whereas other heart-diseases, and particularly stenosis of the pulmonary artery, favour the existence of phthisis. Again, in nosological order, he would place tuberculosis next to pyæmia; the former disease consisting in the taking to the circulation of very minute corpuscular elements, and in their deposition, by nodular formations, in numerous separate parts of the various organs; whereas in pyæmia the particles taken up into the circulation are larger, and so produce embolism, stasis, abscess, and local gangrene. As to the treatment adopted by Waldenburg, the only point of practical importance was the fact that, in those cases where apparently complete recovery took place, he had been in the habit of allowing an abundant supply of green food. Then came an account of the doctrine and practice with which the name of the late Dr. Todd is identified, giving a brief survey of the effects of alcohol on the system in health and disease, as demonstrated by the experiments of modern physiologists, particularly those of Beale and Trousseau. Then came vaccination, which he considered at present on its trial. The properties of Jennerian lymph were briefly discussed; its holding good when passed

through a lengthened succession of human beings, its effect when taken direct from the cow, and its supposed power of propagating syphilis. The different anaesthetics now in use, and the efforts made to improve them, were then reviewed. From anaesthetics he proceeded to surgical operations—resection of joints *versus* amputation coming in for a fair share of comment; followed by an account of the improvements in the treatment of stricture and stone. Medical politics and lady-doctors were the last subjects noted in a long and very able review of the progress of medicine during the last two years.

On the motion of Dr. ELLIOT, a cordial vote of thanks was awarded to the President for his admirable address.

Communications.—Dr. ABLETT gave the results of his experience in the use of Nitrous Oxide Gas in surgical and dental practice, and an animated discussion followed.

Dr. JONES showed the model of a moveable Metal Cottage Hospital, suitable for use during epidemics. A variety of surgical and scientific instruments were also exhibited.

At the conclusion of the meeting, the members visited the wards of the Infirmary, along with two of the acting medical officers, the President and Dr. Dickson.

Dinner.—In the evening, the members and their friends, to the number of twenty-two, dined together at the Black Lion Hotel. Dr. I'Anson, the President, occupied the chair; and the vice-chair was filled by Dr. Elliot, the President-elect.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 27TH.

JAMES PAGET, Esq., F.R.S., President, in the Chair.

DR. OPPERT showed a patient affected with Hydatid Disease of the Loin. The man was himself in the habit of squeezing out cysts through an opening which had formed in the skin over a prominent part of the tumour.

Mr. PAGET read a Case of Necrosis of the Femur without External Inflammation. An oval swelling six inches in length had appeared in the shaft of the girl's femur, firm and somewhat tender on pressure, but without heat or any affection of the textures covering it. Treatment with rest and iodide of potassium having produced little or no alteration in three months, an incision was made over the swelling, and the periosteum, much thickened, divided, exposing a cavity containing a thin rough sequestrum derived apparently not from the outermost layers of the femur but from layers just within them. The central point of interest in the case was the fact of necrosis leading to separation of bone being unattended with inflammation of any of the textures external to the periosteum, or with more than a scarcely discernible amount of suppuration around the sequestrum. Mr. Paget added a suggestion that certain loose cartilages in joints may be really due to a necrosis following an injury, death and separation of a bit of bone occurring without inflammation of adjacent textures.

Mr. BARWELL brought forward four additional cases illustrating his method of treating Local Paralysis by Subcutaneous Injection of Concentrated Solution of Strychnia. Some of these cases were so managed as to serve experimental purposes. All solutions were of the strength of two grains to one hundred minims. Of these doses, beginning in the first case at one half-minim, and increasing in that and other cases to twelve half-minims, were employed. The first solutions had been neutralised by magnesia, in others the fluid was allowed to remain acid; in one case, injection of twelve half-minims was followed by general effects; in another, in which ten half-minims produced no general symptoms, the injection of seven half-minims into two different places was followed by slight twitching. From this, Mr. Barwell argued that neither chloride of magnesium nor acid exercised any protective influence, but that the concentrated form of solution was the sole condition of safety, since the surface for absorption was so small. In all cases a certain amelioration, in one (besides that previously related) a very marked improvement, followed rapidly the use of the drug.—Dr. BUZZARD mentioned the case of a patient in whom, a few days previously, the hypodermic injection of one-thirtieth of a grain of strychnia (*Pharm.* solution) had been followed by spasm of the jaws.

Dr. GOODFELLOW brought before the Society a Case of Paraplegia. A washerwoman, aged 45, while in her usual health, which was good, was suddenly seized, on April 29th, with complete motor paralysis of the lower extremities, and incomplete loss of sensation. At the time of seizure, she felt a "shock" pass through her back, and severe "stab-

bing" pain in and below the seat of shock. There was no fever, and her intelligence was unaffected. She remained in this state until May 6th, when the upper extremities became benumbed, and the motor power much diminished. These symptoms gradually became worse, until the 10th, when great difficulty of breathing supervened. She rapidly sank, and died, seemingly of apnoea, on the following day. On *post mortem* examination, the cord was found to be almost diffuent in two places—in the situation of the third cervical and the third dorsal vertebrae. The paralysis and softening seemed to be due to extensive thrombosis of the arteries and smaller vessels, apparently by coagulated fibrine. No evidence of vegetations on the valves of the heart could be detected.

CORRESPONDENCE.

SHALL WE FIND THAT BY THE CONTROL OF PROSTITUTION WE HAVE IRRETRIEVABLY LOST IN MORALITY AND GAINED NOT AT ALL IN HEALTH?

SIR,—I regretted to read the following passage in your leading article of June 18th, that "the difficulties which surround this perplexing subject do not appear to us to diminish with discussion." It may be a delusion, but I am under the impression that the discussion which has been going on for some months has already overcome not a few difficulties; and I am even sanguine enough to hope that many of your readers may, on reading this letter, still become convinced of the advisability of making prostitution subject to control. Pardon me if I reiterate the opinion I have before expressed, that the advocates of the control of prostitutes have everything to gain by the fullest and freest discussion on the moral bearings of the question. The good that has resulted in a sanitary point of view from the controlling measures which have partially been put in force, has been clearly demonstrated. It has been a matter of some difficulty to induce, first the profession, and subsequently the public, to entertain the subject at all. We have not far to look back to the time when the whole question was so tabooed, and considered so uninviting, that scarcely any one but a conscientious enthusiast dared to allude to it. Now, if I may judge by your own pages and those of your contemporaries, no question, not even that all-engrossing one education, seems to occupy so much public attention as does this control of prostitution. Society all at once appears to have been roused to the importance of the consideration of the question of sexual immorality and its attendant and collateral evils, or, as you justly remark, of "everything that concerns the relation of the sexes, concerns the purity of our homes, the interests of morality, and of religious faith and the honour of our race."

Discussion has not only caused this progressive step; it has, as your own able article admits, shown that Government interference has been attended with the most beneficial consequences to the health of the army and navy, thus giving encouragement to the promoters of the Act to extend the control of prostitution throughout the country, at least on *sanitary grounds*. I propose, then, first to consider the last two lines of your leading article, and attempt to show the groundlessness of the fear that "we may find that we have irretrievably lost in morality and gained not at all in health."

Some among us think that a medical man exceeds his duty when he undertakes to discuss the moral bearing of a sanitary question, and consider that it is sufficient to prove that sanitary regulations are necessary, leaving the kindred profession, the Church, to look after the moral bearings. This is not my view; our duty, on the contrary, it seems to me, is that no conscientious medical man in advocating the control of prostitutes should, without appeal, allow his opponents to charge him with lowering English morality, or running the risk of encouraging the youths of A.D. 1900 to indulge in immorality or lower the national estimate of the virtue of chastity; this, indeed, would be a serious penalty to pay for sanitary reform; but I hope further discussion will prove that such a belief has no better foundation than the dogma of those who hold that venereal diseases had been ordained by the Deity for the chastisement of sexual sin—a dogma, I am happy to remark, which has been stigmatised by yourself as that of a narrow-minded theology. Let me remind the writer of the article in question, that the members of the medical profession daily witness the influence of the sex-passion. It is one of those natural instincts which require training. Implanted in us for the wisest purposes, it may be, and has been, abused. Those who have not had opportunities of recognising the errors to which unrestrained license of the sexual feelings will give rise, are, I maintain, incompetent to offer advice on this important ques-

tion. We must not presume, with the self-sufficiency of the modern pharisee, that Englishmen are not "as other men are;" or hug the belief that we are so much more moral than our continental neighbours. Under the old *régime* of non-self-examination we have prided ourselves that our men were less immoral, our women more chaste, and our people less vicious than our continental brethren. Have we, I would ask, any foundation for such an assumption? Can any one read the daily papers and know the evil going on in our midst, and at the same time entertain the notion that any evil heard of on the continent is not extended to England? Surely our legislators are becoming convinced that it is ignorance of facts which has caused this self-sufficiency and our statesmen must admit (regret it as we well may) that the consequences of sexual immorality are much the same all over the world, and he who would assert that the narrow channel between Dover and Calais separates the vicious from the virtuous, would probably meet with few believers. I have ventured to make these remarks because the writer of the article in question would lead your readers to infer that the advocates of the control of prostitutes were about to convert a Christian young Englishman into a demoralised Frenchman who laughs at the prudery of the Britisher. I assert that this assumption of the characteristics of the two nations is a delusion; and if it exists among any large number of my countrymen, the sooner it is dissipated the better. Like many other illusions, it must pass away together with such beliefs as that the British youth will only read what is good and proper, and intuitively reject what is immoral and debasing; that the public press can, or will, only publish what conduces to morality, or what ought, in the opinion of the writer or speaker, to meet the public eye; or that in these days of advanced thought and desire of public enlightenment, we can control inquiry, relapse into the condition of do-nothingness with which we have so long been satisfied, or pause in the career of progress now that public attention has been roused to the extent and consequences of sexual immorality.

As a set-off to this publicity and inquiry which so many of my friends are now deploring, let me remind your readers that we have the compensation of noticing that, if the youth of the nineteenth century becomes now necessarily early familiarised with the details of vice, the knowledge is accompanied with the practical lesson that illicit pleasure is invariably attended with much physical pain. The veriest trifler who reads his penny paper cannot become acquainted with the offensive details there to be found without listening to the attendant moral; and thus the antidote follows the poison. It is in this way that men of my mode of thinking view the distinction between the modern newspaper details and the prurient literature which has been generally known as *Holwell Street*. In this last named literary garbage, illicit pleasure was depicted in all its most attractive and meretricious forms; but the anonymous author, like the translators of the Greek and Latin loves of the heathen gods and goddesses, omitted to allude to the frightful consequences that illicit love or bestial propensities produce on all those who directly or indirectly indulge their animal propensities.

I will not fall into an error that I wish to condemn in the writer of your article—viz., predict what will be the immoral effect on the youth of A.D. 1900, in the event of the extension of the Contagious Diseases Act to the civil population. But I may remind your readers that, when any novel proposition or improvement has been introduced, the most lamentable moral consequences have always been anticipated by opponents, but have certainly never yet come to pass. I have confidence in history and in progress, and I look forward without dread, and am ready to bear my share of responsibility of future moral consequences, should the legislature determine to gradually extend the control of prostitution to the civil population.

Let me attempt to recapitulate a few of the lessons taught me by many years' professional experience. In common with others, I have long been dissatisfied with the *know-nothing, do-nothing*, effete system of the passing century, in regard to sexual questions. Those who would check us in our endeavours to control prostitutes do not deny that the past has been a failure in every way. Whilst tending to the extension of one of the most frequent and grievous preventable diseases to which the human frame is subject, the existing system has failed to keep or make our youth more moral. There is no reason to believe the assumption that immorality is less common in England than in other countries; but we have ample evidence to show that this disease—syphilis—is more rife here in England than on the Continent. So much is this the case, and so universally are the consequences of this extension of disease felt, that our most rabid opponents all agree that, if the prostitute is not controlled by Government, she, when diseased, must in future at least be cared for and housed by private or civil means. If the writer of the article in your JOURNAL were consistent with himself, he should at once openly assert that, as fear of the disease "is an efficient scarecrow in the fields of forbidden pleasure", and, as he seems to sel-

more value on the morals than on the health of English youth, the more young men were diseased, the better it would be for the welfare of England. Would he subscribe to this doctrine? From the able manner in which he has expressed many of his thoughts, I am sure he does not wish this. I hope, then, as our late opponent, of the Statistical Department of the Army, Dr. Balfour, has seen reason to change his opinions and join us in advocating the control of prostitutes, because such control has been proved to be most instrumental in diminishing venereal disease in the army; that also another efficient public servant, Mr. Simon, the Medical Officer of the Privy Council, will in due time see cause to unite with us and aid in efficiently carrying out the extension to the civil population of the control of prostitutes.

Before closing this letter, let me call your readers' attention to one more statement in the article in question. The writer says: "If, in addition to the *quasi* sanction which the State proposes to give, it can also spread abroad the idea that it has been successful in robbing the pleasure of its sting, we shall undoubtedly, if other things remain equal, find an increase in the number of those who err." Here, again, is one of those prophetic anticipations to which I have already alluded; but let me add that I do not look forward to the advent of the year 1900 as likely to be signalled by the extinction of venereal disease. For many, many years, I only anticipate a considerable abatement in its frequency. Supposing, however, that the wished-for consummation followed, unharmed or illicit intercourse would still be fraught with considerable danger, and would be appreciated by those who at present are deterred from following vicious courses—viz., the probability of the sexual immorality being attended by the birth of a child and its attendant consequences and embarrassments. These restraints our opponents seem desirous of ignoring. The discussion, however, of the measure best calculated to induce continence and check incontinence, and the adducing of proofs that a virtuous life, although not the easiest or pleasantest for the time, is the one fraught with the greatest advantage to youth,—are matters too serious to be entered on at the end of what, I regret to say, is a long letter, and one which, I fear, has taxed the patience of the reader and the space of the editor.

I am, etc.,

W. ACTON.

Queen Anne Street, Cavendish Square, June 1870.

THE PREVENTION OF PITTING IN SMALL-POX.

SIR,—Will you allow me to correct an error in Mr. Startin's paper, "On a Proposed Method of Preventing Pitting of Small-pox," in the BRITISH MEDICAL JOURNAL of June 18th? He speaks of "Higginbottom's method of vesication." I only allude to vesication or blistering in the appendix of my work on the nitrate of silver, and give a case of it in a severe inflammation of the urethra from gonorrhœa, where it was very successfully used.

In the third edition of my practical essay *On the Use of the Nitrate of Silver*, page 71, is the following.

"On Variola, and the Prevention of Pitting of Small-pox.—In frequent small-pox, the concentrated solution of the nitrate of silver must be applied on the whole surface of the face and ears in the same manner as is recommended in erysipelas—the solution to be applied on the second or third day of the eruption. The progress of the vesicles is immediately arrested, and in four days they present small hardened eschars, free from inflammation. In a few days, the eschars come away from the face without leaving pits. The nitrate of silver not only prevents the pits, but the inflammation, irritation, and offensive suppuration, which are so distressing to the patient."

The nitrate of silver might be applied all over the scalp (if the head were previously shaved), as in erysipelas, to prevent cerebral inflammation.

The application of the nitrate of silver is safe, simple, and efficacious, in preventing of pitting in small-pox.

Nottingham, June 1870.

I am, etc.,

J. HIGGINBOTTOM.

A SWELLING SIMULATING AXILLARY ANEURISM.

SIR,—Mr. C. S. Jeaffreson reports a very interesting case, with the above heading, in your number of July 2nd. The diagnosis seems to have been quite an open question in his mind, until fifteen-grain doses of iodide of potassium three times a day relieved rapidly the nocturnal pains in the patient's arms and shoulders, and gradually reduced the swellings; so that, at the end of two months, Mr. Jeaffreson thinks he may fairly say there is very little, if any, trace of his original disease." The result of the treatment, along with the history of syphilis, make Mr. Jeaffreson confident that the disease was "periostitis of the ribs and cartilages".

In this reasoning, I would beg to point out that a fallacy exists, from

the results which the same drug produces in cases of aneurism. In the first place, in full doses, it relieves in a remarkable manner the pains, also worst at night, which commonly shoot up the neck, through the shoulders, and down the arms, in cases of aneurism. And, in the second place, it possesses a curative action; the blood probably coagulating in the sac more readily and the clots being subsequently absorbed.

When in Edinburgh a few months ago, I saw a patient who had been successively under the charge of Dr. Warburton Begbie and Dr. George Balfour, on account of a large aneurism which occupied the mediastinal space, projected through the anterior wall of the chest considerably above the level of the surrounding integuments, and caused very severe symptoms. He was treated by a drachm of the iodide each day; and when I saw him, the only sign of the disease which remained was, that the cardiac dulness extended unusually high up on the left side of the sternum. An account of this case has, I believe, been published in the *Edinburgh Medical Journal*; as I only write from memory, I may have committed some trifling inaccuracy, for which I should beg to be pardoned.

Now, I think it quite possible that the tumour in Mr. Jeaffreson's case was an aneurism, and that the iodide of potassium gave relief from the pain, and produced a cure, as in the case above mentioned.

The other points noted in the report of the case do not seem specially to indicate periostitis, as any tumour in the same position would produce the same symptoms by pressure. It is unfortunate that no mention is made of the size of the swelling, and whether or not the tibiae or any other bones were affected.

In conclusion, I would assure Mr. Jeaffreson that this letter has not been written from any feeling of captiousness.

I am, etc.,

A. CHRISTY WILSON, M.B.

Doncaster, July 6th, 1870.

EXPULSION OF HAIR FROM THE BLADDER.

SIR,—Seeing in your JOURNAL of the 25th June Dr. Fuller's report of a case of a lady who had passed portions of hair, etc., from her bladder, I was reminded of a similar case which came under my notice about three years ago. I had treated a middle aged spinster assiduously for several weeks for what I considered chronic inflammation of the bladder. I could detect no foreign substance; and was therefore much surprised, after using for a few days mild stimulating injections, to find that my patient had passed *per urethram*, shortly after one of my visits, a clotted mass of hair intimately mixed up with solid residue of the urine. The stench from the expelled mass was abominable. I put it aside, fully intending after it had become well ventilated to examine it microscopically, and to bring the case before the next meeting of our Association at Shrewsbury; but, alas! it fell into profane hands, and science suffered. The lady was a most respectable person, of mature age and sober and quiet habits. Her temperament was rather phlegmatic than otherwise. I could detect no ovarian disease of any kind. I remember seeing a hair-pin extracted from a young girl's bladder when I was a student at St. George's Hospital some years ago; but my patient was, as I have stated, a middle-aged spinster, to whom neither immoral nor hysterical tendencies could be attributed. I am sure it would interest a great many others besides myself to hear something more respecting the origin of these cases.

I am, etc.,

HARVEY J. PHILPOT.

Stratheden Villas, East Dulwich, London, S.E., 1870.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, July 11th.

INDIA MEDICAL SERVICE.—Colonel Sykes asked the Under Secretary of State for India whether an examination of candidates for the medical service in India would take place in the spring of 1871, as it was understood an examination would not take place in the present autumn.—Mr. G. Duff said that as the medical service in India was at present somewhat overstocked, the examination would be postponed; but no definite answer had been received on the subject from the Indian government.

BEQUESTS AND DONATIONS.—Addenbrooke Hospital, Cambridge, has become entitled to £500 under the will of James Ivatt, Esq., of Cottenham, and has received £100 under the will of Canon Sparke. £500 has been contributed to the Building Fund of the Rotherham Infirmary, by a donor who has been "forty years in a foreign land." Mr. J. C. Wheeler has left £200 to the Salisbury Infirmary; and George Rule, Esq., £100 to the Edinburgh Royal Infirmary.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council, held on the 14th inst., the following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such.

Gosse, William, L.S.A., Adelaide, South Australia: diploma of membership dated November 20, 1835
Harris, Henry, M. & L.S.A. Lond., Redruth, Cornwall: May 13, 1833
Taylor, Thomas, Warwick House, Warwick Place, S.W.: April 7, 1837

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, July 7th, 1870.

Barton, Frederick, Ordnance Road
Parmiter, Henry, Dorchester
Vickers, William, Albany Street, Regent's Park

MEDICAL VACANCIES.

THE following vacancies are announced:—

ASHTON-UNDER-LYNE DISTRICT INFIRMARY—House-Surgeon: applications, 20th.
BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Resident Medical Officer: applications, 21st; election, 25th.
BRIGHTON AND HOVE DISPENSARY—Physician.
BRIGHTON AND HOVE PROVIDENT DISPENSARY—Consulting Medical Officer.
CHRIST'S HOSPITAL—Surgeon.
DONEGAL DISTRICT LUNATIC ASYLUM, Letterkenny—Consulting and Visiting Physician.
HULME DISPENSARY, Manchester—House-Surgeon: applications, July 27th.
INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, Margaret Street, Cavendish Square—Visiting Physician: applications, 20th.
LEEDS PUBLIC DISPENSARY—Assistant Resident Medical Officer: applications, 16th.
LETTERKENNY, co. Donegal—Medical Attendant to the Constabulary and the Bridewell.
LETTERKENNY FEVER HOSPITAL—Medical Officer: applications, 19th; election, 23rd.
LETTERKENNY UNION—Medical Officer for the Letterkenny Dispensary District: applications, 19th; election, 21st. Medical Officer for the Workhouse: applications, 19th; election, 22nd.
LINCOLN GENERAL DISPENSARY—House-Surgeon.
LIVERPOOL LYING-IN HOSPITAL AND DISPENSARY FOR DISEASES OF WOMEN AND CHILDREN—Dispenser.
LIVERPOOL ROYAL INFIRMARY—House-Surgeon: applications, 19th.
LONDON HOSPITAL—Medical Clinical Assistant: applications, 25th; vacancy, August 1st.
MALE LOCK HOSPITAL—House-Surgeon: applications, 15th; vacancy, Aug. 1.
METROPOLITAN ASYLUM DISTRICT—Medical Officer for Leavesden: applications, July 27th; and for Caterham, July 28th.
MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: August 25th.
NEWCASTLE-UPON-TYNE INFIRMARY—Assistant-Surgeon: August 4th.
NEPORT UNION, Monmouthshire—Medical Officers for the Bedwas, Risca, Marshfield, Caerleon (including Schools), and Magor Districts: applications, 12th; election, 20th.
NORTH BIERLEY UNION, Yorkshire—Medical Officer for the Shipley District.
QUEEN'S COLLEGE, Birmingham—Medical Tutor and Demonstrator of Anatomy.
ROYAL BERKSHIRE HOSPITAL, Reading—House-Surgeon: applications, August 1st; election, 16th.
ROYAL FREE HOSPITAL, Gray's Inn Road—Surgeon.
UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, Newcastle-upon-Tyne—Medical Tutor.

MEDICAL APPOINTMENT.

Names marked with an asterisk are those of Members of the Association

*MOWAT, George, Esq., late House-Surgeon to the Swansea Hospital, appointed one of the Out-door Medical Officers of the Institution.

BIRTHS.

ANDREWS.—On July 6th, at Oakley Square, the wife of *Henry C. Andrews, M.D., of a son and daughter.
SLYMAN.—On July 11th, at Caversham Road, the wife of *William D. Slyman, Esq., Surgeon, of a son.
TURNER.—On July 9th, at Margaret Street, Cavendish Square, the wife of *J. S. Turner, Esq., Surgeon, of a son.
WATSON.—On July 9th, at Thaxted, Essex, the wife of George S. Watson, Esq., Surgeon, of a son.

MARRIAGES.

CORY, Edward, Esq., of London, to Helen Macpherson, second daughter of Robert BALLANTINE, M.D., J.P., at Girvan, Ayrshire, on July 7th.
STONE, William Domett, M.D., of Myddelton Square, to Emily Josephine, only daughter of William HOOVER, Esq., of West Lavington, Wilts, on July 11th.

DEATHS.

COPLAND, James, M.D., F.R.S., at Kilburn, aged 78, on July 12th.
LOWRY.—On July 5th, at West Malling, Mary Ann, wife of *Thos. H. Lowry, M.D.

THE MIDWIFERY CHAIR IN EDINBURGH UNIVERSITY

A MEETING was held on Monday afternoon, at five o'clock, in the rooms of the Medical Society of London, Hanover Square, to consider the recent election to the Chair of Midwifery in the University of Edinburgh, and the general question of the mode of election to the Professorships in that University. There was a numerous and very influential attendance; Dr. Tweedie, F.R.S., in the Chair. Among those present were—Dr. Murchison, F.R.S., D.C.L.; Dr. Spencer Cobbold, F.R.S.; Dr. Currie, Inspector-General of Hospitals; Dr. George Harley, F.R.S.; Professor Croom Robertson; Dr. H. C. Bastian, F.R.S.; Dr. A. Halley; Dr. Drury; Dr. J. R. Steele; Dr. Dyce Duckworth; Dr. J. Ford Anderson; Dr. Ramsay; Dr. J. Hall Davis; Mr. Alfred Pope; Dr. Thomas Hunter; Mr. R. Davy; Dr. George Slight; Dr. Alfred Pullar; Dr. Day Goss; Dr. Louttet, Greenwich; Dr. A. Steven; Dr. A. Wiltshire; Dr. Jno. Lorimer; Mr. Heelas; Dr. Henry Roy; Dr. Glover; Dr. Dickinson; Dr. Workman; Dr. George Wight; Dr. R. Taylor; Dr. John Murray; Dr. Whidborne, Crediton; etc.

Letters of regret at their inability to attend the meeting were read from Dr. Armstrong, Director-General Naval Medical Department; Dr. Sibson; Professors Christison, Lister, Sanders, and Crum-Brown, of Edinburgh; Dr. Andrew Clark, London; Dr. Barnes, London; Professors Macrobin and Inglis, and Dr. Beveridge, Aberdeen; Dr. Hodgson, LL.D., London; Dr. Henry Marshall, Clifton; Dr. Farquharson, Rugby; Dr. Dalton, Cheltenham; etc.

The CHAIRMAN, in opening the meeting, referred to the great blow which the University of Edinburgh had sustained in the result of the recent election of a successor to the late Sir J. Y. Simpson, a subject on which he said he believed they were all of one mind. It was necessary to take some steps to prevent a similar occurrence, and to change the constitution of the body in whose hands the power of election lay.

Dr. MURCHISON, in proposing the first resolution, said that no event which had recently occurred in the University of Edinburgh had caused so much indignation and astonishment as the election referred to; but it seemed to him that the object of the meeting was not so much to give expression to that indignation—for to do so would, he feared, be comparatively fruitless—but to record their opinion of what had been done in such a way as to help in the prevention of the recurrence of such a calamity to the University hereafter. When the death of Sir J. Simpson caused the Chair of Midwifery to become vacant, there were four candidates for the position, of whom two—Dr. Matthews Duncan and Dr. Keiller—were gentlemen of very great professional distinction, who had long been known in Edinburgh as eminent teachers of midwifery, and all over the world of medicine as having added greatly to the knowledge of the profession in that particular department. [*Hear, hear.*] The other two candidates were Dr. Alexander Simpson (a nephew of the late Professor) and Dr. Coghill; and the election terminated in favour of Dr. Simpson, the two eminent men whose names he had mentioned having been entirely passed over. With regard to Dr. Simpson he had nothing to say, except that, whatever eminence he might yet achieve, he occupied at present, in the minds of those who knew medical literature, a very inferior position to those of the two eminent men who were in competition with him. Although he might have given occasional lectures for his uncle, he had never given a course of lectures on midwifery or any other subject. He had never held any hospital appointment. He did not send in any testimonials as to his fitness for the particular post for which he was a candidate, and he had never published a paper of any marked importance on midwifery or any other collateral branch of medicine. They knew that in Edinburgh testimonials were very often cleverly arranged in the interests of the parties; but when a gentleman came forward for an appointment who sent in absolutely no testimonials of his fitness for it, and who was not particularly well known in his profession, it certainly looked as if something very like a job had been perpetrated. [*Hear, hear.*] The elections to appointments such as the present were made by the Curators of the University. In former days, most of the elections to Professorships were made entirely by members of the Town Council, but the present Board of Curators consisted of seven members, four of whom were members of the Town Council, and three the representatives of the University. It so happened that on the occasion under consideration, the three representatives of the University voted for Dr. Matthews Duncan, and the four representatives of the Town Council for Dr. Alexander Simpson, who was therefore elected. Now, it seemed to him that the members of the Town Council of Edinburgh or of any other Town Council, though no doubt very honourable men, were no—being for the most part successful tradesmen—the most fitting person to judge between candidates for lectureships on medicine, arts, law

d theology. [*Hear, hear.*] Therefore, the Town Council having it their power—as matters stood at present—to elect whomsoever they chose, it was the duty of the present meeting to express its opinion, that if possible the Town Council power should be limited in the future. [*Hear, hear.*] Let them, therefore, express their opinion, and let matters in the best possible train to be effectual for the passing of new Act of Parliament to change the constitution of the Court of Curators. He would just observe, further, that this question was one which not only affected those who took an interest in medical education, but also all who wished to see the most eminent men appointed Professorships in all branches of learning. [*Hear, hear.*] He had therefore pleasure in moving the resolution—“That the circumstances connected with the recent election to the Chair of Midwifery in the University of Edinburgh, in the opinion of this meeting, call for a reform in the constitution of the Court of Curators.”

Dr. A. HALLEY, in seconding the resolution, repudiated all intention of personality in the matter. He said that he was sure it was the feeling of all who were members of the University that everything that could be done ought to be done to render impossible the recurrence of such an event as had called them together on the present occasion. [*Hear, hear.*]

The resolution was carried unanimously.

Dr. T. S. COBBOLD next moved—“That this resolution be printed and circulated for signature among those interested in the welfare of the Edinburgh School of Medicine and the advancement of University education; and that a copy of the resolution thus signed be forwarded to the University Court, the University Council, the Senatus Academicus, and the members of Parliament representing the University.” Dr. Cobbold said that if it were asked why English graduates at the University should concern themselves in this matter, it would be a sufficient answer to say that they had been attracted to the University, and taken an interest in it, because of the great intellectual lights that shone there only three years ago. He, in common with other gentlemen present, had been attracted to Edinburgh by the names of Alison, Christison, Syme, Simpson, Goodsir, Jamieson, Gregory, Traill, and others; and when he remembered that, with one or two exceptions, all these great men had been removed, he could not but feel as to the future misgiving amounting almost to distress. [*Hear, hear.*]

Dr. J. BURDON SANDERSON, in seconding this resolution, rejoiced in the moderate tone which had distinguished the proceedings, and that the meeting had not partaken of the character of an indignation meeting. No doubt they felt a good deal of indignation in consequence of the system of election; but it was against the system only, and not against the person on whom the election fell. As the election was that of a Professor to teach a practical subject, and the opinion of those in the elective body who were best able to judge was adverse to the claims of the gentleman chosen, he could not think that the representatives of the Town Council acted on the occasion with an earnest desire to do their duty, and that alone.

The resolution was then carried unanimously.

Dr. DRURY questioned whether the resolution did not somewhat reflect on the memory of the late Sir J. Simpson, who had been elected by the machinery now impugned.

Dr. COBBOLD pointed out that the testimonials brought forward by Sir James, and the hostages to the future which he had already given in the shape of brilliant work, so clearly indicated the great career he was to achieve, that it was impossible even for a bailie to blunder.

Dr. GEORGE HARLEY contended that it was the principle of the election solely which they were attacking. The professional gown was in Scotland the only academical prize to stimulate young men to exertion. It was all the more important that the principle should be rigidly adhered to, “*Palmam qui meruit ferat.*” They did not desire to enforce the point that the man elected was bad, but that the principle of election was bad. [*Hear, hear.*]

Dr. GLOVER said he was far too ignorant of the merits of the candidates for the recent appointment to speak positively on them, but he certainly thought there had been a slight excess in the disparagement of Dr. Alexander Simpson. [*No! No!*] At any rate the newly appointed professor was the nephew of his very great uncle [*a laugh*]; and enjoyed the advantage of his teaching, and had lectured for him in the University. [*Hear, hear.*] He denied that there was anything in evidence to show that Dr. Alexander Simpson might not become a very creditable Professor in the University; but, having said so much, he had no hesitation in expressing adherence to the abstract resolutions that had been passed. He admitted that the Town Council had in times past made some splendid appointments; but he thought it unreasonable and undesirable for that body to retain a majority in the Curators' Court.

Dr. MURCHISON said that if Dr. Glover had been present at an

earlier stage of the proceedings he would have understood that it was the principle of election, and not the personal or professional qualifications of Dr. Alexander Simpson that had formed the subject of animadversion. With regard to the “splendid appointments” that had been made by the Town Council, he could only say that it would have been strange indeed, if they had always chosen the worst men, and would add the remark, that of late years they had made some very bad appointments, which had brought infinite discredit on the University. [*Hear, hear.*]

On the motion of Dr. MURCHISON, seconded by Dr. WORKMAN, Dr. John Murray was appointed Honorary Secretary to carry out the objects of the resolution.

On acknowledging the appointment, Dr. MURRAY stated that he had just heard that a similar meeting would likely be held in Edinburgh. In that case, he would issue circulars in England and Ireland, leaving Scotland to the honorary secretary there.*

In moving a vote of thanks to the chairman, Dr. DYCE DUCKWORTH paid a warm tribute to the merits of Dr. Alex. Simpson, the newly elected professor, of whom he had been a pupil, who had frequently read, with great acceptance to the class, the lectures of his distinguished uncle; who had received a thorough medical training, and was an excellent physician and an admirable linguist. [*Hear, hear.*]

During the proceedings, Dr. Murray read extracts from some of the more important communications he had received from gentlemen unable to attend.

Dr. SIBSON (London) was of opinion that the patronage of the University chairs should be taken out of the hands of the Town Council.

Professor CHRISTISON (Edinburgh) wrote: “There is, in my opinion, no better patron of professorships in Scotland than the Crown. The University Courts are excellent also; but the Edinburgh Court of Curators might be made as excellent by substituting for the Town Council members one appointed by the General Council, one by the Senatus, one by the Chancellor, and one by the Crown, so that every branch of the University might be represented. Various other modes might be pointed out equally good; but the following are, in my opinion, essential conditions: 1, the elective bodies, or individuals who appoint members of the Court, should be such as will appoint only men of education and social position; and 2, the number of the Court should not be so great as to lessen too much the sense of responsibility—therefore not more than nine; seven being very suitable.”

Dr. ANDREW CLARK (London) wrote: “No one can be more sensible than I am of the impolicy of questioning, in ordinary circumstances, the decisions of electoral bodies; but the circumstances of this late election are not ordinary; they are, indeed, speaking quite soberly, so scandalous, that silence would be professional disloyalty, and inaction acquiescence in one of the grossest forms of personal injustice. Surely, if the profession will be true to its highest interests, which are no other than the interests of truth and right, it will not rest from this day forth until it has succeeded in reforming the Curators' Court, and in depriving the Edinburgh Town Council of those judicial functions in the election of University professors; which functions it is now too plainly either incompetent to perform, or base enough to betray.”

Dr. HODGSON, LL.D., of London, said: “It would be a great relief to my mind could I take any part in protesting against either the recent election, or the longer retention by the curators of the power which they have now, but not for the first time, so grossly abused.”

Professor LISTER wrote: “There seem to be practically two alternatives as to the change to be made. One of them is to place the election in the hands of the University Court. This would have the advantage of simplicity, and it would be merely placing the Edinburgh University on the same footing as the other Scotch Universities. But some think the Curatorial Court should be retained, but altered—say, by taking away the Town Council representatives and adding four others—one appointed by the Crown, one by the Chancellor, one by the Senatus, and one by the general University Council, or, perhaps, two by the last. I confess my own view is in favour of the University Court. The University Court is very well constituted so far as I am able to judge. Next, as to the best means to bring about the change; it appears the General Council of the University would probably like to have the initiation of the alteration, and that they are jealous of other bodies initiating changes in the constitution of the University; also, the Parliamentary session is so far advanced that we could hardly expect to get anything passed this session.”

Professor SANDERS wrote: “Evidently strong, immediate, and steady pressure must be made to get the Court changed; additions elected by the General Council of the University and nominated by the Crown,

* We have been requested by Dr. Murray to state that he will be happy to receive, as soon as possible, the names of those who wish to support the resolutions passed at the meeting.

and probably a nominee of the medical profession, and say the President of the Royal Society—these, or such like, raising the number to eleven or more, instead of seven, would prevent Town Council ascendancy, and give some security that a great public trust would be at least dispassionately administered."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ELECTIONS OF THE CURATORS' COURT TO PROFESSORSHIPS AT EDINBURGH.

SIR,—Having attended the meeting yesterday, which was held for the purpose of considering the present constitution of the Curatorial Court in the University of Edinburgh, I wish to state that I am glad the general sense of the assembly was in favour of considering this question apart from the personal one, which led to the discussion at the present time.

The meeting was summoned "to consider the recent election to the Chair of Midwifery, etc."; and perhaps there were some who attended it in the spirit urged by a paragraph in our JOURNAL of Saturday last, where, on page 43, one of the objects of it was stated to be "to protest against the appointment" of Dr. Alexander Simpson.

Although such a tone was not adopted, and would, indeed, have been sadly out of place, I still think that it is most unfair, and must be exceedingly painful to the new professor, that such an announcement should have been published. For my part, I attended the meeting to help in the desirable work of seeking to neutralise, if not to nullify, the unwholesome municipal influence which still unfortunately prevails in the Court of Curators; and I am convinced that the General Council, if they will hold together in this matter, will carry their point at no distant period. While, however, I object to the present constitution of the Curators' Court, I am confident there will never be reason to regret, what all true friends of the University fervently hope may prove to be, their last appointment.

I am, etc., DYCE DUCKWORTH, M.D.

11, Grafton Street, Bond Street, W., July 12th, 1870.

MIDWIFERY ELECTION AT EDINBURGH.

SIR,—Permit me to question the accuracy of one or two assertions in your article of July 9th, on the recent election to the Chair of Midwifery in Edinburgh. You state that "the students of the University have even thought fit, in large numbers, to request Dr. Simpson to resign the Chair to which he has been appointed." Is that statement true?

You further allege that, "in London, a meeting has been called for Monday next—details of which are given elsewhere—to protest against the appointment, and to consider the present mode of election to the Edinburgh University Chair." Was any such protest proposed or carried at the said meeting?

Dr. Simpson is a member of the British Medical Association; and it is surely incumbent on our JOURNAL to protect the associates from, instead of assailing them with, misrepresentation.

I am, etc.,

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

** We confess we are at a loss to understand the meaning of our correspondent's letter. The meeting was held in consequence of the appointment of Dr. Simpson in preference to others generally recognised in the profession as being of greater merit; and the resolutions passed urged immediate reform in the Court which had elected that gentleman. This was surely protesting in the strongest manner against the appointment of Dr. Simpson. We have nothing personal whatever to say against Dr. Simpson; and, had he been the only candidate, we should have been glad to congratulate him on the appointment. Our objection is solely a relative one, and is based on the conviction that Dr. Duncan had the first claim. With regard to the request of the students that Dr. Simpson should resign, we may state that the information was sent by several correspondents, and appeared in one at least of the Edinburgh daily papers. That Dr. Simpson is a member of the Association, is quite correct; but Dr. Matthews Duncan also is a member; and therefore the question of membership can have little or nothing to do with the matter.

NOTICE.—It is requested that all Letters, etc., intended for the Editor or Publisher of the BRITISH MEDICAL JOURNAL be addressed solely to the Office, 37, Great Queen Street, London, W.C.

BLOOD-LETTING AS A REMEDY IN SCARLATINA DROPSY.

SIR,—Some more able pen than mine will, I trust, reply to the proposal of Dr. Bramwell, to reinstate blood-letting as a remedy in scarlatina dropsy. If not, pray find a corner for my protest. The microscope clearly demonstrates that nephritis, accompanied by dropsical effusion after scarlatina, presents most prominently destruction of blood-corpuscles; every symptom, in fact, speaks of deterioration and decay. In the Croonian Lectures for 1864, Dr. Basham thus emphatically puts the case: "It is not a state to be represented by the organism *plus* something which has to be taken away, but by the organism *minus* something which has to be added. Now that something is nutrition—nutritive elements of the nitrogenous series to supply the pabulum for fresh cells and active reproduction. Will blood-letting supply this? Will the abstraction of blood-globules from a fluid already exhausted of these, and reduced to a minimum, give aid to renewed cell-growth?" It was my privilege to learn from Dr. Basham at the bedside those principles of treatment he has since so ably expounded, especially in his recent work on *Renal Diseases*. Tested during fifteen years of active practice, by the observation of many hundred cases, such satisfactory results have followed their application, that the advocacy of a retrograde practice seems to demand the opposing testimony of even the humblest conservative practitioner.

I am, etc.,

Codnor Park, Alfreton, July 9th, 1870.

WILLIAM LEGGE.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, June 13th; The New York Medical Gazette, June 25th; The Parochial Critic, July 13th; The New York Medical Record, June 30th; The Boston Medical and Surgical Journal, June 30th; The Madras Mail, May 2nd; The Gardeners' Chronicle, July 9th; The Poor-Law Chronicle, July 5th; The Shield, July 4th; The Newcastle Daily Journal, July 8th; The Dublin Evening Mail, July 7th; The Liverpool Daily Courier, July 8th; The Ashton-under-Lyne News, July 6th; The Swansea and Glamorgan Herald, July 6th; The Scotsman, July 12th; The Edinburgh Evening Courant, July 11th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

The Director-General of the Army Medical Department; Messrs. Bollmann, Condy, and Co., London; Dr. White, Malvern Wells; M.D.; Mr. R. B. Benson, Pulverbach; Mr. J. M. Burton, Lee, Kent; Mr. F. J. Gant, London; Mr. Charles Harrison, Lincoln; Dr. Heywood Smith, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. C. Handfield Jones, London; Mr. Hulke, London; Dr. H. Barnes, Carlisle; Mr. G. F. Hodgson, Brighton; Dr. E. T. Wilson, Cheltenham; Rusticus; A Country Practitioner; Mr. G. May, jun., Reading; Dr. R. Caton, Liverpool; Mr. W. Legge, Alfreton; Mr. W. G. Davies, Bath; Dr. Thomas Reade, Belfast; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; M.R.C.S.; Mr. T. Watkin Williams, Birmingham; Mr. T. Pridgin Teale, Leeds; Dr. Hyde Salter, London; Dr. James Russell, Birmingham; Dr. J. M. Fothergill, Morland; Dr. J. Moore, Dublin; Dr. Dyce Duckworth, London; Dr. G. Burrows, London; Mr. W. Acton, London; Dr. J. Ford Anderson, London; Dr. Black, London; Dr. Murchison, London; Dr. Davis, London; etc.

BOOKS, ETC., RECEIVED.

On Amputation through the Knee-Joint. By William MacCormac, M.A., M.D. M.R.I.A. Dublin: 1870.
A System of Botanical Analysis applied to the Diagnosis of British Natural Orders, for the use of Beginners. By W. H. Griffith, Ph.D. London: 1870.
Report of the Committee of Visitors of the Lunatic Asylum for the North Riding of Yorkshire. York: 1870.
The First and Second Series of Testimonials in favour of Alexander Keiller, M.D. Additional Testimonials in favour of Dr. J. Matthews Duncan.
Army Medical Department Report for the year 1868. Volume x. London: 1870.
A Treatise on Disease of the Eye. By J. Soelberg Wells. Second Edition. London: 1870.
Notes on the Physiology and Pathology of the Nervous System. By Meredith Clymer, M.D. New York: 1870.
Recent Legislation on Contagious Diseases. By Francis Close, D.D. Carlisle: 1870.
On Cholera and Choleraic Diarrhoea; their Nature, Cause, and Treatment. By George Johnson, M.D. London: 1870.
An Elementary Course of Hydrostatics and Sound. By Richard Wormell, M.A., B.Sc. London: 1870.
Observations on Puerperal Insanity. By R. Boyd, M.D. Edin. Lewes: 1870.
Vital Statistics and Meteorological Report of the Borough of Salford for the year 1869. Salford: 1870.
The Trial of John Reynolds, Medico-legally considered.
On Cholera and Choleraic Diarrhoea; their Nature, Cause, and Treatment. Two Lectures delivered at the Church Missionary College. By George Johnson, M.D. Lond. London: 1870.
Justina's Letters in reply to Miss Garrett's Defence of the Contagious Diseases Act. London: 1870.
The Twenty-fifth Annual Report of the Lunatic Asylum for the Counties of Salop and Montgomery, and for the Borough of Wenlock. Shrewsbury: 1870.
The Contagious Diseases Acts considered in the Moral, Social, and Sanitary Aspects. By Christopher Bulteel, F.R.C.S. London: 1870.
The Hardships of Provincial Letter-Carriers. London: 1870.

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James Ophland

CLINICAL LECTURE

ON A

CASE OF INFLUENZA:

WITH

PERSISTENT HEADACHE AND JARRING SENSATION; FAILURE OF TONICS AND STIMULANTS; SUCCESS OF BROMIDE OF POTASSIUM AND A STERNUTATORY.

By C. HANDFIELD JONES, M.B., F.R.S.,

Physician to St. Mary's Hospital.

H. G., aged 29, millboard-maker, was admitted December 31st, 1869. He had been ill nine weeks. He had at first a violent cold in the head, and much running from the nose, but not much cough. He had still some remains of this cold. He had had a great deal of retching; no actual vomiting. He complained of pain in the head from the temples to the occiput; most pain in the left temple. He had a ringing noise in his left ear, and felt always as if there were "a jumping in the head which jarred him all over". The head was not tender now to tapping; some days it was very much so. He had had, and still had, a craving appetite; he wanted something to eat every two or three hours, and, if he did not get it, felt as if he would sink through the bed, and experienced a dull weary pain at the upper abdomen. He felt very low, and sweated profusely at night. He had much flatulence. Tongue moist. He had no pain after eating. The bowels were open daily. Pulse 81, of fair apparent force; temperature 37.3 deg. (99.1 deg.) The urine was pale, not albuminous, of specific gravity 1012. He had no paralysis. He denied having had syphilis and gonorrhœa. He had been treated by a medical man, who told him he had a water-congestion on the brain, blistered his neck and occiput, and put a leech behind each ear, which bled freely. He was put on ordinary diet, with four ounces of port wine; and was ordered to take the following draught three times a day.

R Ammoniac carbonatis gr. iv; spirit. æther. sulph. comp. ʒss; tincturæ cinchonæ ʒss; decocti cinchonæ ʒj. M.

Jan. 3rd. He had less sweating. His head was not in any pain as long as he kept it warm; but the ringing and throbbing continued. The forehead was cool. He did not sleep soundly. He still felt very low. Pulse good and steady, 72. He was ordered to take the following three times a day.

R Strychniæ gr. 1-20; acidi nitrici mij; spirit. æther. chlor. mx; aquæ ʒj.

Jan. 5th. The jarring sensation, extending all over him from the head, still continued; and the ringing in the left ear. He had been very deaf in that ear for three or four years. He could not hear the watch tick when it touched the left ear, but could hear it with the right at six inches. There was a little discharge from both ears. His appetite was still very craving. Wine relieved the gnawing and craving sensation. He was ordered half a grain of extract of Indian hemp and half a grain of opium three times a day. On the 12th, the head was tender on tapping. There was no improvement; and the remedies were changed for one-sixteenth of a grain of bichloride of mercury, eight grains of iodide of potassium, and ten minims of spirit of chloric ether, three times daily, in an ounce of water. After some days, Indian hemp, fifteen-minim doses of the tincture, three times a day, was given also; but no ground was gained till, on the 21st, I prescribed one-third of a grain of nitrate of silver and one grain of extract of poppies three times a day. The report on the 29th was, that his head was a wonderful deal better; but, when it was dependent, he had a sensation of a rush of blood to it. Our aural surgeon, Mr. Allen, informed us that the left ear was in a state of chronic catarrh, the membrana tympani drawn in by adhesions in the tympanic cavity, and the Eustachian tube obstructed on the left side. The tinnitus was consequent on these alterations.

Feb. 2nd. His head was nearly as bad again as ever, since he got an attack of shivering on January 30th, and some diarrhœa. I ordered him to use common snuff five times a day, and to take two grains of quinine three times daily. The pain in the head was very bad the following night, and his face was much flushed. He could not sneeze, however much snuff he took. I then substituted for common snuff the following sternutatory, which is recommended by Dr. Laycock: R Pulv. hellebori albi gr. 40, pulv. cinchon. ad ʒss; and I gave thirty grains of bromide of potassium and an ounce of camphor mixture every three hours. On the 5th, his head was much relieved; the powder made him sneeze effectually, and some blood was expelled. On the 9th, ringing

in the ear was gradually dying away. The headache was much less; what pain there was, was frontal. His head had felt different altogether since he had the bromide. Mr. Allen reported that he could inflate the tympanum better. The hearing-distance was three inches for a loud-ticking watch.

He was made an out-patient soon afterwards, and was last seen on the 15th, when he reported that he was almost quite free from headache. He attributed much benefit to the hellebore snuff. The bromide had been continued in twenty-grain doses three times a day.

REMARKS.—The following points seem pretty clear in this case: 1. That the patient had been affected with tympanitis of the left ear for some years prior to the commencement of the headache, so that the latter can hardly be referred to the aural disease; 2. That he had undergone a severe attack of influenzal catarrh, which, in all probability, gave rise to the headache and the jarring sensation felt all over him; 3. That the craving appetite, sinking sensations at the epigastrium, and profuse nocturnal sweatings, were other results of the influenzal attack, and indications of its prostrating action on the nervous system; 4. That the headache was not, as I was inclined to regard it at one time, of syphilitic origin.

There remain for our consideration—1. The nature of the head-pain and jarring sensation which attended it; 2. The action of the remedies which proved beneficial.

As to the first, we shall hardly err if we attribute the symptoms to the direct toxic effect of the influenzal miasm on the encephalon. It is surely rational to think that a poison received into the system may directly affect the nutrition of the nerve-cells, without altering in a notable manner the blood-supply of the great centres. When a man is the subject of alcoholic coma, we do not suppose him to have congestion of the brain, or, at any rate, that this is the cause of his stupor; but we simply affirm that he is intoxicated, or, in plain English, poisoned. In many other similar cases, we take generally the same view; but, when we come to more obscure instances of poisoning by ærial and invisible miasms, there seems to be a great tendency to assume congestion or effusion as the chief causes of cerebral symptoms, and to leave out of count the direct operation of the morbid agent on nervous tissue. I cannot help thinking that this error often leads to bad practice.

Too many are inclined, I fancy, to look upon influenza as essentially a bronchial catarrh; but I quite agree with Graves and Blakiston that its cause acts in a special manner on the nervous system, and that it is no mere inflammation. The peculiar prostration, the headache and other nervous symptoms, which are not unfrequent, differentiate it markedly; besides the suddenness of invasion, which is often very remarkable. I will narrate a case briefly to you which illustrates these points well. T. P., aged 32, had been in hospital three weeks under my care for epididymitis, and was nearly well, when he was taken one morning, about 10.30, with severe headache, prostration, and fever. His pulse was very weak, 135, and his temperature 106.5, the same afternoon. There was some deficiency of breathing at the right posterior base, but no marked dulness or crepitation. The lungs continued free; the temperature and pulse soon declined to a lower, though still febrile rate; but his brain remained seriously enfeebled for more than a fortnight after his seizure, and he convalesced very slowly. Giddiness and prostration of mental activity were the most remarkable phenomena. Ten days after his seizure, he staggered and fell down when he got out of bed; and, a week later, he was so torpid and silent that I had some difficulty in getting him to answer questions. His pulse and temperature had, however, become natural, except that the former was very feeble. Here it was manifest that the stress of the disease fell altogether on the encephalon, and that the lungs were very slightly affected. In our first case, it was much the same, though there seems to have been a greater amount of catarrh.

Another instance worth mentioning is that of a middle-aged lady who had very great prostration of brain-power, so that she could scarcely attend to her household matters. Strychnia did her great good. Her husband at the same time had severe catarrh, coughed violently in the early morning, and sweated so copiously at night that he had to change his night-shirt.

It is hardly an hypothesis to say, that in the first of these cases the hemispheres, and in the second the vaso-motor nerves, were almost solely affected. The lady remarked to me, that she supposed she had "suppressed catarrh."

The peculiar jarring sensation throughout his body which our patient experienced can only be regarded, I believe, as a modification of cerebral derangement, dependent perhaps on special implication of the sensory nerve nuclei. That, under certain circumstances, the normally insensitive hemispheres may become the seat of pain, I can hardly doubt. A man, aged 70, consulted me once, complaining of "a soreness of the

brain"; any motion or coughing jarred and hurt his head, or rather its contents. His head, however, was not tender to tapping. He had no rheumatism; no syphilis; no paralysis. His intellect was clear; but he had sensations of things crawling about the lower part of his forehead. The age of this patient would make one suspect calcification of the cerebral arteries; and this might occasion the symptoms complained of. However this may be, there can be little question that, owing to some defect in nutrition, the cerebral nerve-tissue became intolerant of slight commotions, which ordinarily it could have endured very well.

But, to return to our patient: I do not think the peculiar dysæsthesia of which he complained—the jarring sensation—was of any special significance. No doubt, some minute modification of molecular arrangement corresponds to each of the manifold dysæsthesiæ which such sufferers experience; but these are far beyond our ken, and it is not of any vital importance to the practitioner to be acquainted with them. The subjective phenomena (the same is true of the objective) are no sure guide to the *quality* of the disorder; and this is what especially concerns us. You will never treat derangements of the nervous system successfully, if you suppose that all phenomena having the same outward appearance are really alike. Cases of delirium, of spasm, of neuralgia, differ very greatly, though, as far as phenomena go, they are identical. In the case of H. G., I was led into error at first by the history and by the evident signs of prostration of nerve-power. These led me to give tonics and stimulants, which availed nothing for the relief of his head. When, however, I administered an unexciting calmative, aided by a counterirritant (for such I consider the sternutatory), improvement ensued rapidly. You may perhaps think that such a remedy ought, on rational grounds, to have been employed at once; and that stimulants were inappropriate to the symptom *pain*. A little experience, however, will show you that, in a multitude of instances in which debility constitutes a prominent feature, stimulants are most efficacious sedatives. Two or three glasses of port wine will remove, for the time, neuralgia in some cases. All neuralgic pain, however, is not to be thus dealt with; and you may need, to allay it, remedies which are very much the reverse of stimulants, such as hydrocyanic acid, bromide of potassium, aconite, and moist warmth. When I find such means as these successful, I think the condition is thereby at once differentiated from that in which our ordinary tonics avail; just as much as two different saline solutions are distinguished by chemical tests.

As I have above said, I cannot tell you in what the essential difference consists; but I find it of value to keep in my own mind the two conditions separate, and to denote them by some such terms as neuralgia and hyperæsthesia. It may aid us in forming more definite conceptions of these two states, if we call to mind their analogues among motor disorders, such as choreal paralysis and jactitation, which, though extremely unlike, undoubtedly originate in the same morbid process, and are, so to speak, truly homogeneous. It is a fact, that all causes which impair strength are very prone to generate hyperexcitability, which may show itself in the sensory, or motor, or intellectual departments.

Lastly, as to the sternutatory. This must be regarded as a form of counterirritation; having this advantage, however, that it is capable of repeated application within a short time; and that it provokes repeated diversions of blood, with mucous exudation. The formula which I employed is that recommended by Dr. Laycock; and you see that it was very positively more efficacious than common snuff. Its good effect in our patient depended, I think, on its producing reflex stimulation of the vaso-motor nerves of the cerebral arteries, and lessening the blood-flow, which was probably excessive for the *weakened* tissue. I emphasise the word *weakened*; for I hold it well ascertained, that an organ whose vitality is vigorous can bear and employ beneficially a much larger supply of blood than one which is in an opposite state. The nerves of the Schneiderian membrane are perhaps better fitted than any to exert this constricting influence. At the same time that the sensory nerves of this membrane are excited, its vaso-motor are, in all probability, relaxed; so that the vessels become suddenly congested, and modified blood-fluid and corpuscles escape. This seems to be the general rule in all localities, that tissue-excitement determines vascular relaxation. Fatal cases of tetanus and chorea afford marked examples; the vessels of the cord or other nervous centres being engorged, and rupture and extravasation having ensued in some places. To an hyperexcitable organ, an undue amount of blood-flow is certainly injurious; so that it is good practice to try to calm tissue-excitement while we constrict vessels.

I do not know that I can altogether explain the mode of action of counterirritants; but their utility, in spite of recent scepticism, I do not doubt; and I strongly advise you not to doubt.

To conclude, let me counsel you to familiarise your minds with such common things as the management of headache in its various forms. Many of you may never perform lithotomy, nor perhaps amputate; yet

students crowd to gaze at the great operations, of which they can see next to nothing, and which they are little likely ever to perform; while they can hardly be brought to give a thought to the treatment of a malady which they may have to deal with any day of their lives.

CASES AND COMMENTARIES.

By HYDE SALTER, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Physician to Charing Cross Hospital; Lecturer on Medicine at the Charing Cross Hospital Medical School.

No. I.—*Case of Double Aortic Disease.—History of Case and peculiarities of Physical Signs.—Diastolic Impulse.—Relations of Diastolic Murmurs to Diastole.*

HENRY BENNETT, aged 38, a tall, spare, sallow man, with thin, lank, black hair, by occupation an engine-fitter, temperate, married, with four children, all healthy, was admitted into Charing Cross Hospital on December 28th, 1869. He has for years suffered from an undue beating of the heart, but not enough to interfere with his work; a twelve-month ago this palpitation became more violent; at that time, he had an attack of bronchitis, from the heats and chills to which he was exposed in his occupation, and it was on recovering from the bronchitis that he noticed that the palpitation had increased. Eight weeks ago he experienced a further and sudden increase of it, without any bronchitis, or any assignable cause; and now to the palpitation was added dyspnoea—he was unable to walk quickly, or work at his employment, and on lying down at night his breath was very short, and his heart seemed beating in his throat, so that he was obliged to jump up in bed again; from that time, too, he has, almost every night, suffered from orthopnoea, being aroused from his sleep by a sense of suffocation, starting up and labouring for his breath with the utmost violence; especially does this occur if he lies on his left side. He has, too, what he never had before, a sense of uneasiness in the epigastrium accompanying these attacks of palpitation and breathlessness. He has never had rheumatic fever, or rheumatism in any form.

Physical Examination.—On stripping the man, two things are at once seen; first, a strong pulsation of all the arteries, at the root of the neck, arms, etc.; and, secondly, an undue visibleness of the heart's movements over the whole of the front of the chest, especially in the intercostal spaces of the left side, and the scrobiculus. The apex is seen strongly beating between the sixth and seventh rib, at a distance of four inches in a vertical line dropped from the left nipple, and seven inches and a half from the base of the heart. A fluctuous brush of wave-like movement, passing from the region of the apex to the left at each pulsation, is very striking and conspicuous in the fifth and sixth intercostal spaces. On listening at the base, a double murmur is heard, the two running into one another—the first soft and faint, the second loud, rough, and terminating abruptly. On checking these with the pulse, the first is found to be systolic, the second diastolic. There is, therefore, double aortic mischief, constrictive and regurgitant. It would be difficult, perhaps, to say at which margin of the sternum the basic murmur is the loudest; I think the left; but it is decidedly of deeper and softer tone at the right, flatter and harsher at the left, and more conspicuously abrupt in its termination. At the apex, a loud single murmur is heard, accompanying the stroke of a very strong impulse, so strong as to raise the stethoscope with great force against the ear. This impulse has all the characters of a heaving thumping systole, but on checking it by the pulse, I found, to my surprise, that it was diastolic, while at the systole there was no perceptible impulse whatever. About the diastolic period of this violent impulse there could be no doubt. I checked it in every way. On applying the fingers of one hand to the apex, and of the other to the wrist, the alternation of the heart's stroke and that of the pulse was very clear and striking; and on applying the stethoscope to the apex, and allowing its free end to move freely as a sphygmoscope, and comparing its movements with those of the visible pulsations of the radial artery, their alternation was equally conspicuous. I do not know that I have ever felt an impulse of greater strength, more thumping character, and wider distribution; and yet with this impulse the systole has nothing to do. At the period of the systole there is no trace of impulse, and hardly a trace of sound; what little sound is perceptible appears to me to be rather of the nature of a very soft and almost inaudible systolic murmur than having any of the character of a natural first sound. It is, however, so faint and so masked by the loud diastolic murmur, that it is difficult to say anything as to its character. Nothing could be more misleading as to the heart's rhythm than such a diastolic impulse as this; not only its extraordinary strength, but its *singleness*, gave an impression of its systolic character that was almost irresistible.

and no one watching it, or feeling it, or listening to it, unchecked by the pulse, could resist the conviction that it *was* systolic, and that the murmur that accompanied it was a systolic murmur. No case could better illustrate the importance of checking the cardiac movements by the arterial movements. The arteries of the body seem everywhere alive. Pulse 96; respiration 20; pulse-respiration ratio, therefore, $\frac{5}{2} = \frac{1}{5}$, when sitting and tranquil.

The patient became progressively and continuously worse from the day of his admission. He suffered greatly from a pain through his chest, as if it were in a vice; this was a source of great torture to him. For ten days before his death he suffered from constant orthopnoea, and for several nights had no sleep whatever. An eighth of a grain of morphia injected hypodermically gave relief to the anginal agony, but gave him no sleep. The heart's action was very violent, from 120 to 125 in a minute. During the last two days of his life he was troubled with constant vomiting, and took no food. At 8 o'clock on the morning of January 17th, having been asleep about ten minutes, he suddenly woke up, gave a shriek, threw up his hands, fell back, and died almost instantly in the arms of those who were supporting him.

On examination after death, the heart was found to weigh twenty-four ounces; the aortic valves were a mass of atheroma, thickened, stiffened, and puckered; the valves of the pulmonary artery were healthy; the mitral valve was thick and leathery, but not contracted, and was evidently adequate to the closure of the orifice.

There are five points to be noticed in this case.—1. The greater loudness of the diastolic than the systolic element of the double aortic murmur. Many writers insist on the greater loudness and strength of systolic murmurs than diastolic, and maintain that certain characters attach to systolic murmurs exclusively, because they *are* systolic, and because other murmurs are not developed by a force sufficient to elicit them, such as thrill and musical tone. It is impossible, say they, that a mere passive relaxation can generate a blood stream of the same force and rapidity as an active contraction, and therefore we must not look to any but systolic murmurs for the highest expressions of endocardial blood-friction. No mistake can be greater than this; it is founded on an imperfect comprehension of the physics of the case, and is contrary to clinical experience. One of the most musical murmurs I ever heard, of the clearest and highest pitch, was a diastolic aortic murmur which I heard last week; and I have recently pointed out that presystolic murmur is peculiarly characterised by thrill. This is not the first, nor the second, nor, I think I might say, the tenth case, in which I have found the diastolic element of a double aortic murmur predominant. Even lately we have had several cases in this Hospital in which it was so; in the cases of Samuel Easton and George Castle, to such a degree that the loud diastolic murmur almost masked the systolic, so that the latter was at first overlooked; it was so, also, in the cases of Michael Barret and William Brown. I am inclined to think that it is the *rule* for the second half of a double aortic murmur to be strongest of the two, and that it is greatly the exception to find the reverse. If so, what is the explanation of it? I think it is this. The force in each case is equal—on the principle that action and reaction are equal to each other. The force exerted by the ventricle is spent in imparting movement to the blood in the proximal portion of the aorta, in resisting its tendency to backward flux, and in further distending the arterial system—in other words, in overcoming, directly or indirectly, the elastic contractility of the arterial wall. This force, thus dealt out, is stored up, so to speak, in the arterial wall, ready to be dealt back again (and, in fact, *is* immediately dealt back again) in impelling the blood onwards if the aortic valves are sound, and in driving the blood back again into the ventricle if they are incompetent. The force, therefore, with which the blood is driven back into the ventricle in aortic regurgitation is simply the very same force with which it has just been driven forward. So far, then, *ceteris paribus*, the sound ought to be the same—the regurgitant murmur just as loud as the constrictive. But why should the regurgitant be louder? The reason, I believe, is that the forward stream is an opposed stream, and requires the sustained action of the ventricle to carry it onwards; it is, as it were, laboriously pushed forward against the blood in front of it, which it has to propel a stage further along the aorta; while the backward stream in regurgitation is an unopposed stream—there is no tense blood in the dilating ventricle to delay or impede its back-rush. The consequence is that the stream that generates a systolic is less rapid than that which generates a diastolic murmur, and therefore produces less friction and develops a feebler sound. The explanation is exactly the same as that of the greater loudness of the expiratory than the inspiratory sound in bronchial breathing; inspiration has the elastic contractility of the lung to overcome—whereas expiration is an unopposed act; expiration, therefore, takes half the time of inspiration, and its air-stream is twice as rapid, and therefore twice as sound-generating.

2. In one sense the regurgitant murmur in this case might be called pre-diastolic—that is, it preceded the loud and strong second sound which suddenly terminated it, and up to which it ran. It is evident that an aortic regurgitant murmur cannot *really* be pre-diastolic, as it cannot commence till the ventricle begins to dilate, that is, ceases to contract, and its commencement must mark, and exactly coincide with, the commencement of the ventricular diastole. But in relation to the diastolic *sound*, it *may* be pre-diastolic, for the regurgitation may take place before the injured valves fall together (as far as they *can* do so), and, indeed, may delay their falling together, and thus delay the production of the second sound which suddenly terminates the murmur. That the injured valves did partially close in this case, and thus put a stop to the principal regurgitation, was shown by the strong and tolerably sharp second sound with which the murmur terminated. It is clear, then, that the interval between the first and second sound may, at the base, be occupied by two distinct murmurs—one, the ordinary aortic systolic murmur (A), running *from* the first sound into this in-



Diagram representing the relations to the first and second sounds, of (A) a systolic murmur running *from* the first sound, and (B) a diastolic murmur running *up to* the second sound.

terval; the other, the murmur which we find in this case (B), commencing in the interval and running *up to* the second sound. It is quite clear, since the murmur cannot take place till the ventricle relaxes, and since the sound marking the closure of the valves follows it, that the closure of the valves cannot coincide, in this case, with the commencement of the diastole, as it is generally supposed to do. It is very possible, as I have suggested, that the diseased condition of the valves and orifice may retard the falling in of the valves, and thus that we have in such a case a postponed second sound. If so, the murmur is really the true diastolic event, and the second sound in such a case is *post*-diastolic. The thickened and stiffened condition of the aortic valves in this case is just such as one can imagine impeding and delaying the falling together of their segments—in fact, such as must necessarily have been incompatible with that quick movement and instantaneous apposition which the valves effect in their natural thin and flexible condition. There is yet a second corollary that may be deduced from this case—that an aortic regurgitant murmur may have two relations to the second sound—may precede it or succeed it; may run up to it, as here, or run down from it, as is ordinarily the case. In the former case, that of this man, the regurgitation takes place before the valves can fall together, and is sufficiently arrested by their closure to stop the murmur; in the second, the ordinary case, the valves fall together, as far as they can, the moment the ventricle relaxes, and then, their closure being imperfect, the arterial tension continues to squirt the blood back through the chink, till the ventricle being filled from behind, a balance of pressure is arrived at.

3. This case illustrates the point, that the rule about right and left margin of the sternum, in diagnosing aortic and pulmonary-arterial disease, does not apply to regurgitant murmurs, but only to direct ones, as the murmur was perhaps slightly louder on the left (the pulmonary) side of the sternum, whereas the regurgitation was aortic.

4. The conspicuousness of the murmur at the apex, though in its genesis a basic murmur, illustrates the influence of convection on the localisation of cardiac murmurs.

5. This diastolic impulse, without a trace of systolic—what is it? What is its nature? What produces it? Has it anything to do with regurgitation—with the sudden filling of the ventricle with a “flop” of blood from the aorta, or with the concussion of the two streams meeting one another in the ventricle, one rushing back from the aorta, the other forwards from the auricle?

SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM: A RETROSPECT.

By THOMAS READE, M.B., Belfast.

SINCE Dr. Todd of King's College, London, and I, published cases of syphilitic disorders of the brain and its membranes respectively, in 1851 and 1852, the subject has attained a high degree of practical value and nosological importance. The cases we at that time submitted were in direct contravention of the universally accepted opinion and authority which ruled surgeons. It is within the roll of the maladies usually assigned to the care of the physician, that we now trace and follow out the most serious and even fatal results of constitutional syphilis.

In my own paper, first series (*Dublin Quarterly Journal*, 1852), I have unequivocally proved that epilepsy, mania, hemiplegia, paraplegia, amaurosis, hebetude of intellect, loss of memory, cranial neuralgia, suicidal propensity, paralysis of sphincters—all may be the offspring of the one disturbing cause—syphilis affecting the nervous centres. How this protracted darkness overshadowed the observations and judgment of generations of eminent medical men, I can in no way account for, unless in this way: the surgeon had dismissed his patient on the disappearance of all local and visible disorder. Authority had guaranteed the brain exempt from all syphilitic forces. The subsequent injuries of the nervous system were intrusted to the recognised speciality of the physician, whose nosological nomenclature of the nervous system gave no place in its roll, no clue to a true diagnosis, until recent times supplied the defect.

With this prelude, I propose to submit a statement referring to this subject, and to my own special connection with it, made by the editor of the *Dublin Quarterly Journal of Medical Science* for August 1869, p. 155.

"It is very generally known that Dr. Thomas Reade of Belfast published his first paper on syphilitic diseases of the nervous system in the pages of this journal in the year 1852; Dr. Todd of London having drawn attention to the same subject in 1851. All, however, are not aware of the fact that Dr. Reade's paper was offered for publication in the year 1847. Thus Dr. Reade was really and literally the first who recognised the existence of syphilitic disease of the nervous system; and his labours since this time in further elucidation of the same are well known, and should be freely acknowledged."

I deem it due to the profession and to myself that I should briefly supplement the affirmation of the editor of the *Dublin Medical Journal* by a simple relation of the facts as they happened. They are as follows. In 1837, I was required to visit a military officer from the Ionian Isles, who had been under treatment for persistent quotidian ague for eleven months. He was apparently in the most abject state of prostration consistent with human existence. A strict examination of his person guided me to ignore ague (malarial), and to affix a positive diagnosis; namely, constitutional syphilis. His state precluded hesitating measures. I directed fifteen grains of strong mercurial ointment to be assiduously rubbed in every night. The success was wonderful: on the third night he slept unbroken sleep throughout the night; he had no rigor or fever, *which never again returned*. The fifth day, he had ravenous appetite, with restoration of all the nutritive and secretive functions.

I may not dwell on the corroborative proofs of the diagnosis by the relation of the various accidents of constitutional syphilis which attended the progressive convalescence of about one year. He married, has a family, is an officer of high military rank, and, for his years, of rather plethoric health. (See Case 9, second series.)

The fortuitous occurrences of private practice supplied me with other cases in succession up to the close of the year 1847, so prominently characteristic and pronounced, that it was impossible I could resist the conviction that the brain and its membranes were susceptible and capable of being imperilled by constitutional syphilis. The moral obligations of my profession as an instrument of public benefit, imposed on me the duty of publication of facts of such deep interest and value in connection with the advancement of correct pathological knowledge, in furtherance of this duty to put my opinions to the test of full inquiry, I offered my first series of cases in 1847 to the editor of the *Dublin Quarterly Journal of Medical Science*. He, however, refused the paper, and it lay with me until accident introduced me to Dr. Neligan, the next editor of the same journal, who asked me if I could give any contribution. I named the rejected paper, which he gladly accepted, and published in his forthcoming number (February 1852). By Dr. Neligan's desire I continued the subject, and gave him my second series of six additional cases in 1860.

The knowledge of the subject in 1867 had acquired such a full re-

cognition in England and on the Continent, that I considered it right to collect my series of papers and additional cases—in all twelve—and publish them in a volume (Messrs. Churchill, London, 1867).

Subsequently to 1847, Dr. Todd, when on a tour of relaxation in Ireland, paid a visit to me in Belfast. Incidentally I mentioned to him my recent researches on affections of the brain excited by syphilis. He engaged with great interest in the discussion. I discovered that he held opinions on the subject in perfect accordance with my own; he being the only medical man up to that period with whom I had ever conversed holding the same views.

In 1851, he delivered his remarkable lecture expounding his recognition of syphilitic disease affecting the nervous system. No doubt the connection of a name so justly distinguished in the advance of medical science, must have materially encouraged a spirit of inquiry in that direction.

In conclusion, the claim of priority or precedence bears no weight on my mind. The acceptance and reference by *modern writers** on syphilis of my cases, as faithful and instructive types of syphilitic disease dominating the nervous system, could alone be to me a justification for publishing this retrospect.

NOTES ON

THE QUARTERLY RETURN OF BIRTHS, DEATHS, AND MARRIAGES.

By EDWARD T. WILSON, M.B. OXON.,

Physician to the Cheltenham Hospital and Dispensary.

ON the 5th of May last, the Registrar-General yielding, as he admits, to pressure from without, issued a Quarterly Report, differing in many important particulars from those which preceded it; a Report calculated "to merit the attention and satisfy the liberal curiosity of the inhabitants of each place, who will see at once what is going on as regards those important events, births, deaths, and marriages; what diseases are rife, what diseases are fatal, how many children have been born in the past, and even" (the Registrar-General is not unmindful of the gossiping propensities of people) "how many of their neighbours have married in the previous three months." (Preface to Quarterly Report.)

In the Quarterly Returns with which we have hitherto been familiar, the numbers of births, deaths, and marriages, occurring in the registration districts of England, in 14 large towns, and in 46 large town districts, were given; whilst the only intimation of disease was the note appended by the local registrar to account for an exceptional death-rate, whether above or below the average.

The Report under consideration professes to give the same facts for no fewer than 2,196 sub-districts in England, for 17 large English towns, and 50 large town-districts, with the very important addition of the deaths in infancy (under one year) and old age (sixty years and upwards), from violence, and from eight of the most marked and most prevalent zymotic diseases; viz., small-pox, measles, scarlet fever, diphtheria (to include sloughing sore-throat!—*vide Instructions to Registrars*), whooping-cough, fever, diarrhoea, and cholera. "It will be evident," the Registrar-General tells us, "on surveying the tables, that they give as comprehensive a view of the diseases plaguing the population dispersed over the soil of the kingdom, as a series of photographs could give of the clouds that sweep over its skies. It is true the returns of deaths can never furnish such immediate notice of the origins of epidemic diseases as returns of cases of disease; but it is not true that the information of the death-register is necessarily too late; it is too late as regards the individual, but it is not too late as regards the community, which can immediately adopt measures to quench the sparks before they involve it all in flames." Prompt information of the *locale*, type, and course of an invading epidemic is amongst the most urgent needs of preventive, as of curative medicine; and if the performance of the Registrar-General be equal to the promise, he will merit the warmest approbation, not only of the medical profession, but of sanitary authorities, and even individuals, through the length and breadth of England. I venture to think, however, that a close examination of this Report will go far to qualify any excessive satisfaction with the result, and that the simile of cloud-photographs is unfortunate as suggesting to anyone

* Dr. McDowell, *Dublin Hospital Gazette*, 1854; Dr. R. B. Todd, *Clinical Lectures*, second edition, 1856, page 405; Dr. Hughlings Jackson and Mr. Jonathan Hutchinson, *Medical Times and Gazette*, 1861 and 1862; M. Zanibucò, Civrieux Prize, Imperial Academy of Medicine, Paris, 1862; Dr. Duncan, *Dublin Quarterly Journal of Medical Sciences*, 1863; Dr. William Moore, *Ibid.*; Lancereaux, *Traité de la Syphilis*, New Sydenham Society, 2 vols., 1869; J. K. Barton, *Pathology and Treatment of Syphilis*, 1868.

acquainted with the difficulties of the photographic art, the sort of pictures which the figures of the Registrar-General are likely to afford of the *amount of disease*, either in the present or in the past. Regarded from a provincial rather than from a central point of view, the defects of the Report are very patent. It yields but a mocking answer to the growing demand on the part of sanitary bodies, medical practitioners, and others, for speedy information concerning the death and disease going on around them.

1. *The information comes too late.*—The return for January, February, and March is published on the 5th of May—five weeks at least after date, and undoubtedly, in nine cases out of ten, too late to have any effect on the progress of epidemic disease, or to give a warning note of any real value to the intending tourist, the invalid, or the medical practitioner. The healthiest watering place may have passed through an epidemic of scarlatina or measles, and be perfectly free before the Registrar-General is ready to fulminate against it. Much injury and injustice has been already done by this pernicious use of the death-rate. Isolation and other measures are all but powerless when an epidemic has got head; they are all-powerful when brought to bear on the first cases of invading disease, as Mr. Davies has practically proved at Bristol, and others elsewhere. Early information, therefore, is essential to prompt and successful effort; and a death-roll several weeks after date can scarcely be said to fulfil this very necessary condition.

2. *The death-rate is deceptive as an index of disease.*—The prevalence of sickness bears no proportion to the rate of mortality. This has been proved so often and so clearly that it seems almost superfluous to dwell upon it in this place. Dr. Ballard has shown that the months ranged in order of sickness and in the order of fatality do not correspond. The death-rate from scarlatina in Manchester has varied from 1 in 6 cases to 1 in 36, for various seasons of the year. The mortality from diarrhoea in the same city varied from 1 in 3.3 to 1 in 35, the deaths being in inverse proportion to the prevalence of the disease. Lastly, we learn from Dr. Murchison, as quoted in Mr. James Lewis's very suggestive paper on National Returns of Sickness (Sessional Proceedings of the Social Science Association for March 24th, 1870), that, although 34 cases of relapsing fever had been admitted into the Fever Hospital during September, 7 on October 1st, 68 during the week ending October 22nd, and 89 in the week following, "the first appearance of the disease as a cause of death was in the Registrar-General's return for the week ending November 6th, when 2 fatal cases were recorded." The death-rate, then, is but an imperfect guide to the prevalence and fatality of epidemic disease; it is, at best, an uncertain index of sanitary conditions.

3. *The Quarterly Returns of the Registrar-General are provisional only.*—An experiment has been tried, and the Registrar-General "believes this great work has been satisfactorily performed; instructions will provide against future defects." The experiment, I need scarcely say, consists in the fact that the difficult task of analysing and classifying local returns of certain causes of death has been committed to local officers, amongst whom are reckoned farmers, undertakers, grocers, and tailors; whilst the very necessary safeguard of skilled supervision suggested by Dr. Farr, and previously by Dr. Rumsey, has been omitted from the scheme. The result is a provisional return in which, I fear, little confidence can be placed. The registrars are not to blame. All praise is due to a most intelligent and zealous body of men on whom a great stress of work has been thrown without any corresponding emolument. The defaulters, the Registrar-General tells us, have been few. But anyone who is conversant with the terminology of death-certificates, and who has himself tried to classify the causes of death, must know that the difficulties are very real; that terms are used which would tax a grocer's patience to find in the nomenclature of disease; that cases of concurrent disease are often nicely balanced between two columns, and require skilled knowledge and more than ordinary intelligence to give them their true position. No instructions, however clear or detailed, could enable a grocer or a farmer to deal successfully with the various kinds of cynanche, pertussis, or the legion of fevers. In the only instance in which I have been enabled to compare the last quarterly return with the local register of the causes of death, I find that an officer exceptionally intelligent, painstaking, and zealous in the performance of his duties, has counted or classified erroneously in no less than five out of the six columns devoted to special disease. *E.g.*, the Report gives 6 cases of measles and 10 of scarlet fever: I find 4 of measles and 11 of scarlet fever. The cases of measles may be raised to 5 by counting one death registered as "measles and scarlatina" under both heads, thus making two deaths of it. I registered it as scarlatina only.* The scarlet fever cases are then made up to 11 by including a death from

"pneumonia and congestion of the kidneys after scarlatina", which I imagine the Registrar must have omitted. Under diphtheria, two deaths are given: I find but one. Whooping-cough is correct. The greatest discrepancy occurs, as might be expected, in fevers. The Report gives nine: I find but five, unless deaths from—(1) hip-disease and hectic fever, (2) rheumatic fever, (3) rheumatic fever—gall-stones obstructing the bile-ducts, (4) *febris* bronchialis—make up the number. Lastly, in diarrhoea, the Report *must* include one, and one only, of the following, in order to make its number three: "Old age, diarrhoea"; "diseased liver, diarrhoea." There should be two cases only, and both of those above-named excluded. It would appear, therefore, that we must still wait until certified copies (not necessarily copies, I may remark) of the causes of death reach the head office for analysis, "on an uniform plan by practised hands", if we are to look for accurate returns; and it may fairly be asked whether the increased outlay for printing, etc., and the labour expended in producing an array of figures such as we find in the improved Quarterly Report, could not be put to better use. This leads me to the last part of my subject.

4. *Competent local supervision of mortuary returns and registration of sickness.*—The Registrar-General allows that the central organisation would break down under the pressure of immediate returns of causes of death for the whole country; local aid is therefore a necessity; it has been shown, however, that local aid, unless regulated and supervised, leads to erroneous and, by consequence, highly mischievous results. On the other hand, it is well known that a very small portion of the truth is elicited by a central manipulation of the registers of causes of death. No allowance can be made for local circumstances; no correction can be applied in cases of manifest error or gross carelessness. The returns are all passed into the statistical mill, and emerge in the very symmetrical pattern of the annual report; but there are those who place but little confidence in the result. It seems clear, then, that if the death-rate from certain diseases is to be utilised as a true sanitary organ, and not only as a basis for political action or philosophical disquisitions on the causation and nature of disease; if quick and accessible returns on the spot are essential to this end; local analysis under medical supervision must precede the despatch of the local registers to their final resting place in Somerset House. In the absence of a recognised health officer, or a registration medical officer, the superintendent registrar, at least, should be a medical man, and his functions might well be extended beyond those enjoyed by the present custodians of the mortuary records. Weekly analyses of certain causes of death should be accessible to sanitary authorities and every registered practitioner in the district. But a register of deaths without a register of sickness is as a bare list of the slain with no account of the battle. Mr. James Lewis has so recently and so well advocated the cause of sickness registration, that I cannot do better than refer those who wish to follow the subject to his paper quoted above. All difficulties are there dealt with by a masterly hand, and a good working scheme presented for quick returns of sickness from Poor-law officers, charitable institutions, friendly societies, and the like. Voluntary effort has already shown, by its success in London, Manchester, and Newcastle, what might be accomplished if the system were extended to the whole of England. If the details were retained for local use, whilst the summaries were forwarded to the central office, as proposed by Mr. Lewis, Dr. Rumsey, and others, the results would, I believe, be soon apparent, not only in the improvement of public health, but in an increased knowledge of health-resorts, an increased confidence in recommending them to our patients, and perhaps an increased success in our treatment of some of the most troublesome classes of disease. Practitioners in town and country are not generally slow to recognise and appreciate even the feeblest aids in their professional work; and the apathy with which the Reports of the Registrar-General are received by the profession, gives, it is to be feared, a true measure of their usefulness in preventive and curative medicine. The events of a past epidemic are forgotten amidst the absorbing thoughts of the present and the future; but a death-roll which should tell what death is doing—a record of sickness which should tell what it is likely to do if not met on the threshold—would be welcomed in every country town and district as a new weapon in the hands of the practitioner for the alleviation of suffering, the prevention of epidemics, and the cure of disease.

A CASE OF MYELITIS IN A SUBJECT OF INCIPIENT LUNG-DISEASE.

By GEORGE H. SAVAGE, M.D. Lond.

J. H., aged 29, a lead-miner, for eight years single and steady, hitherto healthy, in February last came under my care with hurried breathing, dulness at both apices—especially the left—wavy prolonged respiration, cough, sweating, and expectoration. He improved during the next two months; his cough being less and his breathing better.

* From an Instruction to Registrars just issued, I find that this death should go to measles; but it is difficult to see the reasons which lead the Registrar-General to assign the death to the first and not to the last of two well defined epidemic diseases.

On May 8th, I found him much weaker; he was scarcely able to stand in consequence of the trembling of his limbs. The disease in the chest had progressed.

On May 13th, I was called at 4 A.M., as he was in great pain, and was unable to pass urine. The bladder was distended. He had pain in the lower dorsal region. He never afterwards was able to pass urine without the catheter. The urine was clear, but alkaline; otherwise normal. After this his feet became numb and cold, and gradually he lost all power in them. He had severe pain in the back, extending over the abdomen and down the external cutaneous nerve of the right thigh. The bowels required medicine to make them act, and when they acted he was unconscious of it. The pulse was rapid (120-130) and irregular; it was difficult to count it in consequence of spasmodic action of the tendons at the wrist. Respiration was shallow and rapid. He slept much; and when drowsy, was delirious, but could be readily roused. He gradually became unconscious, and died on the evening of May 22nd. No *post mortem* examination was allowed.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

A REPORT ON HYDROA AND ALLIED DISEASES.

[Continued from page 493 of last volume.]

CASE XII.—*Erythema Nodosum, with General Eruption of Abortive Vesicles in Patches; Hydroa; Phlyctenulae in the Throat and in the Conjunctiva; Swelling of Cervical Glands; Rheumatic Pains in the Joints and great Disturbance of Digestion; Eruption coming out in crops during a fortnight; Iritis of one Eye as the Rash was disappearing.*—E. W., aged 25, married, was admitted into the London Hospital, under the care of Mr. Hutchinson, on May 2nd, 1870. On the arms the eruption occurred in scattered patches and spots. It was most abundant on the backs of the forearms. Each patch consisted of a number of papules closely set together, with erythema of the intervening skin, and some of the largest were attended with œdema, approaching erythema nodosum in appearance. Most of them, however, were almost flat. Scarcely any of the patches were round, and most of them were quite irregular in shape, clearly caused by the aggregation of distinct papules, and not by the spread of inflammation from the centre. Scattered amongst the patches were a number of distinct papules, which were elevated, obtusely pointed, bright-coloured at the base and white in the centre, looking exactly as if vesication were about to take place. They varied in size from a pin's-head to that of half a pea. Only one or two papules occurred on the backs of the hands; there were none on the fronts of the upper arms nor in the bends of the elbows. The patches were arranged with tolerably accurate symmetry, and were made up of the abortive vesicles just described. None of the patches were corymbose. There were patches on the sides of the neck, a few about the eyelids and on the nose, a plentiful crop on the shoulders and upper part of the back, not many on the chest, and there were some on each side of the trunk.

Any one looking at the legs would, without hesitation, have pronounced the disease erythema nodosum; it was very freely out, very dusky, and attended with considerable œdema. It was limited by the ankles, and did not occur on the feet nor in either popliteal space. It was most abundant on the fronts of the tibiae. The ankle-joints were somewhat swollen and tender.

There could be no doubt that the eruption was essentially erythema nodosum. When it first came out there were vesicles upon the soft palate; a few days latter, several vesications were detected on the conjunctiva of the right eye, midway between the inner canthus and the cornea. In the left eye there was general congestion of the conjunctiva of the ciliary region, but no distinct phlyctenulae were to be seen.

The eruption began on the legs on Easter Tuesday. She had for a month previously been suffering from rheumatic pains in the right ankle and in the left shoulder, which she attributed to living in a damp house.

She had applied at the Hospital, under Dr. Jackson's care, on the 25th, suffering from sore throat and enlarged glands in the neck; but at this time there were no patches on her arms. It would appear from her account that the eruption came out in successive crops. She had throughout her illness had a furred tongue and loss of appetite.

The above notes were taken on May 4th. The eruption was then already fast disappearing. A few days later, she had severe pain in the left eye, attended by much ciliary congestion. For several days the

pain was extreme. The iris became muddy, and on the use of atropine the pupil was found to be irregular.

She left the Hospital, at her own request, on May 19th. The rash had then wholly disappeared; but the characteristic bruise-like stains remained, especially on the legs. There was still some iritis, but it was subsiding. Her rheumatic symptoms had vanished.

The occurrence of iritis in this case led to investigations as to syphilis as a complication, but nothing was discovered in support of such a suspicion.

CASE XIII. *Hydroa in a Man aged 24: History of Recurrence once a Year from Childhood: Subsidence of Eruption in a Week.*—Benjamin Grout, aged 24 years, by trade a blacksmith, came to the Blackfriars Hospital for Diseases of the Skin, on June 21st, 1870, suffering from a mixed vesicular and erythematous eruption on the forearms, etc., to which he had been liable from childhood. The attacks had only occurred once a year. The present attack had begun three days before. The next day (June 22nd), a wax model was taken. The eruption was then at its height (on the fifth day). It displayed somewhat different characters in different parts; a distinctive feature being the occurrence of vesications on patches of erythema. Some of the patches of erythema were as large as shillings, and without any vesicle; of bright colour at their margins, and of a lighter tint towards their centres, closely resembling some of the published portraits of Herpes Iris. Some of the best of these occurred about the backs of the elbows. When vesicles were present, they usually occupied the centre of the erythematous patch, and were somewhat irregular in shape, not unfrequently presenting a puckered margin. In some patches, the vesication had dried up, and its edges were still spreading. On the hands, there were many small bullæ, of the size of split peas, with a little redness at the base, but no definite patch of erythema. On his tongue, buccal mucous membrane, and palate, a few small white ulcers were all that were seen. He told us that he was aware when these attacks were liable to come on, by a troublesome itching of the skin. They had occurred in the beginning of the summer, and he had been accustomed to feel confident that he would not have another during the year. He recollected having them when he was at school. Then they were more severe, and the spots used to cover his whole face; but the hands were not affected. Of late years, his hands had suffered more severely, and his face less so.

For many years (nineteen) he was a total abstainer, and enjoyed very good health, with the single exception of these attacks. He was advised to take beer, to check the outbreaks. He did not notice any difference while doing so, excepting that he ate less. He now took two quarts daily. He had never had any attack of rheumatism. He had never had any disturbance of the digestive functions. On June 24th (seventh day of the eruption), the rash had everywhere faded; none of the patches were abruptly margined, and the bullæ were everywhere shrivelling; many of them appeared to be drying up without breaking. Others were breaking and leaving shallow sores. The palms of his hands were so sore that he could not work. The soles of his feet, also, were slightly affected, but not sufficiently to inconvenience him. No trace remained of the sores on his tongue, and those on his lips and face had almost disappeared. He had taken only small doses of an alkaline mixture.

CASE XIV. *Hydroa: Fourth Attack in Two Years: each Outbreak lasting Two Months.*—Elizabeth Boseley, aged 14, an out-patient under the care of Mr. Reeves, at the London Hospital, has a vesicular eruption on the backs of the hands and wrists, not on the fronts of the wrists, nor on the palms; she never has had it elsewhere, and never has sore throat at the same time. She has had four attacks before the present one: two attacks each year for two years; they come in early summer and early winter. An attack lasts two months, during which time fresh spots keep coming out as the old ones die away. The present attack is the worst she has had, and is not extensive. No relations are known to have had it. She does not feel at all ill before it comes out, nor during the attack. She has not menstruated yet. She describes it as coming out in the form of watery heads or blisters, which break and then dry up. She has never before had treatment for the eruption.

June 25th, 1870.—The present attack has lasted *six weeks*, and the eruption is now declining, and not characteristic in appearance. There are a number of partly dried vesicles and scabs resting on erythematous bases on the back of each hand and wrist. The erythematous base is larger than the vesicle. There is no eruption elsewhere. It is more abundant on the right hand than on the left. The patches are about the size of threepenny-pieces; some are separate, and others more or less confluent. In some cases there would seem (from the appearance of the scab) to have been a single large vesicle on an erythematous base; while in others a number of smaller vesications, situated close together, have formed on a single red patch of skin.

BIRMINGHAM GENERAL HOSPITAL.

SYPHILIS: LARGE ANEURISM OF BASILAR ARTERY: SMALL ONE OF RIGHT MIDDLE CEREBRAL: LOCAL DISEASE OF ARTERIES: SUPERFICIAL SOFTENING OF PONS: TWO DISTINCT AND PROTRACTED ATTACKS OF HEMIPLEGIA, EACH FOLLOWED BY RECOVERY: FINALLY PARAPLEGIA.

(Under the care of Dr. RUSSELL.)

THE following case presents subjects of sufficient interest to require special notice. They centre chiefly about the pre-existence of syphilis in the patient and the local character of the arterial disease, the age of the patient, and the three separate attacks of paralysis from which he suffered.

The presence of the syphilitic poison has much significance in relation to the morbid changes observed in the coats of the cerebral arteries. To what extent such changes might have been influenced by the active antisyphilitic treatment employed during the early period of the case, when the patient recovered successively from two paralytic seizures, of course remains uncertain. The limited character of the arterial disease, as compared with the patient's age, and the death being the result of changes in the tissue of the pons, are in complete accordance with the result of such examination as I have been able to make of instances of intracranial aneurisms: they agree also with the remark of Dr. Gull, to the effect that in early life intracranial aneurisms are not usually accompanied by general arterial disease, the fatal issue depending directly upon the agency of the aneurism; whilst at a later age more extensive disease occurs in the cerebral vessels, and the most urgent symptoms from which the patient suffers may be altogether unconnected with the aneurism itself.

With regard to the presence of two aneurisms (a circumstance not altogether unusual in the history of intracranial aneurism*), an interesting contrast is presented. The larger one in the basilar artery was effected by general dilatation of the coats of the artery, whilst the smaller one connected with the middle cerebral was sacculated, sessile upon the vessel. From the appearance presented by the former aneurism, coupled with the disease in the coats of the artery, it seems not unlikely that the case illustrates the explanation offered by Dr. John Ogle (*Medical Times and Gazette*, vol. i, 1866, p. 197) as to one mode in which aneurisms in the intracranial and smaller arteries may be produced; that they may sometimes result from impaction of fibrine in the vessel, carried thither or deposited from the blood, and consequent dilatation of the vessel from increase in the fibrinous deposit, or from the *vis à tergo* of the blood.

The three separate attacks of paralysis form a subject of interesting speculation. First, an attack of left hemiplegia occurred on April 19th, from which the patient had nearly recovered when he was seized on July 12th with right hemiplegia, accompanied by complete loss of the power of swallowing and of speech (articulation?), whilst retaining perfect command over signs and perfect facility in reading to himself. This second attack was again followed by complete recovery of the arm and nearly complete of articulation, though not perfectly of the lower extremity; but recovery was effected more tardily than on the first occasion. Each attack was sudden, or nearly so; the first (the second I did not witness until a month after it had taken place) completely conformed to the ordinary type of hemiplegia, except perhaps that the recovery of the buccinator was unusually tardy; and with regard to the second, besides the dysphagia and loss of articulation, the bilateral muscles generally were deeply implicated, the body muscles remaining feeble for a month; attributable, as I supposed, to the pre-existence of paralysis on the opposite side of the body (*vide* this part of the case, as detailed, *Medical Times and Gazette*, September 18th, 1869). In each attack there was considerable temporary wasting of the paralysed muscles. Then, from about the end of December, the two lower extremities lost power, and paraplegia steadily progressed to the time of death, May 19th.

On dissection, we find softening of the lower stratum of the transverse fibres of the pons and of the lower series of the longitudinal fibres from the anterior pyramids. From the description of the patient's state towards the close of life, it seems probable that the apparent paraplegia was due as much to the effect of destruction of the commissural fibres of the pons as of those having directly motor functions. We find also a sessile aneurism on the first branch of the right middle cerebral artery; and in the first branch of the left middle cerebral, we see a spot of thickening, just sufficient to offer a visible check to the easy passage of blood found in the vessel *post mortem*. Both corpora striata

were healthy to the naked eye, but they were not examined by the microscope.

Referring, now, to the scanty data for judging of the symptoms which ordinarily result from aneurism of the basilar artery, to which I have access, considerable diversity appears to exist. In a certain proportion of cases—smaller, however, than in the case of any other form of intracranial aneurism—there are no symptoms whatever special to the disease. Such symptoms as occur are usually the result of injury to the tissue of the pons; and as the process of invasion commences on the under surface, and does not readily reach the deeper portions, unless in cases of limited hæmorrhagic effusion, so the phenomena afford an interesting contrast with those which characterise many cases of disease of the central parts of this portion of the brain; the contrast consisting in the absence (or imperfect development) of those defects in the action of the sensitive fibres and of the cerebral nerves passing through the deeper portions of the pons which constitute so remarkable a feature in certain forms of disease of that organ.

Among the symptoms, paralysis is prominent; and this symptom, except from direct pressure upon a particular nerve, appears (so far as I have been able to ascertain) to appertain chiefly to the basilar and middle cerebral arteries, among the cases of intracranial aneurisms, and chiefly to the former.

In the instance of basilar aneurism, paralysis may exist as mere muscular weakness, as paraplegia, as general paralysis, or even as hemiplegia. In Dr. Gull's sixth case (*Guy's Reports*, 1859), there was complete left hemiplegia accompanied with complete anæsthesia for fourteen months, together with impaired deglutition and articulation; the right side of the body, however, not quite escaping. Articulation and deglutition are also liable to suffer; but it is to be added with reference to my own case, that in no instance do I discover recovery from this combination of symptoms, unless where it has presented itself in epileptiform paroxysms, as has sometimes occurred: the progress is always to deterioration. As the deeper seated portions of the pons more generally escape, or are pushed aside, sensation is less frequently affected; but the hyperæsthesia of my patient in the *last* attack of paralysis, which was occasioned undoubtedly by softening of the pons, is to be noted, together with two temporary attacks of double vision, due no doubt to affection of the sixth nerve. Both these phenomena were confined to the final attack. Headache—a frequent symptom in the cases under review—was also present in my patient.

In aneurism of the middle cerebral artery, paralysis seems less constant. It occurs of course as hemiplegia, chiefly in connection with changes speedily ending in death; but in one case (*Trans. Path. Soc.*, vol. xx), left hemiplegia was present, with affection of speech, and was thought to be connected with softening of the posterior part of the right third frontal convolution.

The case on which the foregoing remarks are based is the following.

T. F., aged 26, was admitted on April 19th, 1869. He had been seized with left hemiplegia the preceding night. The mode of attack is not described. The only part of his previous history of importance is that he had contracted a chancre six years ago, and that he had had sore-throat, of which present evidence remained in considerable destruction of the soft palate. As already stated, there was nothing to distinguish the attack from one of hemiplegia of the ordinary kind. Half-scruple doses of iodide of potassium were prescribed. On April 27th, the patient could walk a few steps. The muscles of the paralysed arm and the connected shoulder muscles were observed to be much wasted. On May 20th, he had recovered a fair power of grasping. The food still collected in the left cheek. On June 12th, he returned to work.

He was readmitted on July 12th, having just fallen into right hemiplegia. I am informed that the hemiplegia was complete. All the bilaterally acting muscles were found to be markedly affected; and he had entirely lost the power of swallowing and of talking; but he was perfectly intelligent, pointed to words in a book to express his thoughts, and from the first employed himself constantly in reading. When I saw him, a month afterwards, recovery was progressing, though more slowly than on the former occasion. The muscles of the trunk, and notably of the back, continued weak, so that he could not support himself in a sitting attitude. Sensation was quite unaffected. Swallowing was restored, and speech also, except a slight defect in articulating linguals. The cerebral nerves were healthy. He had been subjected to slight ptialism; and the iodide had been renewed. I increased the dose to fifteen grains. The urine was perfectly healthy throughout the case.

On September 4th, he had begun to walk. It was then found that the left leg was not strong, and that the right was somewhat circumducted in progression. The muscles of the trunk were much restored. For three days during his recovery, he again lost speech—this time

* In two cases which I have noted, a symmetrical arrangement of aneurism of each middle cerebral artery is recorded.

plainly from want of power over the recollection of words, and deglutition did not suffer.

He was admitted the third time on December 19th. He had then so far regained health as to walk two or three miles. The arm was nearly restored, and he could write a little. At his admission, he had been suffering from a degree of double vision for a fortnight; the two objects coinciding at a distance of six inches, but diverging more the further the object was removed. I could not discover any fault in the movements of the globes; and I may here state that both now and on a former occasion Dr. Welch found the optic disc healthy. The patient read No. 1 Jäger easily; but the visual distance admitted only ten inches of variation. The attack of double vision speedily subsided, but recurred for a day or two on January 27th, the pupils being normal in size and contractility. On March 10th, he again lost language for a few hours, otherwise his speech was quite natural, and articulation only slightly affected. From this last date, whilst the upper extremities retained full power and he was able to write fairly, and the muscles of the chest acted fairly but not fully, the power of walking progressively declined; the right limb was kept rigidly extended, and was advanced by circumduction; the left knee was but slightly flexed. On April 9th, he was quite unable to walk, though he could raise his legs in bed. At this time, hyperæsthesia was observed in the lower extremities to pain, to tickling, and also to Faradisation, whilst muscular irritability to the current was very low.

He now complained of pain in the left temple; at the second attack of hemiplegia, he had had pain in the right temple; then it shifted to the forehead, and was attended with marked dysphagia. He then suffered for a fortnight from incessant vomiting. From the beginning of April, he was quite confined to bed, not being able even to stand without support. His intellect was intact, save from an uncontrollable tendency to meaningless laughter, of which he himself complained, and which had been noted throughout his case. On May 19th, he was found unconscious, after having vomited incessantly through the afternoon. He continued unconscious, and died next day. About a month before death, he had two fits of general rigidity without losing consciousness.

On *post mortem* examination, the cerebrum and its appendages were found healthy throughout, excepting that there was a considerable quantity of fluid in the lateral ventricles. I could not detect any fault by the naked eye in the corpora striata. The coats of the vertebral and basilar arteries were thickened quite uniformly, creamy looking, and opaque; but I did not succeed in finding any abnormal appearance in their tissues by the microscope, after they had lain in spirit. The three anterior fourths of the basilar artery were occupied by a large aneurism rather over an inch and a half long and one inch in diameter. The aneurism was produced by dilatation of the arterial coats. It was completely full of firm, deeply coloured laminated fibrine; and, though the basilar artery was quite pervious, no passage could be discovered for the blood to have taken through the aneurism. The coats of the aneurism were free from disease. The aneurism had partly pressed to each side the tissue of the pons, so as greatly to broaden that body: it had also deeply indented the surface of the pons. The nerve-tissue surrounding it was diffused; and, by careful examination after hardening in spirit, it was found that the lower stratum of the transverse fibres of the pons were destroyed by softening, which had also invaded considerably the inferior layer of longitudinal fibres ascending from the pyramids. In the middle line the pons was hardly thicker than a quarter of an inch; but, as already stated, a large part of its tissue was pressed to each side. The right posterior communicating artery presented abnormal opacity of its coats, which were also thicker than natural.

The middle cerebral arteries were dissected with much care. The left artery presented, in the first branch which supplied the frontal convolutions, one spot of decided thickening, close to the orifice of the branch from the parent trunk, sufficient to present an obvious check to my pressing through it the blood remaining in the vessel, though it admitted a fine probe; all the other branches of the artery were perfectly healthy. The right middle cerebral, so long as it was traced *in situ*, appeared in a perfectly normal state; but, in slicing the brain subsequently, an aneurism with thick walls, of the size of a hazel-nut, was found by accident, buried in a convolution. Unfortunately, its exact position in the cerebrum could not be ascertained, but its origin was preserved; it was sessile upon a primary branch of the middle cerebral artery, just an inch from the commencement of that artery. The remaining cerebral arteries were healthy, as were the portions examined of the common carotids, subclavians, and radials.

I believe the spinal cord to have been healthy throughout. I found portions of the white matter softened on examining it the day after; but the microscopic appearances were simply those of *post mortem* soften-

ing. The lungs were much loaded with blood; the right ventricle of the heart contained fluid blood. There was slight thickening of the edge of the mitral valve. The aorta was healthy. The other organs of the body were also healthy.

LEEDS GENERAL INFIRMARY.

STONE IN THE FEMALE BLADDER: REMOVAL BY RAPID DILATATION: RECOVERY WITHOUT INCONTINENCE.

(Under the care of Mr. T. PRIDGIN TEALE.)

THE notes of the following case were taken by Mr. R. Atkinson.

Louisa Scott, aged 19, was admitted into the Hospital on November 7th, 1867, suffering from incontinence of urine, and much worn by long continued distress in the bladder. The symptoms began three years before with increased frequency of micturition at night, and pain and scalding in passing urine. During the first two years the symptoms were intermittent; but for the last six months she had suffered severely, having been never free from pain, occasionally passing blood from the bladder, and when recumbent, being unable to control the bladder.

November 7th. Having placed her fully under the influence of chloroform, Mr. Teale introduced into the bladder a bulbed sound; and, having detected a hard solid body, determined to remove it without further delay. Dilatation was commenced by the introduction into the urethra, first of the little finger, then of the forefinger. The small lithotomy forceps was then passed into the bladder, and attempts were made to grasp the stone, but without success. Lastly, a smaller forceps, longer in the blades, was introduced, and the stone was seized and very slowly and gradually extracted. The weight of the stone was nine drachms one scruple; the circumference, longitudinally, was five inches; the circumference, transversely, was three inches and three-quarters. After the completion of the operation, the bladder was examined by the finger, and it appeared that there was some laceration of the urethra and neck of the bladder, but not to an extent likely to prove serious.

On November 8th, she had slept better than she had done for several months, being free from pain and able to retain an ounce of urine in the bladder. On November 12th, she was able to retain her urine an hour and a half; and on the 15th, she could retain urine for two or three hours; there was no incontinence.

November 18th. She had perfect command of the bladder, passing urine in a good stream without pain or incontinence.

RAPID DEVELOPMENT OF CANCER OF FEMUR: AMPUTATION AT THE HIP-JOINT: RECOVERY: DEATH IN TWO MONTHS FROM CANCER OF THE LUNG.

(Under the care of Mr. T. PRIDGIN TEALE.)

THE following case, possessing several points of interest, seems worth putting on record. The notes were taken by Mr. Enoch Snell.

Frederick Bright, aged 19, was admitted into the Leeds Infirmary on September 4th, 1868. Though of strumous appearance, he had always enjoyed good health until a fortnight before the day of his admission, when he received the following injury. On attempting to place a ring in a pig's snout, he received a violent blow on the inner side of his left thigh near the knee-joint, caused by the pig rushing at him. The pain from this blow was so severe that he would have fallen if he had not had the support of an adjoining wall. After resting a few minutes, he with great difficulty succeeded in walking a quarter of a mile, but was compelled to be carried the remainder of the way to his home. Here he remained in bed for two days, during which time the knee was very painful and became much swollen. On the third day, he got up and attempted to work, being actuated more by necessity than by the feeling of ability. Becoming worse, he was obliged to relinquish his occupation; and, at the expiration of a fortnight from the accident, he applied to the Infirmary for relief, and was received as an in-patient.

September 4th. On admission, his left knee and contiguous part of the thigh presented a very swollen appearance. There was not much pain except occasionally; he described it as "cutting".

October 8th, 1868. The swelling had increased. The swollen part was decidedly softer in some places than in others. A small trochar having been introduced, a small quantity of sanguineous fluid came away. He looked worn, and his general health was beginning to suffer. His appetite remained good; but he weighed less than on admission.

October 12th. The disease being judged to be malignant, Mr. Teale proposed to him amputation at the hip-joint, as the only treatment likely to be of any service. He left the Infirmary to obtain the consent of his friends.

January 7th, 1869. After long hesitation, his friends consented to

the operation, and he was readmitted. The cancerous cachexia was more strongly marked; the surface of the tumour was smooth and pale, with numerous veins extending over it, and was soft and spongy to the touch, but more so in some parts than others. On the inner side of the popliteal space was a small, bleeding, rapidly growing fungus. Over the knee was a superficial circular ulcer of an unhealthy appearance, and about two inches in diameter. The temperature of the diseased leg was 99.6 deg.; of the sound leg, 93 deg.; in the axilla, 100.2 deg.

The following circumferential measurements of the tumour show the rapidity of its growth: August 20th, date of injury; September 25th, 17½ inches; October 8th, 19 inches; October 26th, 20½ inches; November 23rd, 22½ inches; December 14th, 25 inches; January 7th, 28 inches. The circumference of the sound limb was 14 inches.

Operation.—January 9th. The patient having been placed on the table and chloroform administered, Lister's clamp was applied so as to compress the abdominal aorta. Mr. Teale, standing on the outer side of the patient, transfixed the limb in the usual manner, and made a very long anterior flap. This was immediately drawn upwards by an assistant, who firmly compressed the femoral vessels with his fingers. The knife was then passed behind the head of the bone, and a short posterior flap was formed. The aorta having been commanded by the abdominal clamp, no more blood was lost than is usual in amputation of the thigh. The edges of the flaps were then brought together by sutures, the long anterior flap falling easily over the front of the short one.

On examination, the tumour proved to be encephaloid cancer, commencing in the tissues external to the bone. Its superior margin was well defined, and extended as far as the upper third of the femur. The cancellous tissue of the lower end of the bone was soft and cheesy; and the femur had undergone spontaneous fracture above the condyles. The tissues above the margin of the tumour had a healthy appearance. When he was taken to bed after the operation, the stump was placed on a pillow and surrounded with oakum; and the sixth of a grain of morphia was administered by hypodermic injection.

January 10th. He had passed a very good night. He felt no pain in the stump; but complained of pain in the umbilical region (probably from the pressure of Lister's clamp). He complained of nausea, and had vomited this morning. Pulse, hard and jerking, 126; temperature in the axilla, 102.8 deg.

January 12th. The nausea and vomiting had ceased. Pulse 120; temperature in the morning, 100.8 deg.; in the evening, 100.8 deg.

January 15th. The abdominal pain had subsided. His cough was troublesome. Temperature, morning, 99.6 deg.; evening, 98.6 deg.; pulse 92.

January 26th. The femoral ligature was removed.

February 2nd. The cough was worse. He expectorated viscid sputa, streaked at times with a little blood. On inspiration, he complained of pain in the right side of his chest. The stump had healed by the first intention with the exception of two small places—one on the outer, the other on the inner side, which continued to discharge a little pus.

February 11th. The cough continued. The sputa contained a little florid blood, especially in the morning. There was dulness over the base of both lungs, especially the right; the apices were normal.

February 19th. He complained of shooting pains in both sides of the chest. He sweated profusely at night. The sputa contained more blood. His respirations were 34 per minute. His appetite was failing. The tongue was coated. Temperature, morning, 98.8 deg.; evening, 99.4. There was decided dulness over the base of both lungs, more especially the right, and towards their apices. There was slightly prolonged expiration at the left apex, but no bronchophony or bronchial respiration on either side.

March 2nd. He had great dyspnoea and severe stabbing pains, especially on the right side. His respirations were more than forty per minute. On the 7th, he died.

Post Mortem Examination.—The lumbar and intestinal glands were normal. The liver, kidneys, and all the abdominal viscera, were healthy. The lungs presented strong adhesions, especially on the right side. Studded here and there throughout the substance of both lungs—especially their bases, their apices being comparatively free—were a number of firm rounded smooth tumours, varying in size from a pea to an egg, for the most part well defined, the largest, however, being blended with the surrounding pulmonary tissue. On a transverse section, they presented a whitish but slightly vascular appearance, and yielded a pale milky fluid on pressure. On the outer side of the right lung, near its base, one large tumour had eaten through the pulmonary tissue and formed an excavated ulcer, with firm everted fungus-like edges; and the contiguous pleura was also involved. No deposit of tubercle could be discovered; nor had the lung entirely lost

its spongy character. A similar deposit had taken place in little nodules in the pleura, along the side of the spine; but no other traces of a similar growth could be discovered in the adjacent parts.

REVIEWS AND NOTICES.

A PRACTICAL TREATISE ON THE DISEASES OF CHILDREN. By ALFRED VOGEL, M.D., Professor of Clinical Medicine in the University of Dorpat, Russia. Translated and edited by H. RAPHAEL, M.D., late House-Surgeon to Bellevue Hospital, etc. From the Fourth German Edition. Pp. 603. New York: 1870.

A PRACTICAL TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By THOMAS HAWKES TANNER, M.D., F.L.S., etc. Second Edition, revised and enlarged, by ALFRED MEADOWS, M.D. Lond., etc. Pp. 472. London: 1870.

STUDENTS of children's diseases cannot complain of any paucity of literature on the subject, for there are now several thick volumes in the English language devoted entirely to it. Both the books mentioned above are tolerably complete treatises, in the sense of naming and describing the most important maladies and deformities of children. In scope, these works, however, somewhat differ; for, while Drs. TANNER and MEADOWS restrict themselves, in matters therapeutic, to the diseases which come legitimately under the notice of the physician, Dr. VOGEL deals as well with some of the defects which need purely surgical interference. Several excellent lithographic plates, and the admirable way in which the volume is got up, add to the attractiveness of Dr. Vogel's book.

Dr. Vogel is more a physician than a surgeon; and he is clearly a physician of no mean order, judged either from a pathological or a clinical standpoint. When he treats a subject exhaustively, he produces an essay, clear yet elaborate, which inspires the reader with confidence that the author believed himself to have the best possible reasons for all that he says. Of Dr. Vogel as a medical practitioner, we would only say that he seems to belong to the comparatively small class of physicians who, when they give a medicine, have a clear notion of the effects which they desire it to produce. Such articles as the ones on "Acute Hydrocephalus" and "Follicular Enteritis" are good specimens of Dr. Vogel's style.

Dr. Tanner's book strikes us as less the work of a pathologist and clinical observer than of a practitioner who knows the practical necessity of always doing something. We should have thought that such headings as "Indigestion", "Diarrhoea", and "Constipation", for the titles of substantive diseases, were hardly likely to inspire either the student or the practitioner with a very lively hope of the real insight to be gained by perusing the articles mentioned.

In method of arrangement, Dr. Tanner's treatise is, on the whole, decidedly superior to Dr. Vogel's. We cannot, for instance, see that any useful purpose is served by the latter author when he places scarlet fever, measles, and small-pox, under "Diseases of the Skin", or "typhus abdominalis" among "Maladies of the Digestive Organs".

Taking the diseases of the stomach and intestinal canal for comparison in the two books, we find in Dr. Vogel's book fifty pages (including typhus abdominalis) devoted to the subject, sixteen of which are devoted to the consideration of "the most important Symptoms of Diseases of the Stomach and Intestines", with the indications for treatment in the different diseases producing each symptom. As a sample of our author's style, we quote the following on the causes and therapeutics of flatulence and colic. "If the gas, that is always physiologically present in the stomach and bowels, increases in quantity, and the peristaltic movements of the intestines do not become accelerated to such a degree as to expel it by the anus, a distension of the stomach and bowels is produced." "For this augmentation of gases, the intestines are in greater part indebted to their own secretions;" . . . "the diarrhoeic intestinal secretion generates large quantities of gas before it is evacuated; and consequently all articles of food, which cause the children slight diarrhoeic stools, produce directly also flatulence"—these preparations being "gruels", especially those prepared with *cow's milk* and *amylaceous broths*. He recommends meat broths, sweetened, for children who are about to be weaned, and who are liable to colic, etc. Dr. Tanner, under Diarrhoea, recommends barley-water; "thin arrowroot, made with milk and water; or "ground rice, boiled with milk." Dr. Vogel gives us excellent descriptions of the Pathology, Causation, and Treatment of Catarrh of the Gastric Mucous Membrane and several other diseases of the stomach, Catarrhal Inflammation of the Intestines, Enteritis Folliculosa and Tabes Mesenterica, and Dysentery, each of several pages in length; in place of these, we find in Dr. Tanner's book only Diarrhoea, Dysentery, Constipation, a

short account of Gastritis, and a page or two on Tabes Mesenterica. In the treatment of Intestinal Catarrh, we find Dr. Vogel again strongly opposed to the use of cow's milk, which is indigestible and irritating, on account of the large size of the lumps into which its casein coagulates. "In general, the condition holds good, that *no child with intestinal catarrh tolerates cow's milk.*" In the treatment, the first condition, therefore, is a total abstinence from cow's milk." Thin beef-broth, with rice or groats, and *without fat*, is recommended. We observe that, in several passages, Dr. Vogel warns us against the use of fat food for children suffering from intestinal and gastric disorders.

We have before referred to Dr. Vogel's classification of Typhus Abdominalis under diseases of the digestive apparatus. The article on this disease is ably and carefully written. In connexion with the diagnosis and treatment of typhoid fever, we quote the following passage on thermometry in children. It would be interesting to know the experience of other children's physicians on the same point, for we fancied that typhoid fever was one of the diseases in which carefully made tables of temperature were of peculiar value for indicating the actual condition of the patient as regards recovery. "The restlessness of a typhous child interferes with the use of the thermometer to determine the temperature of the skin, because, as is well known, the instrument must be entirely surrounded by integument, and allowed to lie quietly for from fifteen to twenty minutes. It is, therefore, better to observe the warmth of the forehead, trunk, and extremities, with the hand, previously warmed, no matter under what disease he may be labouring; and this kind of examination, practised a few hundred times, gives such an amount of skill in distinguishing the different degrees of temperature, that thermometric measurements . . . will be totally unnecessary for any practical purpose." We are not surprised at Dr. Vogel's disgust, when we know that he uses thermometers which require to be kept in the axilla twenty minutes. Further on, we find that our author doubts the infectious nature of typhoid fever. "Admitting the question of infection to be extremely problematical," he still advises as complete an isolation as circumstances will permit. The points in the treatment of typhoid which especially deserve attention are, the administration of coffee as a stimulant, wine being recommended only with great caution for children; the use of cold, both to the head and the whole body (although Dr. Vogel would limit cold affusions of the entire body to, at most, two daily); opium in small doses (as laudanum), to allay restlessness and delirium. Blisters and sinapisms are strongly condemned. "It is much easier to harm a typhous child with medicine than to do it good."

Dr. Tanner, in his article on Typhoid Fever, recognises the value of thermometric observations. He has but little doubt that the disease is contagious. In the treatment, he also recommends coffee as a stimulant, though not so strongly as Dr. Vogel; quinine, when the disease "assumes a distinctly remittent type" (according to Vogel, "actual relapses but very rarely occur in children"). He says nothing about the cold-water treatment, but recommends mineral acids "as general improvers of the blood;" carbonate and acetate of ammonia, to promote diaphoresis; astringents and opium, for the diarrhoea. Dr. Tanner agrees with Dr. Vogel in thinking alcoholic liquors, as a rule, unnecessary in children, unless in very small quantities; though they are sometimes, he thinks, required in considerable amount. As to *post mortem* lesions, Dr. Tanner gives us a paragraph which seems meagre in comparison with Vogel's full description. Dr. Tanner's account of the complications, so important as regards prognosis, is also very brief and unsatisfactory.

Tubercular Meningitis.—Vogel gives nineteen pages to this disease; Tanner allows only six. As to the etiology of tuberculosis, we may notice here the very strong opinion in both books as to its heredity. While, however, Dr. Tanner regards it as also caused directly by bad hygienic conditions, Dr. Vogel denies that it is possible to prove the absence of inherited taint, and further, from several years of large practice in a poor district, where he tells us that maladministration in every conceivable way is the rule, he concludes that tuberculosis is far less common than it would be if external conditions had much direct influence in its production. He notices especially the different liability of the children of different parents living under precisely the same conditions, in support of this; so that his "faith in external causes, unwholesome food, bad air, inattention to the skin, becomes more than vacillating." Vogel regards the arachnoid as the seat of the tubercles of tubercular meningitis, though he afterwards describes the deposits (which, by the way, he describes as consisting of "an amorphous granular mass of detritus") as occurring chiefly "along the artery and vein" in the fissure of Sylvius. Tanner and Meadows adopt Dr. Bastian's conclusion, that the epithelial layer of the perivascular sheaths of the pia mater is the seat of the peculiar deposits in this disease. It is interesting to note, in connexion with the present belief in local contagion as a cause of local and general

tuberculosis, that Dr. Vogel, without referring to recent experiments on inoculation, confirms the results of some experimenters when he says that "it is always observed, in this affection, that an older, larger, yellow tubercle, exists somewhere else in the body." Both authors divide tubercular meningitis into stages on clinical data; Dr. Tanner's "second stage" corresponding with Vogel's "stage of irritation", and the "third stage" of the former being more or less equivalent to the "stage of paralysis" of the latter writer. We would recommend strongly Dr. Vogel's discussion of the symptoms of tubercular meningitis; it is elaborate and very instructive; we fancy, however, he makes less of the pyrexia than most would admit when he says that "fever can hardly be said to ever occur" in tuberculosis of the pia mater; and many will regard his criticism of Trousseau's "*taches méningitiques*" as showing questionable taste. Of treatment both authors speak, of course, unfavourably; both condemn mercury in tubercular, as opposed to other forms of encephalitis. Dr. Vogel is inclined to look seriously on the popular prejudice in favour of a mutual relationship between eruptions on the head and tubercular meningitis. Dr. Tanner prohibits the use of the milk of a tuberculous mother; we should have been glad of further information on this subject.

The Treatment of Croup.—Dr. Vogel speaks in general terms against both emetics and tracheotomy in this disease; indeed, he says that "the prognosis in well-declared croup may be set down as fatal." In respect to emetics, he generally gives one or two doses to produce vomiting in the early stage, but regards the production of prolonged nausea as "useless torture." He agrees with the opinion "that tracheotomy is of no real service in true croup", and attributes the success of the operation in France partly to the greater prevalence in that country of diphtheria—a certain number of cases operated on as croup being really examples of the latter disease—and partly to the difficulty, at an early stage, of distinguishing true croup from catarrhal laryngitis. Dr. Tanner is more inclined to agree with M. Trousseau on the question of tracheotomy. He thinks it is unquestionably true that many lives have been saved by the operation which would otherwise have been sacrificed. He does not, however, advise its performance excepting in cases "where death seems imminent from asphyxia; and there is reason to believe that the obstruction is limited to the larynx and upper part of the trachea."

Drs. Tanner and Meadows are not able to come to a definite conclusion as to the *pathological relationship between croup and diphtheria*. After passing in review the points of difference on which most importance is usually placed; viz., the position of the exudation, the swelling of the glands about the throat, great constitutional depression, albuminuria, and paralysis, they say that "there seem to be strong grounds for believing that diphtheria and croup, if not identical diseases, have at least very much in common;" and, again, "at any rate we must admit that both are blood-diseases." Professor Vogel applies the term croup to "a certain group of symptoms" which he refers to one or other of three different pathological states; viz., catarrhal laryngitis, true fibrinous croup, diphtheritic croup. In the description of symptoms and treatment, however, he confines himself to the *true Fibrinous Croup*, the two other maladies being treated of elsewhere as "Pseudo-croup" (*laryngitis catarrhalis*) and "Diphtheritis of the mouth." He evidently throughout regards croup and diphtheria as pathologically distinct, although his application of the term croup to the symptoms produced by laryngeal diphtheria produces some confusion in his descriptions. Both croup and diphtheria are, according to this author, constitutional, the existence of general fever being insisted on as an important point in diagnosing between fibrinous croup and catarrhal laryngitis. While, however, diphtheria "is decidedly contagious" and epidemic, croup "is a rare disease" in Germany, and is there never epidemic. He describes also a "secondary diphtheria" occurring after scarlatina and measles, which, though sometimes contagious, may occur quite sporadically. Dr. Tanner considers that "simple laryngitis" (? catarrhal) occurs "very rarely in children" as a substantive disease. Perhaps some of the cases included by him under "spasmodic croup" with mild catarrhal symptoms would be regarded by Dr. Vogel as instances of the catarrhal laryngitis, said by the latter author to be a common disease. We would call attention to Dr. Vogel's adoption of Schlautmann's assertion that the paroxysms of dyspnoea and cough in croup are due to *paralysis* of the laryngeal muscles instead of *spasm*. The condition of a patient with croup is compared to that of an animal whose pneumogastrics are divided or paralysed.

Paracentesis Thoracis.—Our English authors content themselves by giving a *resumé* of the experience of others on this question, without expressing any marked opinion on the desirability or otherwise of the procedure. On the whole they seem, however, not favourable to it. No mention is made of submerging the mouth of the exit-tube in

water with the idea of preventing the access of air to the pleural surface. Dr. Vogel devotes only four lines to the consideration of this operation; he has never seen a case of empyema in a child requiring it.

Acute Nephritis.—The articles on this disease in both books are good; there are, however, one or two differences in the treatment recommended which seem deserving of notice. Dr. Tanner advises jalap and saline purgatives for the purpose of procuring watery evacuations when the function of the kidneys is partially in abeyance. Dr. Vogel also recommends the establishment of free evacuation from the bowels; he, however, advises calomel, castor-oil, and senna, for this purpose, remarking that “jalap, and colocynth, and the salines, are with justice avoided, because the salts are in great part absorbed, and then eliminated by the kidneys.” He speaks strongly in favour of “root juniper” as a diuretic in acute nephritis, though he does not state what are the precise indications for administering remedies of this class. Dr. Tanner recommends gallic acid and other astringents for the purpose of checking the amount of blood in the urine; are we to use them at the same time as the hydragogue purgatives? Dr. Vogel gives us a short article on “Uric-acid Infarction”. The subject is of importance and interest, and we regret its omission by Dr. Tanner. Among the articles on diseases of the genito-urinary organs, we find some very good remarks by Dr. Vogel on masturbation, especially as it occurs in schools.

We are perhaps hardly in a position to judge of the readers for whom Dr. Vogel's work was intended; but, if they be any but junior students, we can hardly suppose that they would profit much by some of his teaching on surgical matters. We would refer to his account of Harelip as defective on account of its brevity; while, under the Etiology of Prolapsus Ani, no mention is made by Dr. Vogel or Dr. Tanner either of stone in the bladder or phimosis. We much prefer the brief accounts of malformation, etc., by Dr. Tanner, which do not profess to describe the surgical treatment.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Monday, July 18th, 1870.

1. *Decrease in Mortality from Small-Pox.*—2. *Diarrhœa, Dysentery, and Cholera.*—3. *Academy of Sciences: Annual Prize Meeting.*—4. *The Galignani Hospital.*—5. *Women-Doctors and Male Medical Consultants.*—6. *The War with Prussia: the War-Fever, and Volunteering in the Quartier Latin.*

DECREASE IN MORTALITY FROM SMALL-POX.—During the week ending July 15th, the official return of deaths in Paris from small-pox is 225, which is 42 less than the return of the preceding week. The mortality from all Diseases, including small-pox, was 1,150; in the preceding week, it was 1,119, so that the total mortality shows an increase of 31.

DIARRHŒA, DYSENTERY, AND CHOLERA.—We continue to meet with an unusual number of cases of diarrhœa and chlorine. Infantile cholera—that is to say, the summer diarrhœa of infants—is also becoming more prevalent. These affections of the bowels, though they show an increase in the mortuary returns, do not yet present formidable figures. Subjoined are the returns of the last two weeks.

Cause of Death.	Week ending July 8th.	Week ending July 15th.
Diarrhœa	27	37
Dysentery	2	6
Cholera	4	6

ACADEMY OF SCIENCES: ANNUAL PRIZE MEETING.—On the 11th of this month, under the presidency of Professor Claude Bernard, the Academy of Sciences held a public sitting for the announcement of the names of those to whom the prizes for 1870 had been adjudicated. Among prizes more or less relating to medical science and medical men were the following.

The *Prix de Statistique* was awarded to Dr. Chenu for his great work entitled *Statistique Médico-Chirurgicale de la Campagne d'Italie en 1859 et 1860*. This work, taken in conjunction with the author's work on the Crimean campaign, constitutes the greatest contribution to medical statistics which any single author has produced.

The *Prix de Médecine et de Chirurgie* was not awarded this year. The subject proposed was the “application of electricity to therapeutics.” Though the Academy did not adjudicate the prize to any one, they bestowed medals upon three well known and meritorious physicians—viz., Drs. Legros, Onimus, and Cyron.

The *Prix de Physiologie Expérimentale* was awarded to M. Famitzin for his researches into the influence of light upon the nutrition of plants. An honourable mention, with a gift of 600 francs, was also decreed to MM. Léon, Tripier, and Arloing, for their researches on the cutaneous nerves.

The *Prix de Médecine et de Chirurgie de la Fondation Montyon* was divided as follows:—1. To Dr. Junod, for his work entitled “Les Médications Hémospasique et Aerothérapique ou de la Compression et de la Raréfaction de l'Air, tant sur le Corps que sur les Membres Isolés.”—2. To Dr. Hubert Von Luschka, Professor in the University of Tübingen, for his Researches into the Anatomy of the Thorax and Intra-thoracic Organs.”—3. To MM. Paulet and Sarazin, for their joint work on “Topographical Anatomy”. In connexion with the Montyon Prize, there were also several “honourable mentions”; viz.: 1. To Dr. Henri Roger, for his “Clinical Researches in relation to Chorea, Rheumatism, and Diseases of the Heart in Children;” 2. To Dr. Maurin, for his monograph on “Typhus of the Arabs;” 3. To Dr. Knoch of St. Petersburg, for his work on “Botryocephalus Latus;” 4. To Dr. René Blache, for his essay on “Diseases of the Heart in Children;” 5. To Dr. Radanowski, for his “Photographic Studies of the Nervous System in Man and some of the Higher Classes of Animals”. Finally, in connexion with the Montyon foundation, the Academy presented a thousand francs (£40) to M. Saint-Cyr, for the “continuation of his studies upon Tinea Favosa in Domestic Animals”.

The *Prix des Arts Insalubres* was divided between M. Pimont and M. Charrière, the celebrated surgical instrument maker of the Rue de l'Ecole de Médecine: 1. To M. Pimont, for his “calorifuge plastique destiné à recouvrir les tuyaux; les chaudières pour y conserver la chaleur interne, diminuer l'échauffement de l'air extérieur et l'effet du rayonnement sur les ouvriers;” 2. To M. Carrière, for his “inventions for salvage in conflagrations”.

The *Prix Briant* (5,000 francs) was awarded to Dr. Fauvel, for his work on the “Etiology and Prophylaxis of Cholera”. Twenty-five authors sent in works in candidature for this prize.

WOMEN-DOCTORS AND MALE MEDICAL CONSULTANTS.—M. Duruy (late Minister of Public Instruction), M. Nélaton (the great surgical celebrity of Paris), M. Husson (commonly called Sa Majesté l'Assistance Publique), and M. Milne-Edwards (the well known semi-English Frenchman and philosopher), are at the head of a movement to found an “Ecole de Médecine” specially for women. The programme has been submitted to the Empress, accompanied by a request that she become patron of the projected medical school for women. I have heard it argued that there really is scope for something of this kind in France, as nowadays gentlemen seldom marry till they are rakish and oldish; and then they look out for good dowries, rather than nice wives. As young women are every day becoming more and more debarred from the chance of having husbands, it is said that they ought to get the chance of competing with men in the professions. Then, again, as regards the medical profession, it is alleged that the practice of medicine, from the present dull level of all being competent practitioners, is in a bad state; that it is necessary to institute a new body of practitioners, competent for drudgery and ordinary emergencies, but not competent for consulting practice. It is said that the mass of the profession are far too well educated, and that it is only by having a dash of the charlatan that even a good man can rise above the ranks; whereas, if there were a body of timid practitioners like the English apothecaries prior to 1815, there would again arise an aristocracy in medicine. Thus I heard the question argued by a British physician the other day. He maintained that it would prove a great pecuniary advantage to male medical consultants to flood the profession with women-doctors. Perhaps M. Nélaton and friends may see the question from the same point of view.

THE GALIGNANI HOSPITAL.—For some time past, it has been understood that the British Government was hesitating to accept the hospital erected in a suburb of Paris some years ago by the Messrs. Galignani for the benefit of the poor British strangers or residents in Paris. I was not surprised this morning, therefore, to hear on the best authority that the British Government actually has refused to accept the Hospital. This decision places the Messrs. Galignani in a very awkward position. The position of our Government seems also anomalous. Some years ago, the ground on which the Hospital stands was bought for Great Britain in the name of her ambassador, with money generously given by the Messrs. Galignani. The object of this transaction was to make the property inalienable, and to secure it in perpetuity for the British poor in Paris. The Messrs. Galignani built a hospital on the ground in question. This hospital is now in working order, and its current expenses are wholly defrayed by the Messrs. Galignani. They have recently been urging the British Government to

accept the hospital, and an endowment for maintaining it in operation, so as to enable them to retire from the responsibilities of management after placing it on a permanent basis. Thus it is that matters have been brought to a crisis. It is quite evident that at one time the whole transaction was considered as having been virtually completed; for the Messrs. Galignani publicly received a handsome piece of silver plate, with suitable inscription, acknowledging their generosity. Since then, they have unhappily sanctioned the erection of an immense building so immediately in contact with the hospital that the establishment must, sooner or later, become quite unfit for hospital purposes. It is the existence of this building which has placed matters in their present extraordinary state.

THE WAR WITH PRUSSIA: THE WAR-FEVER, AND VOLUNTEERING IN THE QUARTIER-LATIN.—Since Thursday evening, when the declaration of war by France against Prussia passed from the region of great probability into that of absolute certainty, Paris has been mad with joy. This morning, however, the epidemic has begun to subside under the influence of a popular calumet administered in the form of the following proclamation by M. Piétri, prefect of police.

“Pendant ces derniers jours, la population parisienne a voulu affirmer son enthousiasme par des manifestations sur la voie publique.

“Au moment où nos soldats se rendent à la frontière et après cette explosion du sentiment national, il est désirable que la capitale reprenne son aspect accoutumé et témoigne par son calme de la confiance qui l’anime.

“Le préfet de police croit donc devoir demander aux habitants de Paris de s’abstenir de démonstrations qui ne peuvent se prolonger davantage sans inconvénient.

“17 Juillet.

“PIÉTRI.”

As a matter of course, the epidemic madness of war-fever to which I refer broke out with peculiar violence in the Quartier-Latin. A good clinical observer—an inhabitant of that region—told me that, as a general rule, the disease attacked parties of ten or to twenty simultaneously, the first manifestations being an inordinate craving for Strasbourg beer, brandy, and wormwood-bitters. By and by, two pathognomonic symptoms showed themselves: first, “la fièvre dans les sang”; second, “la chanson guerrière dans la voix”; and occasionally, when potations had been very free in the first stage, a third characteristic symptom appeared, “des larmes dans les yeux”; or, as etiologists and others in Edinburgh would express themselves, the patients were “greetin’ fou”.

On Friday night, some three or four hundred medical students marched in procession from their own quarter to the rue Montmartre and along the great line of boulevards, making vociferous warlike demonstrations, singing la Marseillaise, which, by the way, we are told is no longer to be interdicted as a revolutionary excitant, but to be used and accepted by all as a patriotic hymn. The cries of this Æsculapian regiment were “A Berlin!” “A nous le Rhin!” “Vive l’Empereur!” “Vive l’armée!” There was no attempt to stop this uproarious demonstration, which, as it marched, became enormously swelled by accessions from the working-classes. Similar demonstrations occurred in many other parts of the town, and were not interfered with.

On Saturday morning the Minister of War placed two notices on two pillars in the quadrangle of the Ecole de Médecine, stating that all students who had completed three years of study, or, to use the words of the notice, “tous les étudiants ayant acquis douze inscriptions,” will be received with the rank of assistant-surgeon into the military hospitals forthwith to be organised in the theatre of war. Other analogous notices have appeared, inviting volunteers to join the pharmaceutical staff. The newspapers of this evening announce that above a hundred medical students have already been nominated in connection with the medico-military emergency which has so suddenly arisen; and that there is a fear that the service of the civil hospitals of Paris may suffer from being suddenly deprived of their internes and externes, so popular with them is war duty. Veterans as well as mere students are coming forward as volunteers. Sédillot, aged 70, the great surgeon of Strasbourg—a man justly celebrated as a clinical and scientific surgeon—has requested the Minister of war to be allowed to join the army of the Rhine as a surgeon-volunteer. Be this tremendous contest right or wrong, it is a popular and national war; all classes and all political opinions (with insignificant exceptions) seem for the present to be fanatically bellicose. Still, there are some—perhaps many—who weep. On Saturday I was told that there was going on at the entrances to the Strasbourg railway station “un saisissant spectacle, le départ des troupes pour la frontière.” I went and saw: it was, indeed, a touching sight. By thousands the soldiers were marching in, musket on shoulder, and each with a tin pan and a long loaf of bread strapped on the top of his knapsack. The crowd was cheering at intervals; some street urchins (*gamins et gamines*) were trying to sing “Mourir pour la patrie”; and many weeping women

were wringing their hands in despair. The soldiers themselves seemed very silent and sad. Poor little fellows, without for a moment feeling that they lacked pluck, it was impossible not to conjecture from their countenances that each one of them, as he filed within the station gates, was saying to himself “we hear to-day jubilant cheers at our departure, but are not there many chances against our living to hear the applause which will greet the army on its return from the Rhine?”

Just one word on another matter:—French soldiers are, as a rule, small in stature as compared to our soldiers, and they have, moreover, less of the martial air; but they look more active and nimble, and more like hard work; a circumstance probably explained by their drill being less stupidly monotonous, and their dress being no impediment to the free play of the vital organs.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AN IRON COTTAGE-HOSPITAL.

At the annual meeting of the Cumberland and Westmorland Branch, Dr. W. Jones of Aspatria gave a description and showed a model of a moveable metal Cottage-Hospital which he had designed.

The building, as at present arranged, consists of a central square tower, the length of each of the sides being 16 feet. The tower is 33 feet in height (this being the thirty-third year of Her Majesty Queen Victoria’s reign), including three storeys with a spiral ascending staircase in the centre. The ground-floor is occupied by cooking apparatus and for other kitchen purposes. The central or middle storey contains sleeping accommodation for the nurses and charwoman, while the upper storey may be used as a store-room. On each of the three sides of the tower is a ward of the same dimensions as the base of the tower. Each ward is 12 feet in height from the ground-floor to the eaves, and 24 feet to the roof-tree; and is calculated to contain three beds. The number of cubic feet of air allotted to each patient is 1536 cubic feet. Attached to each of the wards on the outside is a corridor, entered from the end of the ward, for the use of patients during convalescence and during unfavourable weather; it may also be devoted to closet or bath arrangements. The use of the earth-closet has been suggested. Above the corridor-porch, and at each angle of the tower where the corridors meet, there is a cistern 3 feet square by 4 feet in depth for storing water. On the fourth side (the front) is the “house” or entrance to the Hospital. The three wards are intended to be devoted to men, women, and children, respectively. The whole framework of the building is to consist of metal plates 12 feet in length by three feet in breadth; shorter plates being used where space for windows or doors may be required. The several pieces are connected together by means of grooves of different forms. A leading objection against iron buildings has heretofore been the irregularity and variations of temperature. This defect it is proposed to obviate by means of the hollow pillar, which, while it serves as a support to the central staircase in the tower, is so connected with the cooking-stove on the ground-floor as to act as a chimney and convey heat, and radiate it from the centre of the building. The use of the thermometer is essential for the regulation of the heat. Smaller stoves to serve the same purpose may also be placed in the wards. Special ventilators are attached to every ward and to the tower. From the above arrangement it will be seen that each part of the building is complete in itself, while any of the wards may be isolated at pleasure. The plan is, at the same time, capable of extension or diminution to any required extent. The internal means of communication between the patients and nurse are simple and effective. Such a building is capable of being readily erected or removed at pleasure; and when any locality may be visited by an epidemic disease so that it would be next to impossible to convey patients to a hospital at a distance, the operation may be reversed by conveying a hospital to the patients. While calculated for being removed from place to place, it may at the same time be rendered a permanent institution where required. It is the designer’s intention to exhibit the model, when complete, at the forthcoming meeting of the British Medical Association at Newcastle-on-Tyne.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 23RD, 1870.

THE FUTURE OF PROSTITUTION.

IN about thirty years we shall begin a new century. It is certain that only a small number of those who read these remarks will then be alive to note the opinions of our successor in the editorial chair. Our children, it may be our grandchildren, will have succeeded to our tasks. They will have inherited the results of our actions, of our wisdom and caution, our folly and haste. Now, although human nature itself changes with extreme slowness, and genuine development is so tardy that it is perhaps inappreciable, yet modifications of opinion are easily brought about, and thirty years, at the rate of recent change in this matter, may witness such as will appear scarcely short of a revolution. Still, however, it will be for the most part only the garb which has been put off; the essentials must remain the same as they were. It is certain, however, that our successors of 1900 will have to meet the problems of life under considerably altered conditions; and chief amongst these—chief so much as to become paramount and to swamp all others—will be an enormous increase in numbers. Between 1750 and 1800 the British population rose from twenty to forty millions; and unless circumstances should interfere it will, during the next thirty years, continue to increase at the same ratio, and rise in 1900 to double what it was in 1850. Many of the considerations which suggest themselves in association with this overwhelming increase of population concern the politician rather than the medical man, but many of them are such as can be rightly estimated only by trained members of our own profession. We purpose for the present to ask attention to only one single point of the prospect; and, writing as we do for medical men, and for those only, to speak with considerable freedom as to the probable future of prostitution amongst us. It is surely a matter of impossibility that correct views should be formed on the question of detail now so hotly discussed amongst us, unless we have attained to something like just opinions as to the future on which we are entering, and as to the merits of the question in the widest sense.

Now, one of the necessary results of a crowded population is diminished value of human labour and increased difficulty in earning, whether by head or hands, the means of sustenance. Another is the development of many new comforts and luxuries of life which rapidly take their rank as necessities. A third is that people get to congregate more and become more mutually dependent, and that thus large towns and cities develop whilst the rural population remains almost stationary. A moment's thought will show how all these three bear upon our subject. Nor has there been as yet any discrepancy between the results of experience and those which inference would have suggested. Amongst the most terrible penalties which we have to pay for advance in civilisation and increase in the numbers of those who enjoy human existence is, that the blessings of married life become increasingly difficult to obtain, and that concubinage and prostitution become common. Every highly

civilised nation, every densely populated nation has, we believe, experienced this, and the causes are too obvious to need explanation. Let it be, however, clearly understood that the experience of the past is by no means necessarily that which will follow in the future. To prevent it, however, special measures must be taken, measures such as can result only from an honest and fearless estimation of the facts.

The fact which we have mentioned by no means implies that highly civilised nations necessarily undergo degradation as regards sexual morality. On the contrary, it is often, if not usually, observed in this matter, that virtue and "vice" flourish side by side; and a high degree of purity in a large part of the population exists in association with, nay, may even be to some extent dependent upon, the degradation of a smaller section. This aspect of the subject has been ably put by a recent writer. Mr. Lecky writes, "Under these circumstances there has arisen in society a figure which is certainly the most mournful, and in some respects the most awful, upon which the eye of the moralist can dwell. The unhappy being whose very name it is a shame to speak; who counterfeits, with a cold heart, the transports of affection, and submits herself as the passive instrument of lust; who is scorned and insulted as the vilest of her sex, and doomed, for the most part, to disease and abject wretchedness, and an early death, appears, in every age, as the perpetual symbol of the degradation and the sinfulness of man. Herself the supreme type of vice, she is ultimately the most efficient guardian of virtue. But for her, the unchallenged purity of countless happy homes would be polluted; and not a few who in the pride of their untempted chastity think of her with an indignant shudder, would have known the agony of remorse and despair. On that one degraded and ignoble form, are concentrated the passions that might have filled the world with shame. She remains, while creeds and civilisations rise and fall, the eternal priestess of humanity, blasted for the sins of the people."

Thus it is by no means the fact that civilisation increases sexual sensuality; on the contrary, it is highly probable that, by substituting other forms of pleasure less directly animal, high hopes and aspirations which are inconsistent with animalism—habits of life which do something to reduce the force of sexual passion—it is rather favourable than otherwise to continence. It is a change in the form which the thing assumes, not any increase in its quantity with which we have to deal. This change is, however, one of tremendous importance, and fraught with possible consequences of the greatest danger. A virtue which supports itself by, in some sort, an alliance with vice, is in a perilous position; and, as a matter of experience, but few nations have flourished long after having definitely entered into the phase of which we speak.

We are not of those who think that medical men should avoid all other than the purely medical aspects of this question. In the first place, to do so would be impossible; for the physical intertwines itself inextricably with the other considerations. In the next, although surgeons, we are also men, and we have an interest in morality as well as in health. Lastly, nothing would be more unfortunate than that the public should be confirmed in its prejudice against our advice in the matter, founded on the belief that our opinions are based only on considerations of health, and that we take a professional pride in excluding all others. Medical men are, as we have repeatedly asserted, beyond most others, entitled to form opinions on this question in its widest aspect; for they, above all others, are familiar with the very various kinds of facts which concern it. They know the secrets of social life, and are cognisant, to an extent to which happily few others are, of the different developments of the sexual instinct. Their superior position in this matter is admitted by the public; and if the profession should ever be unanimous, or nearly so, on any question relating to prostitution, and should, at the same time, be able to inspire confidence in the public that its opinion is that of whole-hearted men, and not of one-sided sanitarians, its verdict would certainly carry the day. Nor will any important action ever be taken until our profession prepares the way. What has been effected already has been done chiefly by our action; and if anything further is accomplished, it must come mainly from us. It may therefore be worth while briefly to delineate some of

the peculiar features of prostitution, past and future, as they present themselves to the medical mind. Before doing so, we may admit at once our surprise that in this day of fearless out-speaking no one has boldly come forward as an open apologist for the custom. To undertake its defence would tax courage more than ingenuity. Putting aside, by permission, the question of the direct condemnation by the Christian religion of all sexual indulgence excepting under the sanction of the marriage tie, the apologist might begin by reminding us that Saint Paul expressly treats of marriage as a resource for those of strong passions, and that, when dealing with abnormal manifestations of the sexual instinct, he speaks with an explicitness, which to our fastidious ears borders on indecency, of "forgetting the natural use of women." The asceticism which condemns even marriage, and which would advocate, as St. Paul did, absolute continence, finds in the present day but few who attempt its practice, or who think themselves justified in recommending it to others. It is recognised on almost all hands, and with especial clearness by medical men, that this course of conduct is the fruitful parent of things much worse than that which it seeks to repress. The wisdom of modern times consists in the attempt to regulate natural tendencies, to minimise their evils and exalt their good, but seldom or never in undertaking the rash task of their repression.

The apologist for prostitution might next allege that it is sensuality which is the real sin, and he might with much truth retort on married purists that, in many instances, they (both men and women) are more self-indulgent in this matter than many whom it pleases them to count as libertines. Lust, under the cloak of matrimony, does not change its character; and in many cases Portia, although undoubtedly Brutus' wife, is Brutus' harlot too. Next it might be asserted that, whilst much which passes current as virtuous in married life comes very close on sensuality, so much in irregular connexions is far less vicious than many persons suppose. There are various degrees in the admixture of affection and animal appetite; and, whilst many married lives manifest the latter in its strongest phase, many illicit connexions are by no means devoid of the former. One of the quaint and pithy proverbs in use amongst our plain-spoken forefathers declared that "there is more in marriage than four bare legs in a bed," and the application of it may be claimed in some degree for many connexions not hallowed by the Church's sanction. Few can doubt that human character loses in strength and beauty whenever the one sex is deprived of the influence of the other, and most who have allowed their minds a little sea-room in the matter, will be prepared to grant that the connexions called vicious are by no means destitute of good results. We must beg that neither Mr. Acton nor Mr. Buteel, nor any other lover of logic, will convict us of apologising for vice in admitting this, or will attempt to show us the *reductio ad absurdum* to which it would lead. Next it might be alleged, with more or less plausibility, that prostitution substitutes less natural forms of sexual vice, onanism on the one hand, and nameless crimes on the other. With much more truth, and indeed with great force, it might be urged that it prevents seduction and keeps down the number of illegitimate births; for all statistics support this conclusion. Lastly, an ingenious defender of it might aver that all experience has shown the sexual instinct in the light of an overmastering tyrant which sways to its behests men of all nations, of all creeds, and all variety of hope; that prostitution has existed under all conditions of civilised life, that the progress of Christianity has done little or nothing to reduce its prevalence, and that it seems to be a natural tendency of an immense majority of mankind to invent euphemisms by which to shelter its grossness and conceal its sin. By way of postscript, he might further allege, though not perhaps without laying himself open to some risk of refutation, that the good of the human race is consulted by a system which makes it more easy for those who are loose in morals, and probably of idle and improvident habits, to remain unmarried, and thus leave the parentage of future generations to those of higher moral development than themselves. We must reserve the answer which can be given to such suggestions as these to a future occasion.

DR. HUNT, of Hoxton House Asylum, has been appointed Lecturer on Mental Diseases at Charing Cross Hospital.

THE University of Vienna has determined to admit women to its Medical School. Two female students have, it is alleged, entered.

THE MEDICAL BILL.

THE Medico-Ethical Association of Manchester has petitioned the House of Commons to insert a clause in the Medical Bill giving direct representation in the Medical Council to the general profession, or, failing that, to reject the Bill. It has also communicated with the three members for the City on the subject, and requested them to use their influence in support of the petition.

HEALTH OF SALFORD.

THE death-rate of Salford, which increased from 1860 to 1868 almost uninterruptedly, showed a favourable change in 1869, being during that year not quite 27 per 1000 against 31 per 1000 for 1868. The diminution was most marked in the deaths from diarrhoea, fever, and scarlatina. The mortality from measles increased in 1869. Dr. Tyson calls particular attention to the condition of the river, which he says "is becoming more foul every day", and suggests the possibility of successfully applying the A.B.C. process for its purification. The slaughter-houses, too, are not in a satisfactory state; but steps are being taken for the establishment of a public abattoir. The common lodging-houses are, on the whole, in a fairly satisfactory condition; but much improvement is needed in the "houses sub-let in lodgings"—an improvement which, it is hoped, will be effected by the buildings of the Industrial Dwellings Company.

HEALTH OF MARYLEBONE.

SCARLET FEVER, measles, and diarrhoea, were largely fatal in the parish of St. Marylebone in June; and the mortality from the last-named disease will doubtless increase this month. Dr. Whitmore tells us that he found one house in which the inmates were positively afraid to light a fire for fear of driving out the swarms of bugs which, under less exciting conditions, were content to remain in ambush in the walls. These poor people were obliged to light their fire in the yard! The house is to be pulled down. Dr. Whitmore has lately found that the Regent's Park water is offensive in certain parts of the lake; and he had addressed a letter at the request of the Vestry, to Mr. Ayrton, asking for the adoption of certain remedies which he suggests. One of these—the increase of depth of the water during summer from four to five feet—was agreed to by Lord John Manners when the lake was being cleaned, but it appears not to have been carried out.

DISPENSERS IN THE NAVAL HOSPITALS.

THE following regulations relative to the appointment of Dispensers and Assistant-Dispensers in Her Majesty's naval hospitals at home and abroad, have lately been issued by the Admiralty Board. 1. A candidate for entry as Assistant-Dispenser shall make a written application to that effect, addressed to the Secretary of the Admiralty. 2. As vacancies occur, candidates will be ordered to attend at the office of the Director-General of the Medical Department of the Navy, observing that no person can be admitted as an Assistant-Dispenser unless he possesses the minor qualifications of the Pharmaceutical Society; but Dispensers or Assistant-Dispensers in charge of stores must possess the major qualifications of the Pharmaceutical Society. 3. The age of Assistant-Dispensers on entry must not be less than twenty years, or more than twenty-five. 4. The daily pay of Assistant-Dispensers will be as follows: under 5 years' service, 5s.; under 8 years' service, 5s. 6d.; under 11 years' service, 6s.; under 14 years' service, 6s. 6d.; under 17 years' service, 7s. 6d.; under twenty years' service, 8s. 6d.; and for every additional year an addition of 6d. per diem, till 10s. a-day is reached. 5. When in charge of stores an additional allowance will be granted, viz., at Haslar and Plymouth Hospitals, 2s. per day, with the title of Dispenser; and at other Home and all Foreign Hospitals, 1s.

per day. 6. An allowance of 6*d.* a day, in lieu of fuel and lights, will be granted to all Dispensers and Assistant-Dispensers, and they will be provided with quarters. 7. Superannuation will be allowed in accordance with the Superannuation Act of 1859, and a Certificate of Qualification will be required from the Civil Service Commissioners, under the terms of the Order in Council of 4th June, 1870, published in the *London Gazette* of the 7th June, 1870. 8. Assistant-Dispensers will be liable to serve in any of Her Majesty's Naval Hospitals at home or abroad, to which they may from time to time be appointed.

MR. GLADSTONE.

WE are glad to be able to state that Mr. Gladstone has quite recovered from his recent slight indisposition.

AMERICAN CONTRIBUTION TO THE SYME TESTIMONIAL.

A MOST graceful act of international courtesy, a tribute to the merits of the late Mr. Syme as a teacher of Clinical Surgery, has just been done by American surgeons. A meeting was held in Philadelphia, on the 25th of May, 1870, to consider and act upon a letter and printed circular which had been sent to Dr. S. D. Gross by Dr. Charles Murchison of London, in behalf of a committee of British Surgeons who desired the co-operation of American surgeons in a contemplated testimonial to Professor Syme; and who wished Dr. Gross to take the necessary steps for the purpose, in conjunction with such of his professional friends as might be disposed to aid in the movement. Dr. Gross having been called to the chair, and Dr. J. Ewing Mears appointed Secretary and Treasurer, an influential Executive Committee was resolved upon to prepare an abstract of the circular, including an extract from the letter of Dr. Murchison, and an appeal, for circulation among the Surgeons of this country. The following extract from the Circular issued by the Committee will doubtless be read with much pleasure.

"The desire is not so much to obtain a large amount of money as to secure a decided expression of professional goodwill, and a formal recognition of the esteem in which Mr. Syme is well known to be held in America. We believe that American surgeons will cordially welcome the opportunity thus liberally afforded by their British brethren to strengthen the bond of good fellowship already existing; and that they will gladly respond in this manner as an acknowledgment, at once, of the high standing of Mr. Syme among them, and of their appreciation of many acts of kindness and hospitality rendered by him and his friends to Americans visiting them in pursuit of science. Under this view we feel confident that many leading members of our profession in the United States have only to be invited in order to join with alacrity in a testimonial to the pre-eminent character of the services to surgical science, practice, and instruction of the veteran ex-professor of Clinical Surgery of the University of Edinburgh. Nor are we less hopeful that they will take all the more pride and pleasure in the contemplated action, on account of the Fellowship to be established by it in the school in which he was for thirty-six years so able and so distinguished a teacher—a school which is the time-honoured ALMA MATER of so many of our pioneers and masters in American medicine and surgery—the mother school, in fact, of our American medical profession. For the purpose of imparting a national character to the movement, and facilitating its progress without delay, the undersigned have been requested to act as an Executive Committee to make a general appeal, and to receive contributions for transmission to London."

The total sum already raised amounts now to £1,740, but the promoters are in hopes that the full sum originally proposed may be speedily subscribed.

HOSPITAL ORGANISATION.

THE somewhat spontaneously generated Subcommittees which are considering the means by which the abuses of the out-patient departments of general hospitals may best be remedied are progressing with considerable industry towards the completion of their report. The separate reports of the Subcommittees on Poor-law dispensaries and on special hospitals are also nearly ready. The work which they have in hand is so very laudable, and is one which will require so many periods of seed-time, so many seasons of growth and ripening, so much threshing

of the grain and bolting of the flour, before a thoroughly assimilable and digestible result is produced, that we have nothing but words of encouragement and friendship to offer. It is, however, very evident already that the somewhat *amateurish* productions which are about to be laid before the profession, although well worthy of consideration and criticism, will serve as little more than memoirs to aid in the ultimate solution of the numerous and large questions propounded. These questions include highly important considerations of public policy and professional interest, which, by their very constitution, the Committee are imperfectly fitted to discuss, and have no authority to decide. Speaking in the name of a small portion only of a special class of the profession, the authors of the reports have attained, nevertheless, to a spirit of inquiry which is not devoid of catholicity, and have successfully imitated the form, if they have somewhat missed the spirit, which might have marked the results of an inquiry conducted on a wider basis and under circumstances of more easily recognised original authority. We have already foreshadowed the general conclusions. In the process of digestion and adoption to which they are now being submitted, they have not undergone any material change up to the present time. The Committee meets again on Thursday, at 8 P.M., at the Hospital for Women, Soho Square.

THE MERCHANT TAYLORS' CONVALESCENT HOME AT BOGNOR.

THE Merchant Taylors' Company opened a Convalescent Home at Bognor, in Sussex, on the 5th instant. The Home is for the reception and maintenance of patients in indigent circumstances, recently discharged, or about to be discharged, from any of the hospitals in or near the metropolis. It is intended also for such other cases amongst the poor of the metropolis as the Committee may consider fit and proper objects for admission, but principally for those recovering from injuries and surgical operations. No cases of a contagious character will on any account be admitted; and, for the present, admission is restricted to males. Mr. J. A. Kingdon has been appointed Surgeon to the Company for London, and each applicant will be examined by him; and, on his reporting to the Committee that the case comes within their rules, they will grant an admission for such a period (not exceeding a month) as they may consider advisable. The Company will furnish the inmates with everything they need, excepting wearing apparel, without any charge; but the authorities of the hospitals are expected to pay the railway fare. The Home, which is the property of the Company, is described as being spacious and airy. It stands in grounds of seven acres, which, being well timbered, afford ample shade. There are now forty beds. The intention of the Company is to perfect the work of the surgeon by giving rest, liberal and nourishing diet, and good air, to those considered cured. The Committee request that no patients may be sent who are not capable of doing for themselves, as no nurses are attached to the Home. The Committee will meet at 11 A.M. every Tuesday at the Company's Hall, Threadneedle Street, for the purpose of receiving applications for admission.

SCOTLAND.

EDINBURGH OBSTETRICAL SOCIETY: DINNER AND PRESENTATION TO DR. R. PEEL RITCHIE.

DR. RITCHIE, Senior Secretary, was entertained at dinner by the Society in Kennedy's Hotel, Edinburgh, on Friday, the 15th instant—Dr. Charles Bell, President, in the Chair—and presented with a handsome timepiece in recognition of his services in connection with the editing of the Society's *Transactions*.

THE NORTH OF SCOTLAND MEDICAL ASSOCIATION.

THIS Association has issued a circular strongly advocating the direct representation of the medical profession in the General Medical Council. It proposes that the representatives of the Universities and licensing bodies should be elected by their registered graduates, members or licentiates, thus obtaining the desired result without the introduction of any new machinery. By transferring the election of the present repre-

sentatives of the Universities from their Senates to their medical graduates, and of the Colleges of Surgeons and of Physicians from their Councils to their licentiates, the present general plan and numbers of the Council would be retained; or the latter, if thought necessary, might even be reduced by conjoining the representation of the Colleges of Surgeons and Physicians in the same manner as is done with that of the Scotch Universities. The Association has petitioned Parliament in similar terms.

THE MEDICAL ACTS AMENDMENT BILL.

THE Committee on the Direct Representation of the Profession in the Medical Council have drawn up the subjoined petition, which has been presented to the House of Commons.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

THE Humble Petition of the Committee of the British Medical Association appointed to obtain Direct Representation of the Profession in the General Medical Council—Sheweth:

That the British Medical Association numbers upwards of four thousand members of the medical profession residing in the United Kingdom of Great Britain and Ireland, and comprises a majority of the physicians and surgeons of the public hospitals, and also a majority of the professors and lecturers attached to the various schools of medicine throughout the kingdom.

That the British Medical Association has always occupied a prominent and influential position with respect to Medical Reform, and that "the Medical Reform Act of 1858" was, in a great measure, due to the efforts of the Association.

That the General Medical Council, as now constituted, consists of seventeen members as representing the several universities, medical and surgical corporations, and licensing bodies of the United Kingdom, and of six members nominated by the Crown, together with a President chosen by the other members of the Council.

That the great majority of the members nominated by the Crown are intimately connected with the universities and corporations, and that there is, therefore, no direct connection between the General Medical Council and the general body of the registered members of the profession.

That, owing to the medical practitioners having no direct representatives in the Council, the profession evinces but little interest in its proceedings, a disadvantage which has been admitted in the debates of the Council.

That corporate interests only were considered at the special meeting of the Council held in April and May last to consider the provisions of the Medical Acts Amendment Bill; while the representations and wishes of the profession were disregarded.

That the Council, as at present constituted, no longer possesses the confidence of the profession.

That the introduction of representatives elected by the profession would give the profession more confidence in the Council than at present, and would also increase the knowledge of the Council with respect to the needs of the public and of the profession in Medical Education, Sanitary Measures, Medical Jurisprudence, and Poor-law Medical Relief.

That a Bill has been brought into your honourable House intituled the "Medical Act 1858 Amendment Bill," and that no provision is therein made for the Direct Representation of the Profession in the General Medical Council, although the payment of the representatives of the several universities and corporations, and of the representatives of the Crown, together with the general expenses of the Medical Council, amounting to upwards of £4,000 annually, are defrayed, not by the bodies so represented, but solely by fees exacted from the Medical Practitioners of the United Kingdom on Registration.

That the British Medical Association holds annual meetings similar to those of the British Association for the Advancement of Science, and at its annual general meeting held in Dublin in August, 1867, passed a resolution with only two avowed dissentients in favour of the addition of eight direct representatives of the profession to the General Medical Council, that the resolution was affirmed unanimously at the subsequent annual general meetings held at Oxford in August, 1868, and in Leeds in August, 1869, and was again passed with only one avowed dissentient at a special general meeting of the Association held in London on the 18th day of May last.

That various medical societies in the large towns of England, as well

as Branches of the British Medical Association, have passed similar resolutions.

That the Irish Medical Association, the President and Fellows of the King and Queen's College of Physicians in Ireland, the Royal College of Surgeons in Ireland, have passed resolutions in favour of Direct Representation.

That the Royal College of Physicians, Edinburgh; the Royal College of Surgeons, Edinburgh; the Faculty of Physicians and Surgeons of Glasgow, and various medical societies in Scotland, have petitioned for Direct Representation.

That the election of direct representatives by the registered members of the profession can now be readily effected for each of the three divisions of the kingdom by means of voting papers.

Your petitioners therefore pray that

"The General Medical Council shall, after the passing of this Act, always contain Representatives elected by the Registered Medical Practitioners, residing in the United Kingdom of Great Britain and Ireland, in proportion of one-fourth of the number of the said Council."

And your petitioners will ever pray, etc.

EDWARD WATERS, M.D., *Ex-President of the British Medical Association, Chairman of the Direct Representation Committee of the British Medical Association.*

REPORT OF EXPERIMENTS ON THE IODIDE OF POTASSIUM USED IN MEDICINE.

WITH the object of ascertaining the degree of purity which may be looked for in the iodide of potassium as supplied by the druggist to the medical man, we procured six samples of the drug and submitted them to chemical analysis. These samples were obtained from hospitals and from druggists in various parts of London.

The chemical examination was made as follows: 8.305 grains of the iodide, in the undried state and not previously powdered, was dissolved in a little water, and to it a very little alkaline chromate of potash was added, and a standard solution of silver was then dropped into the liquid until the red tinge (the sign that the iodide of potassium was completely saturated with nitrate of silver) made its appearance. The quantity of standard solution of silver being noted, the quantity of silver was of course known. As will be seen from the tabular statement, the quantity of silver used up was that indicated by theory in the first five cases, while in the last only it was a little in excess of the quantity required for absolutely pure iodide of potassium.

After noting the quantity of silver solution, the resulting iodide of silver was washed first with very dilute nitric acid, then with pure water, and finally dried and weighed. The following is a tabular statement of the results thus obtained; viz.:

No.	Obtained from	Quantity of Iodide of Potassium taken. (grains.)	Quantity of Iodide of Silver. (grains.)	Quantity of Silver employed. (grains.)
1.	Moorfields Eye Hospital	8.305	11.49	5.40
2.	London Hospital	8.305	11.68	5.40
3.	Skin Hospital.....	8.305	11.66	5.40
4.	Leo Lee & Co., Bishopsgate St.	8.305	11.66	5.40
5.	Hancock, Fleet Street	8.305	11.48	5.40
6.	Warner & Co., Fore Street.....	8.305	11.68	5.51
	Theoretically pure iodide of potassium	8.305	11.750	5.40

From these results it appears, firstly, that the iodide of potassium is remarkably free from bromide and chloride; and secondly, that, as actually sold, it is very dry. According to these analyses, 100 parts of commercial iodide of potassium contain from 99.3 to 97.7 parts of absolute iodide of potassium, the remainder being the inevitable "hydrometric moisture". It is most satisfactory to find this drug to be commonly supplied in so high a state of purity. We cannot, however, forbear remarking on the high price which is charged for it. A druggist commonly asks two shillings an ounce for iodide of potassium. Now, iodine itself is dear at one shilling an ounce, and iodide of potassium ought not to cost more than iodine; it ought, indeed, to be cheaper than iodine.

There are two varieties of iodide of potassium—the *opaque* crystals and the *transparent*. Fashion has led to the opaque kind being preferred; but there is no other reason in favour of the opaque. The transparent crystals are just as pure.

REPORT

ON THE

HOSPITALS OF GREAT BRITAIN.

V.—THE ABERDEEN ROYAL INFIRMARY.

THE Aberdeen Royal Infirmary is a massive and rather handsome building, after the designs of an eminent local architect. It is Grecian in style, suited to the granite material of which it is built.

The Infirmary affords accommodation altogether for 300 beds, of which it would appear, from the Annual Report recently issued, that not more than 142 were, on an average, occupied. The Infirmary is the chief institution of the kind in the north of Scotland, both from its position and the eminence of its medical officers. In no small degree, also, does it owe its importance to the honourable and responsible position which it occupies, as the Clinical School of Medicine in connexion with the University of Aberdeen.

The Infirmary building is situated on a rising piece of ground almost in the centre of the city, and seven minutes' walk from the University. It consists of three floors; there is a central building with two wings, forming the letter H. The building presents a considerable frontage towards the south. In front of the Infirmary is an extensive lawn, with porter's lodge and carriage-drive. Behind is an open court, enclosed by the wings of the hospital, the dead-house and clinical theatre, the museum and wash-house, the fever-house, a temporary wooden hospital building, the medical superintendent's residence, and, lastly, the dispensary or "shop". This back court is the only out-door resort of the patients; the fever-patients being restricted to a narrow beat in front of their own wards, while the general patients have allotted to them a somewhat more extensive promenade at the other end. The intermediate and by far the largest portion of the court seemed, when we saw it, to be reserved exclusively for bleaching and drying clothes, and was disfigured by rows of poles and fragments of rope dangling from them. Its utility as a poultry-yard has also not been lost sight of. The few benches visible enhanced the discomfort of the scene. On the whole, this place of out-door recreation, without gravel-walks or flower-beds or amenities of any kind, presented a most bleak and cheerless aspect. There are, we were informed, peculiar provisions for enabling the female patients to breathe fresh air in the yard. They rarely go out; but, when this is the case, they occupy a seat at some little distance from the males—a proximity in some cases by no means conducive to their moral, whatever it might be to their physical, health; for the men on the male benches are not infrequently occupants of the lock ward. The wretched provision for open-air exercise is the more noteworthy, as there is at present no convalescent hospital in connexion with the Infirmary. Steps are, however, we believe, being taken to secure a convalescent hospital in connection with the Infirmary; but this does not affect the present unsatisfactory condition of the airing grounds.

[We have been informed since the above was written that the managers are fully alive to the defects of the airing-grounds, and that the staff and architect are now considering the best means of carrying the contemplated improvements into effect.]

The arrangement adopted in the main building will be found, on entrance, to be somewhat as follows: the board-room, administrative department, and residents' rooms, in the centre and on the right hand; the out-patient department, and the male and female lock wards, on the left. Retaining the same standpoint, the left wing above will be found to be set apart for the accommodation of medical patients; the right wing, for surgical, including ophthalmic cases; and the central wards, for surgical cases also. The first floor is devoted to males, and the second floor to females.

The board-room presents the appearance of being devoted much to public business. It is a scantily, uncomfortably, and most economically—we might almost say parsimoniously—furnished room, the walls of which are covered, as is the frequent and unfortunate custom in many hospitals, with the names of benevolent persons who have contributed to the funds of the charity. It is to be hoped that, if the managers of our charitable institutions persist in the belief that such artificial means of obtaining money are necessary, they will at least adopt some more tasteful manner on carrying out their design.

There is an objectionable arrangement whereby only one sitting-room is provided for the resident physician and the resident surgeon. We see no reason why the physician's room should not be given up for the accommodation of the house-surgeon or house-physician, and the board-room be utilised, as is commonly done at hospitals, by the staff. The

Hospital would thus, perhaps, frequently secure the services of a good man who would otherwise, from personal grounds, decline one of the resident appointments.

The out-patient department on the left is very limited in extent. The total number of out-patients during last year did not exceed 1400, including 434 dental cases. The physicians and surgeons attend on fixed days before or after the visit to prescribe for, and, if necessary, admit into the Infirmary one or more of the dozen out-patients who may present themselves. The out-patient town department is supposed to be entirely attended to by the Aberdeen General Dispensary, to the funds of which the Infirmary annually subscribes a considerable sum of money. A rule is accordingly in force at the Infirmary that "No person can be received as an out-patient who resides within the boundaries of the Aberdeen General Dispensary." Although there are, no doubt, some advantages in this plan, still we think the money might be much better applied in increasing to some extent the out-patient department of the Infirmary, which is by no means developed as it ought to be at the hospital of a medical school like that of Aberdeen. It may be urged that there are no means of securing sufficient accommodation at the Infirmary for a large increase of out-patients; but this might, we take the liberty of suggesting, be managed by erecting ample out-patient rooms in another part of the premises, with entrance from Woolmanhill. If it be decided to increase this department, it will be necessary to appoint assistant-physicians and surgeons. This subject is indeed, we believe, under the consideration of the managers at the present moment.

If some such plan as we suggest were carried out, increased facilities would thus be offered for clinical instruction in the out-patient rooms, and a large number of severe or otherwise important cases passed on for admission into the wards. The assistant medical officers would also relieve and assist the senior members of the staff. The out-patient practice and valuable domiciliary experience afforded by the Dispensary would still be open, and be rendered more instructive and interesting to the advanced students, who would probably attend in larger numbers than they do now after the more systematic instruction received at the Infirmary. It is to be hoped at the same time that, in the increased facilities offered for medical relief at the Infirmary, due precautions would be taken to prevent the abuse, by those able to pay a medical man, of the benefits of the charity thus freely opened to the public.

In consequence of the much regretted resignation of Dr. Keith, a vacancy ensues, which affords a convenient opportunity of altering the system hitherto in force, and appointing an assistant-surgeon. Whatever step may be taken, we trust that the managers will not fail to select the candidate who offers the best professional claims for the post. Such appointments are, we were told, decided not by professional merit, but by kirk politics; and it is said that the present contest is likely to afford a more than usually rich field for a display of the kind. Such statements we must, however, decline to accept.

The staircases to the wards above are, on the whole, well lighted and fairly roomy. The architect has, however, successfully exercised considerable ingenuity in excluding light from the side passages leading to the wards. Most of the wards are small. They are mostly insufficiently ventilated. The form of the building forbids of there being windows in the opposite walls of some of the wards; in some of them there are windows on one side only, and in a few cases the exposure is not towards the sun. Others of the wards are well lighted. The heating is accomplished by open fireplaces; and there appeared to be no special means of ventilation. The cubic space—estimated roughly in an ordinarily full ward—appears to be about 1000 feet per patient; which, although a fair allowance, is greatly diminished by the insufficiency of ventilation.

On the medical side—and on the medical side only—the beds are frequently placed two and two together, with a board separating them at the head—a proximity which is in many ways objectionable. Generally, the wards appear to be clean and comfortable, without however having the slightest pretensions to luxuries of any kind. The floors are washed and partly covered with matting. The walls are painted to the height of a few feet, and whitewashed for the rest, and are free from any sort of æsthetic display. The ward-furniture is plain and substantial, though scanty. The bedsteads are of iron, and in a state of good repair; and the bedding appeared to be clean. There are no conveniences in the shape of lockers or baskets; and it seems that the patients, when in bed, place their clothes under their pillows. There are no bed-pulls. Each ward has a closet attached to it for special cases, which, however, affords room for improvement both in light and in ventilation.

The provisions for heating the wards are quite insufficient. We have been told that the patients in John Forbes' ward, for instance, suffer much from cold in the severe winter evenings. The consequence is, that all the patients who are able sit round the fire, and keep its

heat and cheerfulness from those confined to bed. During the night, as we were informed, the majority of the patients insist on placing their own coats and clothes over their blankets in consequence of insufficient bedding—a means of economising by no means worthy of imitation. Conveniences for the encouragement of cleanliness—one of the chief uses of a hospital—are quite insufficient. We searched in vain for lavatories. The bath-rooms of the hospital are two in number—one for males and one for females; and even these were found half-filled with slop-pails, dust-boxes, broken jars, and miscellaneous lumber, and were otherwise far from inviting in their appearance. The water-closets seemed even more objectionable. One closet which we examined was fitted with a long rusty iron trough, mostly uncovered and half-full of slops, and apparently with no communicating drain-pipe from it. The atmosphere of the place was most offensive.

The operating-theatre is on the third floor. The greater part of the seats have been cleverly put behind the operating-table; many of the students are consequently placed in a disadvantageous place for seeing operations. The theatre is well lighted and ventilated, and is heated by hot-water pipes. On the opposite side of the passage from the operating-theatre are closets for the reception of operation-cases. These closets are long and narrow, with a window at one end and the door at the opposite end. In one of them we observed a curious contrivance for ventilation, consisting apparently of an open hole on a level with the bed, and about a foot or so from the patient's head. It had doubtless the advantage or disadvantage of admitting an unmistakable current of air. Like the closets adjoining the wards, these operation-closets did not seem to present, as they stood, any peculiar facilities for recovery after operation; but perhaps, on the contrary, to be inferior to the ordinary wards in this respect, except in quietness.

The nurses' rooms appeared small, and, in some cases, not very tidy.

The ordinary diet of the patients seems to be that of the poorer classes of the district—or, in other words, the great bulk of the patients—oatmeal-porridge with milk morning and evening, with soup and bread for dinner. The ordinary diet never includes meat. The special diet is of the usual kinds; but the cooking is open to improvement. Grumbling at the dietary is not infrequent, and apparently with good cause.

Coming to the special departments, we have first to notice the ophthalmic. Devoted to the treatment of eye-diseases, there are two wards—a male and a female—adjoining the surgical wards, with one admission room on the ground-floor. The wards are small, suitably lighted, but offer the same evidence of closed windows which we have observed as common to other wards. The admission and out-patient room is much too small for the considerable number of patients. We were sorry to hear that only a very small number of students avail themselves of the teaching of this important department.

Of the condition of the male lock ward we cannot speak too strongly. It is very dirty, and shamefully neglected in ventilation, furniture, bedding, and general appearance. The scriptural texts, so plentiful on the walls of the other wards, were here to be seen littered in a corner of the room. We do not remember to have seen on any occasion a hospital ward so neglected as the male lock ward in the Aberdeen Infirmary. The custom of isolating male lock patients is, besides, one which is open to the gravest doubt.

As to the female lock ward, we have to notice an inexplicable arrangement which prevents students from availing themselves of its clinical instruction. There should be at the least opportunity given to advanced students to visit this room with the surgeon. Would any of the surgeons explain the reasons for closing this ward against instruction?

We found also, to our complete surprise, that the same secrecy is observed in treating other diseases of women; and we were informed that he might be considered a lucky pupil of the hospital who had seen a speculum introduced. Such is surely not the case!

The clinical teaching in connexion with the University appeared to us capable of much improvement in the way of organisation. Although several members of the staff teach much in the wards, there seemed, except in the case of students attending the clinical lectures, to be an absence of *general* and *systematic* provision for instructing the students, either in the admission room or in the wards. Add to this that the admission, the visit, the clinical lectures, and the *post mortem* examinations are all appointed for the same hour, and it will be easily understood that the students would have their opportunities of learning more than doubled, if some efforts were made at co-operation and organisation. It must, at the same time, be confessed that some difficulty would be met with in this direction so as to avoid clashing with the University classes. One feature which has done so much to render the Aberdeen student successful in competitive (which are chiefly "theoretical") examinations, strict compulsory attendance at systematic lectures, is not properly carried out in the matter of clinical instruction. The student has merely to enter his name once a

month in a book provided for the purpose during the term required by the University; and this is even abused. We are told, and we have had frequent opportunities of judging, that the Aberdeen student greatly lacks practical knowledge. On the other hand, were some such system carried out as that adopted with much success at St. Mary's or the Middlesex Hospitals in London, of calling the roll in the wards as well as in the class-room, great improvement would be effected. There ought also to be afforded to the junior student means of making himself fully acquainted with the stethoscopic and other signs in health, prior to his entering the wards to be taught disease. The duty of teaching these preliminary subjects would naturally fall to the junior or assistant members of the staff. An effort was made last winter, we believe, by Dr. Beveridge, to introduce compulsory systematic attendance in the medical wards, which was so far successful as to give every hope that great good might be done if some such plan were generally adopted.

We have already spoken of the neglect, perhaps inevitable in the circumstances, of the ophthalmic instruction; and we found exactly the same state of things regarding pathology and morbid anatomy. And this is explained, although not the less to be deplored, when it is understood that the University has not only no chair of pathology, but that the subject is not considered sufficiently important to be made a compulsory course; and this is the more to be wondered at, when it is considered that few *post mortem* examinations are annually obtained. Are the efforts made to obtain these examinations sufficient? The accommodation afforded for this department is capable of improvement and increase. The clinical lecture theatre, by no means deserving praise, answers the purpose also of a *post mortem* room—a combination by no means conducive to comfort or efficiency. Increased accommodation is here much wanted. We were informed, much to our surprise, that the pathologist has to do the menial work of the *post mortem* examination, to the undressing, washing, and redressing of the body—a position which he should decline to accept. For any assistance he may obtain, he has to depend on the kind services of the house-surgeon, house-physician, or the students. The pathologist, we understand, announced a course of lectures and demonstrations at the beginning of the winter session, and was rewarded by the attendance of *two* pupils, one of these being the house-physician!

There is a good museum attached to the Infirmary.

As further showing the kind of facilities given for practical instruction at this hospital, we may state that such apparatus as the sphygmograph, clinical thermometers, and the like, not to mention more recent inventions, have not yet been supplied by the Infirmary. They are, however, used by the members of the staff, who get them at their own expense.

With regard to the fever-wards, we shall say nothing at present, as we gather from the last Annual Report, recently published, that this department is about to undergo considerable and much needed alterations. The present inadequate accommodation has previously been remarked on in our columns.

For skin-diseases there is no special department, nor are there separate wards. Considerable trouble is, however, we understand, taken by Professor Pirrie to make the students familiar with this class of diseases.

It was scarcely our intention to notice the financial management of the Infirmary, superintended as it is by a Treasurer in whom everyone recognises a very valuable and efficient servant. But certain statements appear in the last annual report which bear on what we have previously stated, and which require from us some comment. A comparison is made—taken from the tables of Mr. Wilkinson of London, which were contributed some time ago to this JOURNAL—between the expenditure of the Aberdeen Infirmary and the hospitals throughout the kingdom. In the report, it is stated "that in respect of economy the Aberdeen Infirmary still stands first amongst all similar charities in the United Kingdom." It goes on to point out that, whilst in the forty English hospitals given in Mr. Wilkinson's tables the average cost of each bed occupied is shown to be within a fraction of £47; and in the two Irish hospitals, £36:17; the Scotch hospitals show a much lower cost, the Aberdeen Royal Infirmary's being the lowest, and amounting to not more than £25:14:6. We will not stop to point out the evident fallacy of the statements as given in the report of the Aberdeen Infirmary, because the average cost of *each bed occupied* is open to various interpretations, and may not give any idea of the average cost of *each patient*. For instance, a bed in a London hospital may have been occupied by half a dozen times as many patients in the year as one in the Aberdeen Infirmary, and the cost naturally would be greater in the former. We shall merely allude to the cost *per in-patient*, and here Aberdeen doubtless shows a small expenditure, smaller, perhaps, than any other of the hospitals mentioned by Mr. Wilkinson; but this, again, does not necessarily show economy in its truest sense. We have pointed out that the administration of the Aberdeen Infirmary is by no means of a liberal character. The furnishings, the dietary, and

the general management and comfort of the Infirmary, will not favourably compare with that of many other hospitals, and in no less a degree does the severity of the cases differ. We might allude to many other points of difference which materially affect the cost per patient in different hospitals, and which make a comparison in saving one of extreme difficulty; but enough has been said to show that the Committee have been, perhaps, too hasty in their conclusions in asserting for the Aberdeen Infirmary a position, on the ground of economy, superior to any other in the United Kingdom.

We have thus reviewed, as fully as our space will permit, the Aberdeen Royal Infirmary. From the limited space we are able to give to the subject, our remarks will have been seen to refer chiefly to the faults which, in our opinion, are observable in the Infirmary and its administration; but it is, we hope, understood that we at the same time recognise the many points of excellence in the charity, the vast amount of good to the district which is constantly being effected by the Infirmary, and the deservedly high position it occupies, from the distinction of its staff and its connexion with the great School of Medicine at Aberdeen. These are well known; and there are many items in its mode of government, its system of support, and other matters, which are well worthy of imitation by similar institutions. What we have attempted to show has been this, that the institution fails, in a greater or less degree, as most hospitals do, to fulfil the objects of a hospital in accordance with the opinions of the day. There is a mistaken economy in its administration; the airing grounds, which we hope to see soon remodelled and enlarged, are cheerless and insufficient; the wards are badly ventilated and badly heated; the accommodation for the due encouragement of cleanliness, one of the most vital duties of a hospital, is inefficient; and the proper attention to out-patient practice which a hospital such as that in Aberdeen is pre-eminently fitted to effect, and the advancement of the most recent discoveries of medical science which its position as a great medical school demands, are capable of much improvement. If, by our drawing attention to these defects, in the best interests of the Infirmary and the medical school of Aberdeen, the managers of the Infirmary may be persuaded to adopt measures of reform, we shall consider that we have done good service.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 14TH, 1870.

GEORGE BURROWS, M.D., F.R.S., President, in the Chair.

ON THE REMOVAL OF SUBCUTANEOUS TUMOURS WITHOUT HÆMORRHAGE OR LOSS OF SKIN. BY HENRY LEE, F.R.C.S.

THE author had been in the habit for some time of removing small tumours by India-rubber thread. He found that the pressure of the thread would rapidly, by a process of linear mortification or of ulceration, cut through the base of a tumour. This principle might be applied to the surface as well as to the base of any growth that might have to be removed, and was peculiarly applicable to vascular tumours of the neck and face. A crucial line of ulceration was first made through the skin by the continued pressure of India-rubber bands or thread. Needles were then inserted below the flaps of skin thus produced, and the skin was dissected back, from the centre towards the circumference, by the pressure of the India-rubber. The base of the tumour was then cut through in the same way, so that the whole of it was enucleated without the aid of the knife. The process went on much more rapidly than might be expected; and it was comparatively safe, as the India-rubber thread always, on account of its elasticity, remained tight. The circulation could not consequently be reestablished in a part once strangulated, and so far the danger of blood-poisoning was avoided.

ON THE FUNCTIONS OF THE SYMPATHETIC SYSTEM OF NERVES. BY EDWARD MERYON, M.D., F.R.C.P.

The author commenced by showing that every sympathetic ganglion, in all animals, was connected with three forms of nerve-fibres—namely, motor, sensory, and sympathetic proper, or the fibres of Remak. On entering a ganglion these several forms of nerves separated into their component fibres, and united with the ganglionic caudate cells. Each ganglion thus became a nervous centre in its own sphere, receiving, transmitting, originating, and reflecting impressions, on which the functions and nutrition of organs depended.

Experiments and observations were next adduced to prove that the sympathetic had little or nothing to do with the motions of the iris; but that these actions depended upon the third cerebral nerve, and the fibres proceeding from the regio cilio-spinalis of Wagner and Ruiter.

Dr. MERYON then entered into the inquiry relative to the special function of each different form of nerve-fibre respectively, which went to or proceeded from every ganglionic centre; and, from many experiments and cases, he concluded that the motor fibres which proceed from each ganglion, having their terminal fibres extending to the most minute arterioles, gave an impetus to the blood-current, and were subservient to the functions of the secretory tissues. The sensory fibres communicated an organic or vital sense to the secretory glandular tissues, just as the muscular sense was conferred on, and conveyed from, the muscles to the nervous centres, to communicate a stimulus to muscular action; in fact, the sensitive nerves affected the histological tissues, without operating immediately upon the bloodvessels. Finally, the fibres of Remak—or the sympathetic fibres proper—having a correlative ramification with the motor fibres, regulated the stream of nutriment conveyed by the arterioles into the cell-territory for secretion and nutrition. This latter function was effected by the restraining or inhibitory attribute of the fibres of Remak.

On these views Dr. Meryon proposed, in a future paper, to suggest a system of rational therapeutics, founded upon the properties which many medicines were known to possess, of inducing, through the influence of the vaso-motor nerves, the contraction or dilatation of bloodvessels.

Mr. SPENCER WATSON exhibited a new Ophthalmoscope, with which the fundus oculi could be examined by direct daylight in favourable cases and under favourable circumstances, but which would be more especially useful for examination of the retina in a room which was only partially darkened. It would also be very useful as an instrument to be employed by medical men at a distance from home. The mirror employed was concave, with a focal length of fifteen inches and a diameter of three and half inches; being, in fact, the laryngoscopic mirror.

Mr. BRUDENELL CARTER also exhibited a new form of Demonstrating Ophthalmoscope, invented by Dr. Wecker of Paris.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MAY 4TH, 1870.

J. O. FLETCHER, M.D., President, in the Chair.

Congenital Deformity of the Leg.—Mr. HAMILTON showed a child in which one of the legs was abnormal from the knee downwards. The tibia was shortened, the fibula absent, and the foot represented by the bone of the great toe and a rudimentary toe.

Spinal Tumour.—Mr. BRADLEY showed the spinal cord of a man who, during life, had had complete sensory paralysis of the right lower extremity and motor paralysis of the left. At the lower dorsal region, a small rounded enlargement was found adherent to the membranes, and pressing over the left side of the cord. The man had had a syphilitic history. Mr. Bradley remarked on the support given by the case to the views of Brown-Séquard.

Abscess of the Brain.—Dr. MUTER related the particulars of a case of chronic otitis in a boy of 15, the result of scarlatina seven years ago. He had had purulent otorrhœa ever since, and was seized with symptoms of his fatal illness on April 9th. He complained much of pain over the left side of the head, and, at the same time, the ordinary otorrhœa had ceased. The membrana tympani, being found bulging, was punctured, and this gave exit to a quantity of fetid pus. The symptoms were those indicative of pressure on the brain. He died in a convulsion on the 18th of April. After death, the whole of the anterior and middle lobes of the left cerebral hemisphere were found occupied by a collection of pus, which had also made its way into the left ventricle. The petrous bone was carious, and the adjacent dura mater thickened. The lateral sinus appeared quite obliterated.

Extroversion of the Bladder.—Dr. LLOYD ROBERTS brought forward an infant, the subject of this malformation. He remarked that the case was noteworthy from the fact of its being a female child.

Suppression of Urine from Mechanical Obstruction.—Dr. WM. ROBERTS mentioned a case of this interesting affection which he had recently met with. It was very similar in its history and progress to those which Dr. Roberts has already recorded, and its nature was perfectly diagnosed during life. After death, the left kidney was found atrophied and sacculated, and its ureter blocked by a calculus. In the right kidney, three little uric acid calculi were found in the infundibula, but, contrary to expectation, no obstruction was found in its ureter. After some search, however, a calculus of the size of a hemp-seed was found lying in the man's pelvis, which had, no doubt, been forced out of the ureter during the dissection.

EDITORSHIP OF THE BRITISH MEDICAL JOURNAL.

THE office of Editor of the BRITISH MEDICAL JOURNAL is about to become vacant. Gentlemen desirous of being appointed to the same, are requested to forward their applications to the President of the Council, W. D. HUSBAND, Esq., York, on or before the 30th day of July, 1870.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
ANNUAL MEETING.

THE Thirty-eighth Annual Meeting of the British Medical Association will be held in Newcastle-upon-Tyne, on Tuesday, Wednesday, Thursday, and Friday, the 9th, 10th, 11th, and 12th of August next.

President—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

President-elect—EDWARD CHARLTON, M.D., Senior Physician to the Newcastle-upon-Tyne Infirmary.

An *Address in Medicine* will be delivered by FRANCIS SIBSON, M.D., F.R.S., F.R.C.P., Physician to St. Mary's Hospital.

An *Address in Surgery* will be delivered by G. Y. HEATH, M.D., M.R.C.S., Senior Surgeon to the Newcastle-upon-Tyne Infirmary.

The business of the meeting will be conducted under six Sections:

Section A. *MEDICINE*.—*President*: Dr. Embleton. *Vice-Presidents*: Dr. Simpson and Dr. Lyons. *Secretaries*: Dr. H. Barnes, Carlisle, and Dr. Morell Mackenzie, 13, Weymouth Street, London.

Section B. *SURGERY*.—*President*: Professor Lister. *Vice-Presidents*: Charles Trotter, Esq., and Timothy Holmes, Esq. *Secretaries*: Dr. Arnison, Newcastle-upon-Tyne, and W. H. Favell, Esq., Sheffield.

Section C. *PHYSIOLOGY*.—*President*: Dr. A. Clark. *Vice-Presidents*: Dr. Sanderson and Dr. Hayden. *Secretaries*: T. C. Nesham, M.D., Newcastle-upon-Tyne, and J. G. McKendrick, M.D., 29, Castle Terrace, Edinburgh.

Section D. *MIDWIFERY*.—*President*: Dr. Robert Barnes. *Vice-Presidents*: Dr. Gibson and Dr. Graily Hewitt. *Secretaries*: Luke Armstrong, Esq., Newcastle-upon-Tyne, and J. H. Aveling, M.D., Rochester.

Section E. *PUBLIC MEDICINE*.—*President*: Dr. Rumsey. *Vice-Presidents*: Dr. Druitt and Dr. Morgan. *Secretaries*: Anthony Bell, Esq., Newcastle-upon-Tyne, and Dr. A. Ransome, Bowden, Cheshire.

Section F. *PSYCHOLOGY*.—*President*: Professor Laycock, M.D. *Vice-Presidents*: Dr. Sankey and Dr. Maudsley. *Secretaries*: Grainger Stewart, M.D., Borough Asylum, Newcastle-upon-Tyne, and T. Harrington Tuke, M.D., 37, Albemarle Street, London.

TUESDAY, August 9th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Council Chamber, New Town Hall.

3 P.M.—MEETING OF COUNCIL—Council Chamber, New Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—The retiring President, Dr. CHADWICK, will resign his office.—The new President, Dr. CHARLTON, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Any motions of which notice may have been given.

WEDNESDAY, August 10th.

8.30 A.M.—SHERIFF OF NEWCASTLE'S BREAKFAST to the Association in the New Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Council Chamber.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—Appointment of Place of Meeting for 1871 and President-elect.

12 NOON.—Address in Medicine by Dr. SIBSON, F.R.S.

2 P.M.—MEETINGS OF SECTIONS.—Adjourn at 5.

9 P.M.—PRESIDENT'S SOIRÉE—New Town Hall.

THURSDAY, August 11th.

10 A.M.—THIRD GENERAL MEETING—Lecture Room of Literary and Philosophical Society.—Reception of Reports of Committees.

11 A.M.—Address in Surgery by Dr. HEATH.

12 NOON.—SECTIONAL MEETINGS.

6 P.M.—PUBLIC DINNER of the Association—New Town Hall.

FRIDAY, August 12th.

9 A.M.—SECTIONAL MEETINGS.—Adjourn at 12.

12 NOON.—CONCLUDING GENERAL MEETING.

2 P.M.—SPECIAL CONVOCATION OF THE UNIVERSITY OF DURHAM for granting Honorary Degrees.

4 P.M.—SPECIAL SERVICE in Durham Cathedral.

Reception Room.—A room will be opened in the New Town Hall as a reception room on Tuesday, August 9th, at 10 A.M., and on the following days at 8 A.M., for the issue of tickets to members; for the supplying lists and prices of lodgings, and other information.

Members and others requiring information with regard to the meeting are requested to make application in this room.

Gentlemen are requested to proceed to this room immediately on their arrival, to enter their names and addresses, and to obtain the tickets necessary for admission to all the proceedings.

Letters, parcels, etc., may be left in this room in the care of the clerks. Arrangements will be made for the receipt and postage of letters in this room.

Gentlemen intending to visit Newcastle during the Meeting, are requested to send their names, without delay, to Dr. Arnison, 45, Northumberland Street, Newcastle upon Tyne.

The *Local Secretaries* are: G. H. Philipson, M.A., M.D., 1, Saville Row; W. C. Arnison, M.D., 45, Northumberland Street; Luke Armstrong, Esq., Clayton Street West; T. C. Nesham, M.D., 43, Northumberland Street; R. J. Banning, M.D., 136, High Street, Gateshead.

Hotels.—The principal hotels are: the Station Hotel; the Queen's Head, Pilgrim Street; the Turk's Head, Grey Street; the Turf Hotel, Collingwood Street; the Central Exchange, Grey Street; the Royal Exchange, Grey Street; the Neville Hotel, Neville Street; the Adelphi (Temperance), Clayton Street; the Norfolk Hotel (Temperance), Grey Street. Any information respecting hotels or lodgings will be willingly furnished by Dr. Nesham, 43, Northumberland Street, Newcastle-upon-Tyne.

Post-office and Telegraph-office.—Royal Arcade, Pilgrim Street.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary at their earliest convenience. All papers must be in the hands of the General Secretary, or one of the Secretaries of the Section to which the paper belongs, on or before Monday, August 1st.

Authors are requested to prepare beforehand short abstracts of their papers for publication. The papers (and abstracts) read in the different Sections are to be handed to the Secretaries of the Sections for publication in the JOURNAL of the Association.

No paper shall occupy more than twenty minutes in delivery. All subsequent speakers not to exceed ten minutes.

Annual Museum and Annual Library.—It is intended to exhibit objects of interest belonging to the following classes. 1. New Instruments and Appliances in Medicine, Surgery and Midwifery. 2. New Drugs and Preparations. 3. New Books, English and Foreign. 4. Pathological, Physiological, Anatomical, and Microscopical Specimens. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions, relating to Public Health, etc. 7. New Preparations of Food, etc. Rooms will be provided at the Newcastle Infirmary, for the Museum, which will be opened on Tuesday morning, August 9th, and closed on Friday evening, August 12th. All the objects intended for exhibition must be addressed, "Care of Dr. Page, Infirmary, Newcastle-upon-Tyne," be delivered on or before Monday, August 1st, and be removed on or before Monday, August 15th. Every object must be accompanied by a written or printed description, together with a short reference, for insertion in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects will be provided, but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the exhibitors. Intending exhibitors are requested to apply to Dr. Banning, Gateshead-upon-Tyne, for any information that they may require, and to inform him, as early as convenient, what they intend to exhibit, and how much space they are likely to require. Exhibitors who may prefer personally delivering their Specimens, are earnestly requested to forward a short description, on or before Monday, August 1st, in order that the Catalogue may be complete.

Notices of Motion.—The following notices have been given.

The Rev. Dr. BELL: That a Committee be appointed for the purpose of inquiring into the present constitution and operation of the Com-

mittee of Council; and whether it might not be better to have only one well constituted Council, consisting of a limited number—say fifty—to be elected by the general body of members through the medium of voting-papers: and that the Committee report to an ordinary general meeting, or to a special general meeting convened according to law.

Dr. STYRAP: That, considering the nature of the duties of the office of General Secretary, the great assistance rendered by the Honorary Local Secretaries, and the financial position of the Association, the increase of his original salary of £100 to £250 in 1866; £313 in 1867; £370 in 1868; and £364.9 in 1869, has been excessive.

That, in the opinion of this meeting, a stipend of £250 (inclusive) would be ample.

Dr. ELLIOT: That a volume of *Transactions* be annually published by this Association, to contain such essays or communications as are either too lengthy for admission into the JOURNAL, or may be deemed worthy of a more permanent record than a hebdomadal serial can secure.

Papers.—The following papers have been promised.

D. Embleton, M.D. On the Shoulder-tip Pain in Liver-Diseases.

J. Henry Bennet, M.D. On the Climate of Algeria. On the Influence of Inflammation in the production of Uterine Displacement.

E. J. Tilt, M.D. On Uterine Pathology at the Change of Life and after the Menopause.

J. Althaus, M.D. On the Treatment of Rheumatic Gout by Galvanisation of the Cervical Sympathetic.

W. Adams, F.R.C.S. On the Subcutaneous Division of the Neck of the Thigh-bone, as compared with other operations for rectifying extreme distortions at the hip-joint with bony ankylosis. Illustrated by a successful case of the subcutaneous division.

A. E. Sansom, M.D. The Sulpho-carbolates; and the Antiseptic Method in Medicine.

G. Y. Heath, M.D. On the Rapid Pressure Treatment of Aneurism.

W. H. C. Tessier, M.D. Remarks upon an Epidemic of Intermittent Fever in the Mauritius, during 1866-7-8.

J. C. Murray, M.D. On Snuff-taking; its utility in preventing Bronchitis and Consumption.

G. H. Philipson, M.A., M.D. On the Health and Meteorology of Newcastle and Gateshead during 1868 and 1869. Notes of a Case of Biliary Fistula.

J. Hutchinson, F.R.C.S. On Xanthelasma Palpebrarum as a Symptom of Diathesis. On Syphilitic Rupia.

W. Spencer Watson, F.R.C.S. On the use of the Seton in the treatment of Vascular Ulcers of the Cornea; with illustrative cases and drawings. Cases of Traumatic Ophthalmitis.

Anthony Bell, M.R.C.S. Notes of a case of Epilepsy of Sixteen Years' Duration, from Parietal Depression of Cranium: Trephining: Recovery.

W. F. Teevan, F.R.C.S. On Spermatorrhœa. Twenty cases of Stone in the Bladder.

J. W. Eastwood, M.D. On Intemperance in its Medical and Social Aspects.

Robt. Elliot, M.D. Lobelia Inflata; its Action as a Poison: evidence and autopsies at eighteen inquests.

R. H. Meade, F.R.C.S. On a case of Ovariectomy, in which the tumour was removed by enucleation, without the necessity of the application of either clamp or ligature to the pedicle.

B. Foster, M.D. The Murmur of Mitral Stenosis.

D. De B. Hovell, F.R.C.S. On the Treatment of Paralysis.

John Couper, F.R.C.S. The Diagnosis of Astigmatism by the Ophthalmoscope.

W. Fairlie Clarke, M.A., F.R.C.S. On some rare forms of Opacity of the Cornea.

J. H. Aveling, M.D. On the Advantages to be Derived from Curving the Handles of Midwifery Forceps.

J. M. Fothergill, M.D. On the Preservative Agency of Lowered Vitality.

F. Waterhouse, M.R.C.S. On a New Form of Elevator for Depressed Cranium in Childhood.

Thomas Skinner, M.D. On a new Pessary; and to shew Pessary for Prolapsus Uteri, Rectocele, and Vesicocele.

George Oliver, M.B. The Therapeutics of the Sea-side.

James Whitehead, M.D. On Mucus Disease.

M. W. Taylor, M.D. On the Transmission of the Virus of Fevers by Fluids.

T. Clifford Allbutt, M.A., M.D. On Functional Hemiplegia in Child-bearing Women.

Wm. Roberts, M.D. The case of a man who had a Vesicular Eruption on the Abdomen, which discharged at times great quantities of a Chylous Fluid.

B. W. Richardson, M.D., F.R.S. On Anæsthetics.

Henry Lee, F.R.C.S. On Transplantation of Skin in the Centre of an Old Ulcer: with Observations and Drawings.

Graily Hewitt, M.D. 1. On a New Instrument for Securing the Pedicle in Ovariectomy. 2. On Strangulation of the Uterus.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary.*

13, Newhall Street, Birmingham, June 6th, 1870.

MIDLAND BRANCH.

THE annual meeting of the above Branch will be held at Lincoln, on Thursday, August 4th, at 2 P.M. *President*, Dr. MITCHINSON.

Gentlemen wishing to read papers, are requested to communicate, as early as possible, with the Secretary.

Lincoln, July 12th, 1870. C. HARRISON, *Hon. Secretary.*

SOUTH EASTERN BRANCH: ANNUAL MEETING.

THE annual meeting of this branch took place on Thursday, June 30th, at the Rosherville Hotel, Gravesend. There were present thirty-one members of the branch.

Retiring President's Address.—The PRESIDENT (CONSTANTINE HOLMAN, M.D., Reigate) opened the proceedings by the delivery of the following address.

"Gentlemen,—It has been customary for the retiring President ere he inducts his successor into the chair, to render to you some account of his stewardship. Many a time it has been simply to express his happiness that the branch has prospered, whilst he reported that his ministerial duties had been well-nigh *nil*. This has not been my lot; for, whilst I may truly congratulate the members on the great prosperity of the Branch, I must at the same time tell them that the past year has been one of no small anxiety to their President. The Medical Acts Amendment Bill has been introduced, and it has received my most earnest attention. Associated with several of your oldest and most respected members, and being cognisant from past experience of the wishes of the great majority of the branch, I have not thought it necessary to call together a general meeting of the members. Your Council have met and have drawn up a memorial to the Lord-President of the Council, embodying the main points of objections to the proposed Bill. In its present form, and especially with its amendment, it is well-nigh impossible that the Bill can pass; and it behoves everyone of our members earnestly to bestir himself to indoctrinate the members of both Houses with the views held by the thinking and practical men of the profession. I would express my regret that, at the meeting of the members of the Association in London, even the sublime of division should have occurred. No vote need have been taken on the amendment of Mr. Southam for the one Examining Board. The desire for "one portal" was unanimous, I believe. The opinion that this could only be by one Board of Examiners in the United Kingdom, was only a corollary, and might have been accepted or rejected without damage to the main proposition. Without expressing any decided opinion myself in favour of one board or of three boards with one uniform equal form of examination, I would say that many objections to one board may be met by appointing a certain number of English, Scotch, and Irish examiners, who should then arrange amongst themselves for their rota in forming an examining board in each of the three capitals of the United Kingdom at stated periods. In this manner each division of the kingdom would be represented, and no undue stress on the practitioner need accrue; whilst position and fees would sufficiently recompense for loss of time consumed in fulfilling duties once, twice, or three times in the year. The amalgamation of the Medical Societies of London, and the formation of a Royal Society of Medicine has also, in consequence of the position you have so kindly given me, engaged much of my attention. An amalgamation of these societies ought to and must take place, but not until the rights of each section of our profession and the necessarily integral unity of its several parts have been more decidedly recognised. No physician is truly a practitioner of medicine until he understands something of the principles guiding the practice of the surgeon: no surgeon is rightly so-called unless he understands most of the principles of the practice of medicine: whilst the obstetrician is physician and surgeon, and something more. It would be hypocrisy, gentlemen, if I were not to admit that to me this day is one filled with much regret. To-day is severed a service of one family to your interests, hitherto uninterrupted during twenty-six years. Pray do not think that this is done lightly, or without thought. It has been the delight of their lives to possess your confidence, and to do their utmost to discharge their duty in the positions in which your kind confidence placed them. Two have gone, whom you in life and death so much honoured; and now I, after a very

short official life, retire. Beyond, however, my official life, my intimate acquaintance with the working of this Branch goes back two-and-twenty years; and since my first introduction to its members, in 1848, at Tunbridge Wells, it has been my great delight to do all that lay in my power for its advancement. Falling far short, as I did, of the abilities of my predecessors, it gives me sincere delight to know that in quitting official life I leave the Branch more active, more powerful than ever: subdivided into districts, and each district under the guidance of an efficient secretary. To these gentlemen I would tender my heartiest thanks for much. And now, gentlemen, whilst introducing Mr. Burton as my successor, allow me to express the hope, nay the conviction, that this Branch must go on and prosper. 'The king is dead—long live the king'—so goes the old saying; and, with this vanity-correcting sentence on my lips, I now most cordially and most gratefully, officially bid you farewell."

Dr. ARMSTRONG (Gravesend) said that the address which the meeting had heard would, in some measure, acquaint them with the work which had devolved upon the President. Of the way in which that work had been performed, those most intimate with his efforts to raise the status of the profession were the best judges. So far as he (the speaker) had had the opportunity of forming an opinion, the labours of the President on behalf of the Association and of the profession at large were beyond price. The reference which had been made so touchingly by the cessation of official connection with the Branch—a connection lasting over a long period, and replete with many instances of kindness and generosity, could not but have produced in the minds of many a regret that it was not a continuous connection. But, though he retired from an official position, he would still remain heart and soul one of themselves, and would be always willing to co-operate and lend his assistance to everything tending to promote the interests of the branch and of the profession at large. He concluded by moving a vote of thanks to the retiring President, and also to the Vice-Presidents, Dr. Jeaffreson and Mr. C. J. Pinching.

The proposition was seconded by Dr. ALFRED HALL (Brighton), and carried by acclamation.

Dr. HOLMAN, in acknowledging the vote, said that if, by his experience of the working of the Branch, he could in any way benefit them, he should be always willing to give that assistance.

Mr. C. J. PINCHING (Gravesend) responded on behalf of himself and his colleague, Dr. Jeaffreson, who was absent.

Mr. J. M. BURTON (Lee Park), having taken the chair as President, addressed the meeting. After thanking the members of the Branch for the honour conferred upon him, Mr. Burton referred to the Medical Acts Amendment Bill and the proceedings of the General Council of the Association and of the Council of this Branch in relation thereto. He considered the Bill to be most objectionable. Its only good feature—the one portal as an entry to the profession—would prove an utter sham, unless the eighteenth clause were retained. It must be most satisfactory to the profession to find that the Council of the College of Surgeons had protested against the proposed omission of this clause. The placing the Medical Council under the control of the Privy Council—*i. e.*, under that of its medical officer for the time being—was most unsatisfactory. The President might be a homœopath, and the medical officer also. What was really wanted was a Medical Council properly representing the great body of the profession, able to enforce a good and uniform examination and to regulate the education of students. It was to be hoped that medical teaching would before many years be put upon a better system; and active and able minds were now engaged in considering the subject. The Association was steadily progressing, both in its influence over the profession and in the attention which it could now extort from the Government; and, especially, the district meetings were constantly adding fresh members to the general body. These district meetings gave the opportunity of gathering from the three counties men who would otherwise seldom or never meet. If it were considered that in the last twenty-five years the science and art of medicine had been completely revolutionised, it could be perceived how much the practitioner had to learn, and still more how much he had to unlearn. Of course, every intelligent practitioner endeavoured to keep himself *au courant* with the medical knowledge of the day; but the busy and overworked country practitioner had but little time, and was but rarely able to revisit his hospital and see how things were going on. Now, the district meetings gave the opportunity of collating each other's experience, and of seeing new modes of treatment demonstrated. In this district, during the last year, there had been many demonstrations of this kind, of which Mr. Burton especially mentioned those given by Drs. Barnes and Braxton Hicks; the one explaining the mode of checking *post partum* hemorrhage by the application of perchloride of iron; the other showing the use and mode of application of the cephalotribe. In looking round this room, there was one face con-

spicuous by its absence—one rarely missed either from the annual or the district meetings—that of their old and valued friend, Adam Martin. He was a hard-working, able, and energetic man, who made his own way in life by his own determined perseverance and industry, without any adventitious advantages. He was highly esteemed by all who knew him; and it was at his house that the first district meeting of this Branch was organised and held. He died at the age of seventy-six, leaving behind him an excellent reputation, and amongst his friends the "desiderium tam cari capitis". In concluding, Mr. Burton welcomed the members to Gravesend, and expressed thanks to the Vice-President, Mr. Pinching, to Dr. Armstrong and the members of the Local Committee, for the arrangements made for the meeting.

Mr. FLAXMAN SPURRELL (Belvedere) proposed a vote of thanks to the President for his address.

Mr. BELL (Rochester) seconded the motion, which was carried unanimously.

Report of Council.—Mr. G. F. HODGSON (Secretary) read the following Report.

"The report of the proceedings of the Branch during the past year may fortunately be a brief one, as its doings closely resemble those of the preceding one, only extended. They might, therefore, be expressed in two words—'progress' and 'prosperity'.

"To give a few details, however, it may be stated that our printed list of members last year numbered 287. This year it includes 304 names, an increase of seventeen. There has really been an addition of thirty-four new members; but, then, the list has been subjected to a loss of just half that number:—eight by deaths, and nine by withdrawals on account of changes of residence or otherwise, two having allowed their subscription to lapse. The members, whose loss by death we have to lament, were:—Mr. Adamson, of Rye; Mr. Balchin, of Godalming; Mr. Chapman, of Lingfield; Mr. Ingram, of Midhurst; Mr. Kent, of Eastbourne; Dr. Martin, of Rochester; Mr. Sladden, of Ash; and Mr. Whitfeld, of Ashford. Most of these gentlemen had attained to an age beyond that ordinarily allotted to man, and several of them had been prominent and valuable members of the Branch.

"Our progress has been illustrated by the activity of the districts; and we have to thank the secretaries of them for their continued and valuable exertions, viz: Dr. F. J. Brown, of the West Kent District; Dr. Bowles, of the East Kent; Dr. Lanchester, of the East Surrey; and Dr. Morton, of the West Surrey. All these districts were existing at our last meeting. A new one, then sanctioned, has been established in East Sussex, and has distinguished itself by some cordial meetings at Lewes, Tunbridge Wells, and Hastings. Our warmest thanks are due to the Secretary, Mr. Mudd, of Uckfield, for his activity and zeal. We regret to have to report that Dr. Bowles has found it necessary to resign his post, after a good service of six years. A successor has fortunately been found in Dr. Parsons, of Dover. It is now proposed to divide the area hitherto included in the West Surrey and West Sussex district into two districts to be called the West Surrey and West Sussex respectively. Dr. Morton will continue as Secretary to the former; and it is hoped that a Secretary will soon be found for the latter. When this has been accomplished, each of the three counties included in the Branch will have its two districts, each with its own local secretary; and these six districts collectively will provide, during each year, about twenty-four meetings for our members. Judged by the good social feeling that has hitherto resulted from them, and the opportunity they give for the interchange of professional experience, these district-meetings must be looked upon as part of the best fruits of our Association.

"This report must not conclude without drawing your especial attention to one other topic, one of importance, not only to our Branch, but also to the whole Association, and, indeed, to the entire profession; viz., the Medical Acts' Amendment Bill now before Parliament. Your Executive Council held a special meeting at Redhill, at the end of April, to consider the contents of the Bill; and they resolved to memorialise the Lord-President of the Council on certain of its clauses which seemed to them highly objectionable. Our President undertook to forward this memorial; and he did so, receiving a courteous reply from the Lord-President, assuring him that the points adverted to should receive his careful consideration. The Parent Association also summoned a special meeting at Willis's Rooms, where similar resolutions were come to, and delegated to a deputation to present to the Lord-President the next day. The Committee of Council of the Association met again in London two days since, and deputed the Direct Representation Subcommittee still to urge that the wishes and claims of the profession on this important point should be attended to. There are other clauses in the Bill which your Council are of opinion should be revised, viz.: that which renders nugatory any decisions of the

Examining Boards to reject a candidate who may entertain opinions in the practice of his profession different from those generally entertained; and, again, that which will permit the admission on to the Medical Register of men who possess foreign diplomata, without passing a British examination. These are defects in the Bill, which we should all determinedly persist in trying to get remedied."

Mr. T. HECKSTALL SMITH (St. Mary Cray) in moving the adoption of the report, said that it appeared to him to be a clear, comprehensive, and able document, one taking in all the salient points which presented themselves on the progress of the Branch. All who had belonged to it from the first must rejoice at the increased numbers, and he hoped that those numbers would be made up by young men who would feel that to this Association (and, therefore, to this Branch of the Association in part) the honour, dignity, happiness, and progress of the profession had been and would be mainly confided. The British Medical Association was the only body in the United Kingdom which could be thoroughly depended upon to secure for the profession all that is required to make its members honourable, independent, accomplished, and worthy to be confided in by the public. There were, no doubt, great and learned bodies for tuition and examination, and amongst them some had done their duty; but when there were nineteen examining bodies competing with each other for the admission of men to the responsible position of taking charge of the health of Her Majesty's subjects, and when the pecuniary success of those bodies depended upon the numbers passed, it was not difficult to see that the temptation was too great. He then went on to refer to the importance of the step taken by the Council of the College of Surgeons in reference to the present Bill. The head and front offenders had been the College of Surgeons of England. For many years they had admitted men to practise without a test as to their knowledge of medicine. Thousands have been sent forth to practise their profession, who had no right whatever in it. Happily, the College of Surgeons had at last seen the error of their ways, and had taken the initiative in the endeavour to remedy matters by moving for the restoration of the eighteenth clause. Dr. Sibson had said that the London University had desired to grant degrees to men who might wish for the honorary M.D. without desiring to practise. That was all he (the speaker) could gather. But, he asked, where would such a principle stop? How were they to see that such men passed the one portal before they went into practice? There was nothing in the Act to require them to do it. They ought to let the public see that this is a matter which interests them primarily. The medical men were in this seeking to protect the public against unqualified persons. There was one other point without which medical reform was absolutely useless—an amendment of the constitution of the Medical Council. If the Bill were ever so good, it would still be necessary to have it properly administered. A clause had been introduced, not only rendering the profession liable to be overrun by irregular practitioners, but almost inviting it. It was proposed that men should not be rejected because of peculiarities of opinion. What examiners, he asked, would reject a man because he differed on legitimate grounds as to a particular line of practice? The clause, then, could only apply to homœopaths and such like persons. The defects which he had named he considered to be worthy of the most strenuous opposition on the part of the Association. He concluded by moving the adoption of the report.

Mr. ROWLAND SMITH (Cobham) seconded.

Dr. ARMSTRONG said that he was rather inclined to favour the idea of granting an honorary degree similar to the honorary D.C.L. of the universities, which was frequently conferred upon distinguished persons.

Mr. HECKSTALL SMITH said the point was whether they had anything to prevent those upon whom the honorary M.D. had been conferred considering themselves practitioners. If there were such a restriction he had no objection.

Mr. PINCHING supported Mr. Heckstall Smith's view. He was of opinion that pretenders got into practice by means of these honorary degrees. At the same time he was a little inclined to think with Dr. Armstrong that it was a pity that the medical was the only profession that could not grant an honorary degree.

The proposition before the meeting was then carried.

Financial Report.—Mr. HODGSON read the financial report, of which the following is an abstract, viz.:—

	£	s.	d.
Balance in hand, June 12th, 1869 ...	25	12	6
Received since ...	40	0	7
	65	13	1
Expenditure ...	33	5	9

Balance in hand, June 27th, 1870 ... £32 7 4

Mr. S. GOULD (Northfleet) proposed, Dr. A. HALL seconded, and

it was resolved,—“That the financial statement now presented, and already audited, be adopted.”

Next Annual Meeting: Officers.—Mr. HODGSON moved—“That the annual meeting of the branch for 1871 be held at Worthing, and that N. Tyacke, M.D. (of Chichester), be requested to act as President-elect; and H. Collet, M.D. (of Worthing), and John S. Bostock, Esq. (of Horsham), as Vice-Presidents-elect.”

Dr. PARSONS (Dover) seconded the proposition, which was carried.

The following gentlemen were declared to be elected members of the Association Council and of the Branch Council:—

Representatives in the General Council.—John Armstrong, M.D.; R. L. Bowles, M.D.; J. Cordy Burrows, Esq.; John M. Burton, Esq.; Alfred Carpenter, M.D.; Wm. Carr, M.D.; Frederick Fry, Esq.; Alfred Hall, M.D.; Constantine Holman, M.D.; Stephen Monckton, M.D.; Albert Napper, Esq.; T. Heckstall Smith, Esq.; James R. Stedman, M.D.; Nicholas Tyacke, M.D.; and Edward Westall, M.D.

Branch Council.—James H. Aveling, M.D.; Chas. W. Chaldecott, Esq.; J. Cooper Forster, Esq.; Thos. Fuller, M.D.; Richard Gravely, Esq.; William John Harris, Esq.; George Lowdell, Esq.; T. H. Martin, Esq.; James Reid, Esq.; John Sisson Steele, Esq.; George Tatham, Esq.; Charles Trustram, Esq.; John Underwood, M.D.; William Wallis, Esq.; and John R. Wardell, M.D.

Dr. A. HENRY (London) proposed, and Dr. BARRINGTON (Bexley Heath) seconded, the following resolution: “That the gentlemen who constituted the Executive Council (collectively) during the past twelve months be thanked for their valuable services on behalf of the interests of the Branch.” The motion was carried unanimously.

Dr. A. HALL proposed the re-election of the Secretary. Mr. Hodgson, he said, had much to contend with in succeeding Mr. Peter Martin and Dr. Holman; and the office was one requiring a large amount of self-denial and sacrifice, and much serious thought and hard work. Mr. Hodgson had, however, succeeded in performing the duties in the most admirable and satisfactory manner; and his efforts had tended much towards the advancement of the Association.

The proposition was seconded by Mr. PINCHING, and unanimously accepted.

The HONORARY SECRETARY, in thanking the members for their expression of continued confidence, remarked that some evidence of the extent of the Secretary's work would be given in one item in the accounts—postage-stamps—which amounted to nearly £7.

New Members.—The following new members were then proposed and elected: Henry Gould, Esq., Northfleet; James F. Lovegrove, Esq., Wrotham, Sevenoaks; and Thomas C. Spyers, M.D., Faversham.

The Branch Subscription.—Dr. HALL proposed that the following alterations be made in the laws of the Branch: “That in Law 6, instead of the words ‘two shillings and sixpence,’ there be substituted the words ‘four shillings;’ and that in Law 8, instead of the last clause, ‘The Council shall be empowered to assist in defraying, etc.,’ there be substituted ‘The travelling, printing, and stationery expenses which are incurred by the Honorary Secretaries on account of these district meetings, shall be defrayed from the funds of the Branch.’” He spoke of the importance and utility of these district meetings. Members living in one neighbourhood, thus meeting together, gained the benefit of each other's experiences; and such gatherings tended to produce a good fellow-feeling and to remove existing prejudices. District secretaries had experienced difficulty in collecting the small sums given as district subscriptions; and, to remedy this, it was now proposed to have one Branch subscription of four shillings, to cover all expenses, instead of, as heretofore, a smaller Branch subscription and an additional district subscription.

Mr. HECKSTALL SMITH seconded the proposition. He thought that the future success of the Association would be greatly promoted by the increase of district meetings.

The HONORARY SECRETARY remarked that this subscription of four shillings would enable the Branch to do what it had not done before—viz., allow the travelling expenses of district honorary secretaries. Although the circular giving notice of this motion had been sent to every member of the Branch, he had heard of an objection to the proposal from only one member.

The motion was carried unanimously.

The late Dr. Adam Martin.—Mr. PINCHING proposed that a letter of condolence be forwarded to the family of the late Dr. Adam Martin of Rochester. He had known their departed friend for thirty-five years, and had always found him to be a most excellent, hardworking man, and an active member of the Association.

Dr. ARMSTRONG, in seconding the proposition, said that in Dr. Martin's house the first district meeting was held; and he had always been

an active and willing member of the Branch. As a member of the Association, he could not but regret his decease with feelings of deep tenderness and sympathy.

The PRESIDENT said that Dr. Martin had held a high place in the estimation of all, and he was sure that it was quite unnecessary to put the motion to the meeting.

Dinner.—The members of the Association, to the number of about forty, with the addition of several visitors, dined together at 5 P.M., in the hotel; the President in the chair. After the removal of the cloth, the usual toasts were given; and the President, in proposing "Success to the British Medical Association", referred to the formation of the Association by Sir Charles Hastings, and to its subsequent progress. Mr. Heckstall Smith responded to this toast. Several other toasts were given in the course of a very enjoyable evening.

BATH AND BRISTOL BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Mineral Water Hospital, Bath, on Thursday, July 14th, at 4.30 P.M. C. H. COLLINS, Esq., took the Chair; and there were also present thirty-five members.

Mr. Collins, after a few remarks, resigned the Chair to CHARLES BLEECK, Esq., who read an address on the Progress of Medicine and Surgery.

Mr. LEONARD proposed a vote of thanks to Mr. Bleeck for his very interesting paper, which was seconded by Mr. BARTRUM and carried by acclamation.

New Member.—Mr. S. P. Budd was unanimously elected a member of the Branch and of the Association.

Report of Council.—Mr. FOWLER, the Bath Secretary, read the following report.

"Your Council has much satisfaction in being able to report that the Branch continues to flourish. The number of members has increased from 167 to 176 during the past year.

"We have to deplore two losses by death; namely, Dr. Colborne of Chippenham, and Dr. C. J. Fox. The former, shortly before his decease, was chosen President-elect of this Branch, when he succumbed to disease contracted in the discharge of his professional duties, cut off in the midst of a career of great usefulness, universally beloved and respected. His place has fortunately been supplied by Mr. Bleeck of Warminster, who, without doubt, will ably sustain his position as your President.

"Nineteen papers have been read during the season, and have led to several most interesting discussions.

The attendance of members at the meetings has been scarcely as large as in previous sessions, owing to the difficulty of arranging the meetings to suit the trains.

"The balance-sheet shows a very satisfactory condition. Not only is this Branch cleared of debt, but has a balance in hand of £11:10:9; but of this sum your Council recommends a donation of three guineas to the Medical Benevolent Fund—an offshoot of the British Medical Association—by which immediate and unostentatious relief is afforded to a large number of distressed fellow-practitioners without publicity or injury to the feelings of the recipients.

"A most important meeting on the subject of the new Medical Act was held in London for the purpose of ascertaining the wishes of the body of the Association on the subject of Direct Representation of the General Practitioners in the General Medical Council, and Branch meetings were held throughout the country to discuss the matter. A meeting of this Branch was held in Bristol on May 16th, under the Presidency of Mr. Collins, when the following resolutions were passed.

"That in the opinion of this meeting, any medical Bill will be unsatisfactory that does not provide for Direct Representation of all Registered Practitioners in the Medical Council.

"That this meeting highly approves of the provision in the proposed Bill for the construction of a single Examining Board for each kingdom (these being uniform), which shall be the only portal of entrance into the body of registered medical practitioners."

"Your secretaries attended the meeting in London, when the first of these resolutions was adopted; and a deputation was appointed to wait on the Lord President of the Council, urging him to introduce a clause to effect this object into the new Act, but his Lordship was unwilling to pledge himself to any course. These resolutions, in the form of a petition, were forwarded to his Grace the Duke of Beaufort, who kindly undertook to present them in the House of Lords. More recently, the Bill has passed on to the consideration of the House of Commons; and the only means of effecting this most necessary alteration in the constitution of the General Medical Council will be by the exercise of individual influence on the members of that House.

"Another meeting was rendered special to consider the following resolution, proposed by Dr. Budd and seconded by Dr. Brittan—'That power be given to the Local Councils to fill in any vacancy that may occur in their Councils, *ad interim*, to the next annual meeting.' In accordance with this resolution, Mr. Morgan having resigned his place in the Bristol Council, Mr. Coe was elected to fill the vacancy.

"Your Council sincerely regrets losing the valuable services of Mr. Steele as Bristol Secretary; but his numerous engagements, both professional and in the school of medicine, lay greater claims on his time. Your Council hopes the Branch will long continue to benefit by his active influence and knowledge of business on its executive.

"The scrutineers report the following gentlemen have been elected members of the Local Councils: For Bath—Messrs. Stockwell, Bartrum, Stone, Mason, Harper, and Brabazon. For Bristol—Dr. Davey, Dr. Brittan, Mr. Steele, Mr. Leonard, and Dr. Martyn."

Dr. FALCONER proposed, and Mr. LANSDOWN seconded, the following resolution—"That the Report now read be received and adopted."

Resolution.—Mr. BARTRUM withdrew the resolution of which he had given notice; and Mr. TIBBITS proposed a resolution as announced, which, after some discussion, was adopted in the following form, after being seconded by Mr. LEONARD—"That no one who has been back-balled by this Branch of the Association shall be admitted to the meetings, even though a member of the parent Association."

Dr. DAVEY proposed, and Mr. MICHELL CLARKE seconded—"That Mr. Crosby Leonard be President-elect." This was carried by acclamation.

Mr. SWAYNE proposed, and Dr. GOURLAY seconded—"That the best thanks of the Branch are due, and be hereby tendered, to Mr. C. H. Collins for his able conduct in the Chair, and to the Council for their admirable arrangements during the past year."

Dr. MARSHALL proposed, and Mr. MASON seconded—"That the best thanks of this meeting are due, and be presented, to Messrs. Fowler and Steele for their services as Honorary Secretaries during the past year, and that Mr. Fowler be invited to continue in office; and at the same time this meeting expresses its regret at losing the services of Mr. Steele."

Mr. STEELE briefly replied, expressing his regret at being obliged to leave, but his satisfaction at the progress the Branch had made during the time he had been in office.

Mr. PRICHARD proposed, and Mr. COLLINS seconded—"That Mr. E. C. Board be elected Secretary for the Bristol District."

Each of these resolutions was carried *nem. con.*

Representatives in the General Council.—The following gentlemen were appointed Representatives of the Branch on the General Council of the Association: C. S. Barter, M.D.; J. S. Bartrum, Esq.; C. Bleeck, Esq.; W. J. Church, Esq.; C. H. Collins, Esq.; J. G. Davey, M.D.; Henry Marshall, M.D.; R. W. Tibbits, M.B.

The proceedings closed with a vote of thanks to the Governors of the Mineral Water Hospital for the use of the Board-room; and the members adjourned to the York House, when thirty-four sat down to a capital dinner.

NORTH WALES BRANCH: ANNUAL MEETING.

THE Twenty-first Annual Meeting of this Branch was held on Tuesday, 5th July, at 12 o'clock, at the Crown Hotel, Denbigh, under the Presidency of T. FRANCIS EDWARDS, Esq. There were fifteen other Members present. Several letters were received from Members regretting their inability to attend.

Dr. MAUGHAM, retiring President, having addressed a few words expressive of thanks for the courtesy and kindness extended to him during his year of office, vacated the Chair, and introduced T. Francis Edwards, Esq., Denbigh, President-Elect, who delivered a long and eloquent Address upon the History of Medicine and Surgery, for which a vote of thanks was unanimously passed and suitably acknowledged.

Report of Council.—Dr. WILLIAMS (Wrexham), for the Secretary, Mr. KENT JONES, read the following.

"It is with great pleasure that the Council of the North Wales Branch welcome the members to Denbigh on the occasion of its twenty-first Annual Meeting. Years have rolled on, and time has wrought many changes; but it has also brought in its onward march many additions to our ranks, and effected important improvements in the scientific and social progress of our noble profession. To pause and take a retrospective glance of what has been done—of friends departed, and of new acquaintances enrolled within the period of the existence of this Branch, would be a task to arouse both painful and pleasurable emotions. On occasions similar to the present, it has been usually the practice rather to look forward with hope of a bright future for medical

science and its devotees. Instances of such advancement in our professional fabric are close at hand, and may be briefly stated. Look at the improved condition of the medical services of the army and navy to which candidates can enter by merit alone, unlike what it used to be some twenty years ago. There are also, now, channels of employment under the Privy Council and Poor-law Board as medical inspectors, and a growing desire is springing up that medical officers of health specially educated ought to be more generally appointed throughout the country.

"Your Council trust that the efforts now being made by the Government and our Association, as well as other medical bodies, to effect an important reform in the medical profession will be attended with success. A petition from this Branch to the House of Lords, praying for the insertion in the Medical Reform Bill of the direct representation of the profession upon the General Medical Council, has been presented, signed on behalf of the members by the President and Secretary. It is very much desired that the Lord-President of the Privy Council will reintroduce the eighteenth clause in his Bill, and otherwise give effect to the one-portal principle of entrance to the profession.

"The intermediate Meeting of this Branch, held at Carnarvon on 2nd and 3rd March last, was an agreeable and successful one. The hospitalities of the President, Dr. Maugham, conduced greatly to this happy issue.

"Your Council desire to call the attention of the Members to the state of the finances of this Branch which placed it indebted to the late treasurer, Mr. Kent Jones, on 31st December, 1869, in the sum of £4:13:10. By regularity in the payment of the annual half-crown subscriptions, it is confidently expected that no additional demand will be necessary; but to meet the present deficiency, a small voluntary subscription is recommended."

The following resolution was moved by Dr. TURNOUR, of Denbigh, seconded by Dr. O. ROBERTS (St. Asaph), and unanimously carried—That the 'Report of Council' now read be agreed to and entered in the Minutes."

Branch Funds.—Dr. WILLIAMS (Wrexham) moved, and Dr. TURNOUR seconded, the next resolution, which, after a discussion, was agreed to—"That as the sum of £4:13:10 is due to the late Treasurer, Mr. Kent Jones, the members be requested to give a voluntary subscription towards its liquidation."

President-Elect for 1871, and place of Annual Meeting.—It was moved by Dr. WILLIAMS (Mold), seconded by Dr. TURNER JONES, and carried with acclamation—"That Josiah R. Jenkins, M.D. (Ruthin), be the President-Elect for 1871; and that Ruthin be the place of Annual Meeting for that year."

Council of the Branch.—It was moved by Dr. WILLIAMS (Wrexham), and seconded by Dr. HUGHES (Denbigh), and agreed to—"That the following Members constitute the Council of this Branch for next year, viz.: G. Harvey Williams, M.D., Rhyl; A. E. Turnour, M.D., Denbigh; J. R. Hughes, M.D., Denbigh; W. Williams, M.D., Mold; R. Walker, Esq., Corwen; and T. Prytherch, Esq., Barmouth."

Representatives in the General Council of the Association.—Upon the motion of Dr. HARVEY WILLIAMS (Rhyl), seconded by Mr. ARTHUR JONES (Carnarvon), it was unanimously agreed—"That A. E. Turnour, M.D. (Denbigh), and O. Roberts, M.D. (St. Asaph), represent this Branch in the General Council of the Association."

Representative to the Parliamentary Committee of the Metropolitan Counties Branch.—Dr. WILLIAMS (Wrexham) moved, and Dr. AUGHAM seconded—"That T. Taylor Griffith, Esq., Wrexham, be elected." This was carried with acclamation.

Intermediate Meeting.—After some discussion, the majority of the members present decided to hold the next Intermediate Meeting at the Elvoir Hotel, Rhyl, on the second Tuesday in February 1871.

Treasurer and Secretary.—Dr. G. Turner Jones, Denbigh, was re-elected Honorary Treasurer; and Mr. Kent Jones, Beaumaris, Honorary Secretary for next year.

New Members.—The following two gentlemen were duly proposed, seconded, and elected Members of the British Medical Association and of this Branch: E. Shelton Jones, Esq., Infirmary, Denbigh; and Samuel Griffith, M.D., Portmadoc, Carnarvonshire.

Papers and Cases.—The following were brought before the meeting. 1. Avulsion of the Arm. The patient was brought into the room and examined. (This case was reported before, but, at the request of several members, he was induced to appear again.) By T. E. Jones, Esq., Llanasa.—2. Case of Compound Fracture of the Humerus, Radius, and Ulna, where the limb was torn off from the body about an inch and a half from the shoulder-joint: Recovery. By J. R. Jenkins, M.D., Ruthin.—3. On the Use of Disinfectants in Severe Surgical Cases. By O. Roberts, M.D., St. Asaph. He found Condyl's fluid

to answer in many cases in which carbolic acid was preferred by others.—4. Case of Midwifery; anomalous Presentation of Head and one Leg descending with it. By W. Williams, M.D., Mold.—5. Case of Head-and-Arm Presentation. By A. E. Turnour, M.D., Denbigh.—Mr. Arthur Jones (Carnarvon) also related a similar case.—6. Case of Monstrosity without Head and Arms, having reached the full period of gestation, presenting the breech. The placenta was firmly attached to the upper part, where the head ought to have been; afterwards, the woman was delivered of twins, of about six months gestation, in a decomposed state. The monster appeared quite free from decomposition. By W. Maugham, M.D., Carnarvon.—7. Case of Twins; one of the full age, the other about five months; they did not show any sign of decomposition. By E. Williams, M.D., Wrexham.—8. On Epilepsy and Bromide of Potassium. By J. R. Hughes, M.D., Denbigh.—9. On Hydrate of Chloral and Bromide of Potassium combined in equal doses, in Asylum Practice, with beneficial results. By G. Turner Jones, Esq., Denbigh.—10. Case of Paralysis. By O. Roberts, M.D., St. Asaph.—11. Cases of Catalepsy. By E. Williams, M.D., Wrexham. In some of these cases, bromide of potassium was administered in conjunction with the iodide of potassium, with very good results; and in one interesting case of an infant seven months old, small doses of the bromide completely removed the disease.—12. On the use of Belladonna, combined with Ergot, in Epilepsy. By A. E. Turnour, M.D., Denbigh.

Dinner.—Nearly all the members who were present, with some guests, dined together about 4.30 p.m., having spent an agreeable and delightful day.

YORKSHIRE BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Cutlers' Hall, Sheffield, on Wednesday, July 13th; the President, W. F. FAVELL, Esq., in the chair.

THE PRESIDENT, after making some remarks on recent points of practice in connection with surgery, called on Dr. Procter to read the report.

The Report of Council, after congratulating the members on the success which had attended the late annual meeting in Leeds, went on to say that the Council had determined to hold two meetings in the place of one, which had been previously held; and that this additional special meeting was to be devoted entirely to scientific purposes in relation to medicine and surgery. In accordance with this resolution, a meeting was held at Bradford in March of this year, with most successful results, both as to attendance as well as the subjects brought forward. Papers were read by Mr. Miall, Mr. Lawson Tait, Dr. Hime, Mr. Procter, Dr. Clifford Allbutt, Mr. Meade, and Dr. Leeson, and led to interesting discussions and relations of practical experience. The report then went on to give a *resumé* of what had been done by the Association in regard to the Medical Bill of Earl De Grey, and the circumstances which led to the meeting of the several Branches being summoned. A meeting of this Branch was held in Leeds on May 13th, and resolutions were passed which have appeared in this JOURNAL; and a petition has been presented to Earl De Grey objecting to the power given to the Privy Council to control the Acts of the Medical Council, and praying for direct representation and for uniformity of examination and fees for examination. The Branch is in a flourishing condition. Twenty-six new members have been admitted during the year. Attention was drawn to the fact that, although the number of members in Yorkshire was absolutely large, in relation to the number of practitioners in the county it was small, and members were requested to use individual exertions to increase the number, in order that the great objects of the Association might be advanced and its advantages extended.

Dr. HEATON moved, and Dr. EASTWOOD seconded, the adoption of the report, which was passed unanimously.

President.—It was proposed by Mr. BOWMAN, and seconded by Mr. WALKER, "That R. H. Meade, Esq., be President for 1871-72; and that the next annual meeting be held at Bradford."

Council.—The following gentlemen were elected as Representatives in the General Council:—J. D. Heaton, M.D. (Leeds); S. Hey, Esq. (Leeds); W. D. Husband, Esq. (York); J. C. Hall, M.D. (Sheffield); W. Matterson, M.D. (York); C. Chadwick, M.D. (Leeds); T. P. Teale, Esq. (Leeds); C. G. Wheelhouse, Esq. (Leeds); W. Procter, M.D. (York), Secretary, *ex-officio*.

The following gentlemen were elected Council of the Branch:—W. D. Husband, Esq.; B. Dodsworth, Esq.; H. Keyworth, Esq.; W. Matterson, M.D.; G. Shann, M.D.; C. Williams, M.D.; C. Chadwick, M.D.; J. D. Heaton, M.D.; W. Hey, Esq.; S. Hey, Esq.; C. G. Wheelhouse, Esq.; T. P. Teale, Esq.; J. C. Hall, M.D.; W.

Favell, Esq.; J. Haxworth, Esq.; J. Benson, Esq.; and J. C. Ness, Esq.

Secretary.—It was proposed by Mr. LAWSON TAIT, seconded by Mr. GREENWOOD, and carried, "That Dr. Procter be re-elected Secretary."

Retiring President.—It was proposed by Dr. GREENHOW, seconded by Dr. SHANN, and carried, "That the best thanks of the Branch be given to the retiring President, Dr. Matterson."

Communications.—1. Mr. Greenwood related a case of Malformation of the Anus. 2. Dr. Eastwood read a paper on Delirium Tremens, Dipsomania, etc. 3. Mr. Lawson Tait read a paper on Lithotripsy. 4. Dr. Hime exhibited a new form of Injecting Syringe and Chloroform Bottle. 5. Dr. Frank Smith introduced a case of Hodgkin's Disease of the Spleen.

CORRESPONDENCE.

SHALL WE FIND THAT, BY THE CONTROL OF PROSTITUTION, WE SHALL HAVE IRRETRIEVABLY LOST IN MORALITY AND GAINED NOT AT ALL IN HEALTH?

SIR,—Mr. Acton, in your issue of July 16th, seems to take exception to the above expression made use of recently in an editorial part of the JOURNAL. I am inclined to agree with the expression, and think that Mr. Acton has not proved that the writer of it was wrong. Everything that falls from Mr. Acton's lips on this question deserves earnest attention, since he has done more than any single individual in this country to make the subject of prostitution and the contagious diseases parasitic upon it a subject of positive science, and to rescue it out of the hands of the dogmatic classes. Mr. Acton first of all says that, if prostitution be controlled by governments, the soldiery will be less affected than they now are with venereal disease. In this assertion, he is generally borne out by facts, although, as in Holland, there seem to be some exceptions to the rule that a celibate army *may* be made less infected by putting all the women in the country under police supervision in the matter of their intercourse with men, by means of secret spies. I confess that this lowering of the amount of disease among our soldiers is not so inspiring to me, as it would be, were I not convinced that a celibate army, such as we see so many examples of in European states, is not at all necessary. I remind myself that in the United States the greatest battles the world has seen were waged by troops most of which have been since disbanded, and have been allowed to have domestic partners. Hence, I cannot admit Mr. Acton's or Mr. B. Hill's arguments as to the necessity for infringing the Habeas Corpus Act with respect to *all* of our women, for the sake of the army and navy.

Mr. Acton says that the Contagious Diseases Acts have a tendency, besides that of lessening diseases, of tending to make young people more moral. Now, of course, in all matters relating to society, it is very difficult to make out a case of causation; but, beforehand, one would be apt to suppose that the State, by means of tolerated houses and weekly inspection of prostitutes, is likely enough to give to the poorer classes of men, always thoughtless and prone to follow their instincts, an idea that the main point in their relations with women is to see that they don't spread venereal contagion. I believe that the French Government has given this lesson for many years to its working classes in Paris; and I feel pretty sure that the *Bureau des Mœurs* in Paris is in great measure answerable for the state of things depicted by M. Lefort in a private letter recently received from him by myself, in which he uses these words. "The number of illegitimate children is, as you remark, in Paris, in the proportion of one illegitimate child to less than three legitimate; but I do not see that easier divorce would change this at all. In fact, if the Parisian working man does not marry, it is not because he fears to enter into an engagement which is with difficulty broken legally. He fears to give up his liberty, and to fall into poverty, in giving himself up to maintain a wife and family. He finds a work-girl who consents to be his mistress; he frequents her, but he rarely lives with her. If she become pregnant, he quits her without remorse, and seeks another. The woman, on her side, does not hold out for marriage, because the looseness of morality brings it about that among the working classes there is scarcely any difference between the legitimate wife and the mistress." (Paris, 27th June, 1870.)

I cannot help thinking that the two chief causes for this heartlessness on the part of the working men in Paris are: (1) the indissolubility of the marriage tie in Catholic states; and (2) the existence of the French system, an almost exact imitation of which Mr. Acton wishes us to introduce into London. And this result, too, has been brought about at

a cost to the Parisians into which I need not enter. I wish Mr. Acton, however, would inform *me* what he means by saying, in his letter, "we have ample evidence to show that syphilis is more rife here in England than on the Continent." I had, in 1867, a kind of belief that this was more or less the case; but, in a careful survey of the Parisian hospital that year, and every subsequent year, I became quite convinced that there was no gain in that respect. M. Lecour mourns the amount of venereal disease in Paris. With one thousand beds for contagious disease, and a most vigilant police and clever doctors to examine the women, he tells that one in twenty of the Parisian population are affected by these diseases annually. The figure given is 47,000 cases which, he says, is evidently much below the real amount. That the poor French soldier escapes a good deal from contagion is owing to the fact, that his pay is very small, that he frequents the miserable brothels prepared for him by the State alone (having no money to spend in his enforced state of enslaved penury); but the enormous number of clandestine women, about thirty thousand, who are chiefly resorted to by all those who earn any good wages, are far more infected than they would be were it not for the terrorism of the *Bureau des Mœurs*. How far the unfortunate Parisian prostitute is right in fearing with her whole heart and soul enrolment among the ranks of those "white slaves", may be learnt from the words of M. Lefort, in a recent letter in the *Lancet* to Mr. Acton, wherein he says: "The inscription, as it exists in Paris, has unfortunately opposed to it several grave objections. *I necessarily condemn the registered women to life-long prostitution.*" M. Lefort then tells us that, of some four thousand registered women in Paris, not more than twenty a-year are married, and very few can ever get away from this career. "All hope abandon ye that enter here", might be well written over the door of the Hôpital St. Lazare or the Bureau Central.

There must decidedly be something important in proving his point, which Mr. Acton has left out when writing his work or the letter referred to, or I must be wanting in the capacity of judging of evidence; for I confess that, instead of believing the Contagious Diseases Acts, or their forerunners, the French Acts, likely to do good, I hold that all that I have heard makes me judge that they are calculated to do no good towards lessening the spread of syphilis. Even if they could do a *little*, it would be at a great cost that it could be achieved, since, wherever such acts are enforced, prostitution seems to insinuate itself everywhere and take the place of domesticity. In Naples, in Rome, in Berlin; always the same tale. And I suspect that Mr. Acton has been asleep whilst the working classes and many able women of this country have lately expressed their dislike to the Acts of 1866-69; or he would not think that the discussions which have recently taken place have advanced the question of extending the Acts. I can only say that all assemblies which I have attended have expressed their condemnation of them. Mr. H. Lee, and many persons who know syphilis and syphilitic patients, agree with you in believing that, by such Acts, we shall gain nothing in health, but lose much in morality, or the utilitarian "happiness." I am, etc.,

CHARLES R. DRYSDALE, M.D., M.R.C.P.L., F.R.C.S.E.
99, Southampton Row, W.C., London, July 15th, 1870.

ACTION OF THE CHOLERA POISON.

SIR,—I see by a letter from Dr. G. Johnson, published in the BRITISH MEDICAL JOURNAL of the 23rd April, that he thinks I have misapprehended his views in stating that "the primary action of the cholera-poison was to cause spasm of the pulmonary artery", whereas the only symptoms which he explained by the contraction of the minute branches of the pulmonary artery are those of impeded circulation, which are associated with the stage of collapse; and he refers to the last number of the *British and Foreign Medical and Chirurgical Review*, as containing his views on cholera. As this review was published three months after my lecture was delivered, my ignorance of its contents may be excused. I merely expressed the views attributed to him by the profession in India (one of his own pupils was present when the lecture was given), and as I interpreted them from Dr. Johnson's published works, extending up to 1868, of which the following are extracts. "It (the poison) so affects the circulation through the lungs that the flood-gates of the pulmonary artery are closed, and the excretory process then ceases for want of arterial blood, and death results, not from exhaustion, but from arrest of circulation."—*Treatment of Cholera*, p. 14. "An opiate might hinder the exit of this poison from the blood, and thereby induce that perilous spasm of the small arteries of the lungs, which is the essential cause of collapse"—*Epidemic Cholera*, p. 23—this retention "causing a rapid manufacture of cholera cathartine." These expressions led me to suppose he was discussing the disease cholera, with the history of the development of the poison in the blood,

and its action on the system. He now says, "when the poison of cholera is abundant, or very virulent, or when the process of elimination has been early and abruptly checked by opiates, the blood is so *morbidly changed* that the minute arteries of the lungs contract, and hinder its passage."—*Medico-Chirurgical Review*, p. 486. The expression "*morbidly changed*", here employed, is not so definite as that of "*accumulated cholera cathartine*", used in 1868, and not more satisfactory in explaining the general progress of the symptoms of the disease, or even of the stage of collapse. The suddenness with which the symptoms disappear and health is restored in some cases of recovery, more remarkable the effect induced by a poison which mixes with the blood, like alcohol, and may be thrown off, or cut short without leaving any trace, than that produced by poisons like small-pox or typhus, which mix with the blood and induce changes in its constituents, and must run their course.

Dr. Johnson fails to produce any proof of the existence, *during life*, of spasm in the pulmonary arteries, causing a mechanical obstruction to the passage of the blood. In other diseases, mechanical resistance to the passage of the blood excites increased action of the heart; and we have distinct proof that the reverse of this exists in cholera, in the diminished strength of the pulse from the first trace of *malaise*, and its gradually becoming less and less perceptible until, at last, it disappears.

Dr. Johnson asks if I know of any poison which acts only on the right side of the heart. I confess ignorance of such, and never supposed the cholera-poison to act so. My conviction is that it acts on both sides alike as a depressant. There is no distress of breathing, cough, or tightness in the chest, as shown in other spasmodic affections of the chest, nor obstruction to the passage of the blood. There is slow oppressed breathing, often interrupted with deep sighing, as if nature in its agony forgot to breathe, but no sign of increased action or spasm. *After death*, spasm relaxes here as in other instances, and leaves no trace. Whether the pathological signs found on *post mortem* examination were caused by spasms during life, is a matter of inference. Those found in the lungs have been very carefully watched by Dr. Fawcett during the last three years, during which he has had constant opportunities of observing the disease. He has found that the appearances are very materially influenced by the interval after death at which the *post mortem* examination is made; as a general rule, however, there was no essential difference between the appearance of the lungs of those who died from cholera, and of those who died from other diseases not complicated with organic disease of the lungs. As the blood continues after death more liquid than in most other diseases, the weight of the lungs after removal from the chest must depend on the quantity of blood which has oozed out previously to their being placed in the scales, unless the vessels were tied; hence, if all the liquid blood were allowed to discharge itself, a cholera lung would naturally be lighter than that of diseases where the blood coagulates more freely; this lightness would show the liquid state of the blood, but would be no proof of the existence of spasm during life. If the existence of spasm of the pulmonary artery and arrest of the passage of the blood were the cause of the suppression of the bile and urine, as supposed by Dr. Johnson, the restoration of the circulation should restore these secretions. This can be tested by direct experiment. The transfusion of a saline fluid, even in the most advanced stage, restores the circulation and colour, but it neither restores those secretions nor the voice, nor does it save life. There are several well authenticated cases of cholera excretions being found in the stomach and intestines of the foetus in mothers who have died from cholera. In the foetus, the blood does not pass through the lungs. It is difficult to suppose that the symptoms of cholera can be influenced by the constriction of the pulmonary artery. In illustration of spasm of the pulmonary artery being the cause of collapse, in contradistinction to the prostration from exhaustion, Dr. Johnson states, in 1868: "To walk, or stand, or even to sit up, in the latter instance, is simply impossible; whereas, in the collapse of cholera, syncope is well nigh unknown." The absence of syncope is quoted as one of the diagnostic symptoms. This forms an important link in Dr. Johnson's chain of argument, if it be not the main support and prop of the evidence in favour of his spasmodic theory. This is a matter of fact; and the accumulated evidence of the medical profession in India may be relied on on this point. My own observation supported by theirs, as shown in my Report in 1869, p. 3 and 43, proves the tendency to syncope to be so great as often to cause death by the patient merely sitting up in bed, a practice which is considered so dangerous that it has to be strictly prohibited. As this proclivity to fainting on the assumption of the erect posture is considered by such eminent physiologists as Sir Thomas Watson and Dr. G. Johnson to indicate exhaustion and enfeebled action of the heart, I trust the learned Professor of King's College will allow that no misun-

derstanding exists in my mind when I suppose that this supports my views regarding the diminished power of the heart in cholera.

The recognition of *malaise* as being caused by the presence of the cholera-poison in the system, is the most important step that has been gained by recent investigations regarding the history of the disease. The want of this knowledge has filled many graves in India and in Europe by preventing measures from being adopted to arrest its progress in the individual and to guard against its being disseminated over the world. On this point I am in full accord with Dr. Johnson, but I differ from him in the view "that, so long as the morbid poison remains in the system, there is going on a rapid manufacture of cholera cathartine which must and will purge itself away", p. 9. There can be no misunderstanding of these words, or of their not being applicable to cholera, in so far as in more than fifty per cent. of the cases that have come under my observation of *malaise*, which is recognised as a stage preceding diarrhoea, there has been no increased action of the bowels. To promote this action by purgatives, as recommended by Dr. Johnson, is most dangerous. I have seen cases, and heard of many more, where the use of an ordinary purgative, even castor oil, or Gregory's powder, during epidemics, has been followed by congee stools and death. The arrest of the diarrhoea immediately the irritating contents of the bowels (such as undigested food) are removed, is the treatment by which most lives will be saved. The bowels form one channel through which nature eliminates the poison, but it is the most dangerous. In collapse it is different, and I fully concur with Dr. Johnson in his condemnation of opium. I am somewhat surprised that he does not appreciate the information to be derived from experiments on cholera evacuations, and the vitalities that are developed in them. There is every reason to believe that the cholera-poison is contained in these discharges; and it is important to ascertain the action of the various disinfectants now in general use, as well as that of other agents on the visible organisms found in cholera evacuations, from which may be inferred their action on the possibly invisible cholera-poison, which the history of the disease indicates to be of an organised nature.

Calcutta, 12th June, 1870.

I am, etc., JOHN MURRAY.

OBITUARY.

JAMES COPLAND, M.D., F.R.S.

ANOTHER man of note in the medical profession has departed. Dr. Copland has died at the ripe age of 78. He had enjoyed a vigorous constitution and generally sound health; having been subject, however, during the last twenty-three years, to gout. Three years ago, he had hæmaturia, which was believed to be due to disease of the prostate; and from that time he had occasionally passed blood in his urine. Towards the end of June, a severe attack of hæmaturia set in, followed by retention of urine; and he died on the 12th instant, with symptoms of uræmic poisoning.

Dr. Copland was a native of the Orkney islands, where he was born in November, 1791, being the eldest of a family of nine children. His father having subsequently removed to one of the Shetland islands, he was at the age of nine placed at school in the family of the clergyman of Lerwick, where he remained until fourteen years of age, when he went for two years to a neighbouring clergyman. Being originally intended for the church, he entered at the age of 16 to the lectures on classics, mathematics, and metaphysics in the University of Edinburgh, receiving the instruction of Dunbar, Dugald Stewart, Ritchie, and other celebrated professors, and acquiring a taste for metaphysics. Having decided on entering the profession of medicine in preference to the church, he became a student of the medical classes of the University in 1811, after what appears to have been an excellent preliminary preparation. During his career as a student, he several times visited Shetland, and studied natural history and geology, for which the islands afforded him good opportunities.

His graduation-thesis was written in 1815. In it he put forward the opinions that inflammation originated in lesion of the nerves supplying the capillary vessels: that rheumatism was essentially a disease of the nervous system, the vascular disturbance being consequent thereon: that increased functions of the liver was often consequent on diminished action of the lungs, and that high ranges of temperature diminished the elimination of carbonic acid, while they increased that of bile.

Having obtained his degree, Dr. Copland came to London with the object of increasing his store of professional knowledge. Here he remained about a year and a half, paying attention principally to surgery. He was there offered an appointment on the Gold Coast; and being then, as is said in his life written by Mr. Pettigrew more than thirty

years ago, of spare habit of body, and being also abstemious and temperate, he accepted the offer. Early in 1817 he proceeded to Goree, the Senegal, and Gambia, at each of which places he stayed a few days; he then spent some weeks at Sierra Leone. He then took passage in a coasting vessel, in which fever broke out, disabling thirteen or fourteen (about three-fourths) of the crew. Dr. Copland was very successful in his treatment of the disease, and acquired from this incident, as well as in his travels in the West Coast, a knowledge of fever which he afterwards turned to good use in his writings. After a journey along the coast to the British settlements, finally visiting Cape Coast Castle, he returned to London early in 1818. The next two years were spent in visiting France and Germany; after which he returned in 1820 to London, and commenced practice at Walworth.

From this time the life of Dr. Copland belongs to metropolitan medical history; and the following summary, in which are recapitulated the facts to which we have already referred, contains also an outline of the principal events of his professional life.

CHRONICLE OF THE LIFE AND CHIEF WORKS OF JAMES
COPLAND, M.D., F.R.S.

DATE. AGE. *First and Second Decades.*

1791. Was born in the Orkney islands; the eldest of a family of nine children.
1800...9. Placed at school in the family of the clergyman of Lerwick.
1807...16. Went to the University of Edinburgh. Was intended for the church.
1811...20. Commenced the study of medicine.

Third Decade.

- 1815...24. Took the degree of M.D. of Edinburgh, and came to London.
1817...26. Visited Goree, Senegal, Sierra Leone, and other places on the Gold Coast; thence proceeded to Cape Coast Castle. Treated successfully a severe outbreak of fever in a coast trading vessel, in which he had taken passage from Sierra Leone.
1818...27. Returned to England. Visited France and Germany.
1820...29. Commenced practice at Walworth.—Became a Licentiate of the Royal College of Physicians, and a Member of the Medical Society of London.—Was elected Physician to the Dispensary (now Royal Infirmary) for Diseases of Children. Established (with others) the South London Dispensary, in which he held the office of Physician during two years.—Offered to investigate an outbreak of yellow fever in Spain.—Wrote in the *Quarterly Journal of Foreign Medicine* on the Medical Topography of the West Coast of Africa, Yellow Fever, and Rabies.
1821...30. Delivered the Annual Oration before the Medical Society of London, on the Agents by which Inanimate Matter and Organised Bodies are governed.—Published a Case of Chorea, dependent on Rheumatic Carditis, with an account of the *post mortem* appearances (*Medical Repository*, vol. xv, p. 23).—Cases of Chronic Inflammation of the Peritoneum, with Remarks on the Pathology and Connection of that Disease with other Ailments, and on its Treatment (*Ib.*, p. 372).

Fourth Decade.

- 1822...31. Removed to Jermyn Street.—Was elected a member of the Medico-Chirurgical Society.—Became Editor of the *London Medical Repository*, in conjunction with Dr. R. Dunglison. Published an Outline of a Series of Observations on the Ganglionic System of Nerves (*Med. Reposit.*, vol. xvii, p. 369).—Case of Poisoning by Opium in which the Cold Affusion was successfully employed (*Ibid.*, vol. xviii, p. 29).
1823...32. Was appointed Consulting Physician to Queen Charlotte's Lying-in Hospital.—Published some Account of the Life and Professional Character of the late Matthew Baillie, M.D., F.R.S. (*Lond. Med. Repository*, vol. xx, p. 520.)
1824...33. Edited, with notes, Richerand's *Elements of Physiology*.
1825...34. Projected an "Encyclopædic Dictionary of the Medical Sciences", in which he was to have been aided by Drs. Dunglison and Gordon Smith. The plan was, however, relinquished.—Began to lecture on Medicine at the School in Little Dean Street, founded by Dr. Armstrong; lectured there during two sessions.—Dr. Darwall of Birmingham, and Dr. John Conolly, were associated with him in the Editorship of the *Medical Repository*.
1826...35. At the end of this year, Dr. Copland retired from the Editorship of the *Medical Repository*.
1828...37. Contemplated the production of a Dictionary of Medical

Science, and negotiated for its publication with Messrs. Baldwin and Cradock, who, however, refused to proceed.—Published a Severe Case of Colica Pictonum, with Great Distension of the Colon (*Medical and Physical Journal*, vol. i, p. 147).

- 1830...39. Agree with Longman and Co. to write a *Dictionary of Practical Medicine*.—Article on Cases of Rheumatism affecting the Ovaries (*Medical and Physical Journal*, vol. v, p. 58).

Fifth Decade.

- 1832...41. The first part of his *Dictionary* appeared.—Wrote on *Pestilential Cholera; its Nature, Prevention, and Curative Treatment*.
1833...42. Was elected a Fellow of the Royal Society.
1835...44. Became Lecturer on Medicine in the Middlesex Hospital Medical School, and held the office during five sessions.
1837...46. Became a Fellow of the Royal College of Physicians.
1838...47. Delivered the Gulstonian Lectures at the College of Physicians.
1839...48. On the retirement of Dr. Elliotson from the Professorship of Medicine in University College, Dr. Copland completed the course of lectures.
1841...50. Was a Censor of the College of Physicians in this and the next year.

Sixth Decade.

- 1844...53. Croonian Lectures at the College of Physicians; also in 1845 and 1846.
1850...59. Wrote on the *Causes, Nature, and Treatment of Palsy and Apoplexy*.

Seventh Decade.

- 1852...61. Elected President of the Pathological Society of London.
1853...62. Was elected President of the Royal Medical and Chirurgical Society.
1854...63. In this and the following year, Dr. Copland delivered the Lumleian Lectures at the Royal College of Physicians.
1857...66. Delivered the Harveian Oration.—Pamphlet on the Drainage and Sewage of London and of large Towns.
1858...67. The last part of his *Dictionary* appeared.
1861...70. Censor of the College of Physicians.

Eighth Decade.

- 1866...75. In conjunction with his nephew, Mr. James C. Copland, published an abridgment of his *Medical Dictionary*.
1870...79. July 12th. Died.

Dr. Copland's claim to fame rests mainly on his performance of that gigantic work which he undertook, and carried to completion after a labour of thirty years. On finishing his *Medical Dictionary*, he wrote in the preface that "his labours, which had been incessant for many years, had been persisted in under circumstances and contingencies which few could have endured. . . . Every line in it was written by his own hand, and all the proofs were carefully read and corrected by himself." The amount of research and time spent in the production of the *Dictionary* must have been enormous; and the perseverance of the author such as few men possess. The *Dictionary* is a cyclopædic *resumé* of all that has been written on the various subjects treated in it, from the earliest days of medicine down to modern times, with copious references to all the sources of information; and with all this are given the opinions which the author's observation and experience had led him to form. That one man should have undertaken and, labouring single-handed or nearly so, completed such a work, is indeed a remarkable fact. The work is a monument of calm energy and self-reliance, such as is but rarely met with.

Dr. Copland survived the completion of his great work twelve years, and in the interval, in conjunction with his nephew, Mr. J. C. Copland, prepared an abridgment of it.

In addition to his literary labours Dr. Copland enjoyed, as he tells us, "as extensive opportunities in public and private practice as he could use with advantage to his patients and the advancement of his own knowledge." He was for many years a teacher of medicine, being for five sessions attached to the Middlesex Hospital. He took much interest in sanitary matters and the treatment of epidemic diseases; in the early part of his career, he offered his share of contribution to our knowledge of fever and cholera; and at a much later date the important subject of the disposal of sewage engaged his attention.

Apart from his distinction as one of the most remarkable literary characters among medical men in this country, Dr. Copland was much esteemed in his profession, and had his share of the honours which it has at its disposal. In his disposition he was kind and genial, and was a staunch and disinterested friend.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

At a meeting held on Tuesday last, it was agreed to petition the House of Commons that Clause XVIII be reinserted in the Bill, that Clause X, subsection 3, and the last subsection of Clause III be omitted from the Bill, and that provision be made in the Bill for direct representation of the profession in the Medical Council.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual meeting was held on July 13th at the Freemasons' Tavern, Great Queen Street; Dr. JOSEPH ROGERS, President, being in the Chair.

The *Annual Report of the Council* was read, detailing what had been done during the last twelve months. One hundred and twenty new members had been enrolled. The balance-sheet was favourable, although the expenditure had been heavy. The Council referred more especially to Dr. Brady's Superannuation of Medical Officers Bill. They detailed the steps taken by them in order to secure the support of the President of the Poor-law Board, which support Mr. Göschén afterwards gave. One of the great objects had therefore been now achieved. Mr. Göschén was also about to issue a general order which would place officers in parishes on the same footing as those in unions; namely, that they should be elected for life. The past year had, therefore, been an eventful one; and the Council expressed their thanks to the medical and general press for their valuable support.

The President was re-elected, and the other officers were appointed for the ensuing year.

The PRESIDENT delivered an address, in which he reviewed the progress made by the Association since the amalgamation, two years ago, of the Metropolitan Poor-law Medical Officers' and the Poor-law Medical Reform Associations. He gave a sketch of the action of the Association in regard to the various matters which had engaged its attention during the last two years. With regard to Dr. Brady's Bill for granting superannuation allowance to Poor-law medical officers in England, he said that, as soon as Dr. Brady's intention to bring in his Bill was known, steps were taken early in the session to strengthen his hands. With that object, an appeal was made through the medical press for information as to the existence of specific cases of hardship arising from the exclusion of medical officers from the benefits of superannuation. Authentic letters, containing the details of several distressing cases, were received. Extracts from these communications having been carefully made, a circular letter embodying them was drawn up and addressed to such members of Parliament as were known to be favourably affected to medical officers; a form for a petition was also circulated; and the Council were able to hand in, through Dr. Brady, upwards of three hundred separate petitions, including those forwarded by the Councils of the Colleges of Physicians and Surgeons, and from several branches of the British Medical Association. A deputation also of the Presidents and Councils of the Colleges of Physicians and Surgeons waited on Mr. Göschén. The result of this deputation and memorial was most satisfactory; for, if it did not decide, it materially strengthened Mr. Göschén in the course which he subsequently took. Having been present in the House during the whole of the debate on the second reading, it was most satisfactory to Dr. Rogers to hear the earnest expressions of sympathy with medical officers which proceeded from members on both sides of the House. Indeed, it would be difficult to determine which political party evinced the strongest feeling as to the insufficiency of the stipends, the magnitude of the obligations, the self-sacrificing spirit in which the duties are so constantly performed, the risk to health and life to which medical officers and their families are exposed from communicable disease. Several speakers also commented indignantly on the scant consideration and too frequent insults to which they are exposed at the hands of Guardians; and some members of position earnestly urged the Government to entirely remodel the Poor-law Medical Service. It was, for the first time in the House of Commons, stated how intimate were the relations between the sickness of the working-classes and the development of pauperism; and how impossible it was to expect other than its continuous expansion so long as the medical service remained in its present ill-paid and discontented condition.

In his previous addresses, Dr. Rogers had stated that the largest portion of the Irish report was always occupied by statistics relating to the sickness of the poor; but that it was difficult to discover from the English annual reports that there was ever any sickness amongst the poor here at all. This year a large portion of a bulky volume (as

yet not completed) is taken up by a mass of details, all of which relate to the sickness of the poor. Whilst the matter in places is excellent, he demurred to some of the deductions which have been drawn from the facts. Time did not permit him to expose all the fallacies of the Board, but he intended to do so at the next meeting in November; still there were a few points to which he must not on this occasion fail to refer. First, as to the objections taken to the comparison of Irish with English medical relief, he had never attempted to make it apparent that there was the slightest similarity. He had stated that in Ireland all drugs, etc., are found by the Guardians, whilst in England (except quite recently in the metropolis) they are almost entirely supplied from the stipends of the medical officers; that the stipends in Ireland are much greater than England, proportionately to the obligations, and fairly uniform: again, in Ireland there is a weekly return of all cases of sickness in the dispensary districts, which is utilised, whilst here, that which is made is entirely disregarded; that there is a rigid out and in-door inspection of the sick by competent professional inspectors, whilst here there is no inspection of the out-door sick or other poor at all, and that which is made of the in-door sick, has been and, he feared, is now comparatively worthless; that in Ireland the sick poor can obtain medical relief without incurring the lasting brand of pauperism, while here, on the contrary, social degradation is for ever associated with sickness, when the unfortunate is so poor as to require the aid of the parochial surgeon. It was urged that medical relief in Ireland was much abused, and that many persons able to pay a doctor get gratuitous assistance; but was there not the same thing here? Was it not notorious that many of the working-classes, able to pay, and notably the servants of well-to-do farmers, of gentlemen, and even of the nobility, get orders from relieving officers, which cost the local authorities nothing, but which are a grievous injustice to the hard-worked medical officer? After some further criticism of the report, Dr. Rogers, in bringing his address to a close, congratulated the Association on the signal success which had attended its efforts during the last two years. In July 1868, there appeared to be absolutely no hope left for the parish doctor, save a life of ill-requited, unrecognised, unhonoured toil, too frequently cut short by a premature death from disease contracted in the performance of his duty. Thanks to the continuous exertions of the Association, and the assistance of a generous press, a different position had been achieved. Thus, it had been made apparent that the office of parochial surgeon is highly important; that to him is confided a great public duty, with the due performance of which the interests of the whole community are intimately bound up; that, accordingly as he is or is not a gentleman of integrity and ability, so will that duty be well or ill performed; that, up to the present, whatever of integrity and ability has been exhibited, has not only failed to secure encouragement, but has been repressed with every form of misconstruction and unreflecting antagonism.

"A change from this state of things seems to be opening up. For the first time in your history, your grievances have been ventilated in the House of Commons. You must have read that the conduct of those who have oppressed and insulted you has at length been fully stigmatised and condemned. In Mr. Göschén we have at last a President who has shown himself alive to the necessity of a reform of the system, and who will be able to carry out such reform, if his hands are duly strengthened by such united expressions of opinion as we and similar bodies are able to excite; but it is necessary that our efforts should be continued and not relaxed.

"Finally, allow me to state that if, in the course of this agitation, dealing as I have with inveterate and almost intolerable abuses, I may, to the mind of some, have been led into the expression of opinions and the employment of phraseology in excess of the requirements of the case, let those who think so please remember what a terrible inertia we have had to overcome in the stubborn officialism and resolute immobility of a Poor-law system. That the healthy atmosphere of public opinion has at length found its way into Gwydyr House, is due in great measure to the earnestness of Mr. Göschén; and I feel that it is just to him to say that the criticisms of the Board, which I have been compelled to make, have been directed, not against the President, but against that system of which he is the accidental head."

Dr. ROGERS concluded by moving the adoption of the report, which was seconded by Dr. STEDMAN, and carried unanimously.

Dr. DUDFIELD proposed—"That this meeting desires to place on record the feelings of gratification with which it is inspired by the generous support given by the President of the Poor-law Board to the Medical Officers' Superannuation Bill, to which the success of the measure must be mainly attributed. The meeting desires, also, to express the great pleasure with which it has learnt the intention of the President to make parish medical appointments permanent, the same as those of unions; and it trusts that he may continue at the Board long enough to carry out many other reforms for the benefit both of the

sick poor and of the medical service." Dr. Dudfield maintained that there was no spirit of antagonism between this Association and the Poor-law Board or the guardians. The more perfect the union among them, the better would be the administration of the Poor-law.—Dr. M. THOMAS seconded the resolution, which was carried.

Mr. BENSON BAKER moved that the thanks of the meeting should be given to the Local Secretaries for their activity and energy, to which mainly was due the large accession of provincial members. The motion was seconded by Dr. RICHARDS, and carried unanimously.—Mr. CLARKE of Leicester, and Mr. SMITH of Hay, Brecon, acknowledged the vote on behalf of the Local Secretaries.

Dr. DIXON proposed—"That this meeting has heard of Dr. Dudfield's intention to resign the office of Secretary with great regret, and desires to record its deep sense of the ability and energy which he has at all times brought to bear on the interests of this Association, and which have so largely contributed to its prosperity and influence."—The resolution was seconded by Dr. BURCHALL, supported by several members, and carried unanimously.—Dr. DUDFIELD made a graceful acknowledgment.

Mr. SLEMAN of Tavistock proposed a vote of thanks to the Officers and Council of the Association for their services during the past year, and to the President for his conduct in the chair. This having been carried, the members and guests adjourned to the Dining Hall, where the Annual Dinner was held.

MEDICAL VACANCIES.

The following vacancies are announced:—

- BIRMINGHAM WORKHOUSE—Medical Officer.
BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon: applications, August 10th.
CENTRAL LONDON SICK ASYLUM DISTRICT—Medical Officer and Assistant Medical Officer: applications, August 1st.
DEVON and EXETER HOSPITAL—Dispenser: applications, July 27th.
DONEGAL DISTRICT LUNATIC ASYLUM, Letterkenny—Consulting and Visiting Physician: August 3rd.
EASTERN DISPENSARY, Bath—Resident Medical Officer and Apothecary: applications, 31st.
HULME DISPENSARY, Manchester—House-Surgeon: applications, July 27th.
JERSEY GENERAL DISPENSARY—Resident Visiting and Dispensing Officer: duties, October 1st.
KENSINGTON DISPENSARY—Assistant Resident Medical Officer.
LONDON HOSPITAL—Medical Clinical Assistant: applications, 25th; vacancy, August 1st.
METROPOLITAN ASYLUM DISTRICT—Assistant Medical Officer for Leavesden: applications, 27th; duties, about September 29th. Assistant Medical Officer for Caterham: applications, 28th; duties, October 1st.
MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: August 25th. Resident Physician's Assistant: July 30th.
MIDDLESEX LUNATIC ASYLUM, Colney Hatch—Assistant Medical Officer to the Female Department: applications, 23rd; election, 26th; duties, Sept. 1st.
NEWCASTLE-UPON-TYNE INFIRMARY—Assistant-Surgeon: August 4th.
NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh—Assistant Medical Officer: applications, August 9th.
QUEEN'S COLLEGE, Birmingham—Medical Tutor and Demonstrator of Anatomy.
ROYAL BERKSHIRE HOSPITAL, Reading—House-Surgeon: applications, August 1st; election, 16th.
ST. GEORGE'S HOSPITAL MEDICAL SCHOOL—Lecturer on Ophthalmic Surgery and Ophthalmic Surgeon: applications, before July 30th.
ST. PANCRAS and NORTHERN DISPENSARY—Physician.
SOUTH DEVON and EAST CORNWALL HOSPITAL, Plymouth—House-Surgeon: applications, 31st.
WESTERN GENERAL DISPENSARY, Marylebone Road—Resident Surgeon and Apothecary: 25th.
WESTMINSTER HOSPITAL—Resident House-Surgeon: applications, Aug. 6th.
WINDSOR ROYAL INFIRMARY and DISPENSARY—House-Surgeon; Dispenser: applications, 27th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- STEVEN, Alexander, M.D., appointed Registrar to the Hospital for Children, Great Ormond Street.
SYMES, Edmond W., Esq., appointed Assistant Resident Medical Officer to the Leeds Public Dispensary, *vice* T. Davies, L.R.C.P.Ed., etc., resigned.

BIRTHS.

- CHORLTON.—At Southborough, Tunbridge Wells, on July 18th, the wife of *Alfred Chorlton, Esq., Surgeon, of a daughter.
ROBINSON.—On July 17th, the wife of *Rawdon B. Robinson, Esq., Dulverton, of a son.

DEATH.

- *LAURENCE, John Zachariah, M.B., lately of Devonshire Street, Portland Place, at Hammersmith, aged 41, on July 18th.

BEQUESTS.—Mrs. Caroline Armitstead, in addition to several other charitable bequests, bequeathed £200 to the Whitehaven and West Cumberland Infirmary, £200 to the Samaritan Fund, and £100 to the Ladies' Charity, Whitehaven.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

EXPECTED OPERATIONS AT THE HOSPITALS.

- GREAT NORTHERN HOSPITAL, Wednesday, July 27th, 2 P.M. Removal of Scirrhus of Breast, by T. Carr Jackson; Ovariectomy, by Dr. G. C. P. Murray.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE RECENT ELECTION TO THE CHAIR OF MIDWIFERY AT EDINBURGH. THE Dr. Barnes referred to in our report of the meeting held in London as having sent a communication regretting his inability to attend, was Dr. Barnes of Ewell, and not Dr. Barnes of London, as stated in mistake.

CHEAP RAILWAY TICKETS FOR THE ANNUAL MEETING.

SIR,—I wish to ask if there is any probability of day tickets being allowed on the various lines of railway leading to Newcastle-upon-Tyne during the approaching meeting. A year or two since, it was the usual custom; and I believe it would tend to increase the number present. I have made this inquiry privately, but cannot procure satisfactory information. I am, etc.,

July 1870.

AN ASSOCIATE.

* * We are not aware that any special arrangements have been made with regard to railway tickets. It may, however, be interesting to our correspondent and to other members of the Association to know that return tickets issued from King's Cross Station, London, to Newcastle, are available for return within four days, inclusive of the date of issue. For instance, a return ticket issued on Tuesday will be available for return up to and including Friday.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, June 20th; The New York Medical Gazette, July 2nd; The Parochial Critic, July 20th; The New York Medical Record, July 7th; The Boston Medical and Surgical Journal, July 7th; The Madras Mail, May 9th; The Gardeners Chronicle, July 16th; The Poor-Law Chronicle, July 12th; The Shield, July 11th and 18th; The Edinburgh Evening Courant, July 18th; The Leicester Express, July 9th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Vale, Blackburn; Mr. G. P. Blackett, Whickham; Mr. T. J. Preston, London; Mr. W. C. Begley, Hanwell; Mr. G. G. Bothwell, London; Mr. Wanklyn, London; G. E. D.; Enquirer; Mr. Liddell, Newcastle-upon-Tyne; Omidore; Rev. J. Kempthorne, Weston-super-Mare; Mr. J. H. Gornall, Warrington; Dr. Paul, London; Dr. G. H. Philipson, Newcastle-upon-Tyne; Mr. C. E. Hoar, Maidstone; An Associate; Dr. Silver, London; Mr. W. H. Elmes, Limerick; Mr. J. Costeker, London; Mr. Burgen, London; Dr. Stewart, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. Joseph Bell, Edinburgh; Dr. Hyde Salter, London; Mr. Hulke, London; Mr. T. Pridgin Teale, Leeds; Dr. James Russell, Birmingham; Dr. C. Handfield Jones, London; Dr. C. J. Smith, Bath; Mr. M. Douglas, Sunderland; Dr. T. Reade, Belfast; Dr. Skinner, Liverpool; Mr. R. B. Robinson, Dulverton; Mr. E. E. Phillips, Southend; Dr. R. Douglas Powell, London; Mr. W. J. Moore, Rajpootana; The Director-General of the Navy; Dr. C. R. Drysdale, London; Dr. J. Heygate, London; Mr. F. W. Parsons, Wimbeldon; Dr. J. W. Keyworth, Torquay; Mr. R. S. Fowler, Bath; Dr. Murchison, London; Mr. John Tilley, London; Dr. Robert Barnes, London; Dr. D. Leslie, London; Mr. T. Watkin Williams, Birmingham; Dr. J. Hardie, Harpurhey, Manchester; Dr. E. Waters, Chester; Dr. Procter, York; Mr. D. Kent Jones, Beaumaris; Dr. Black, Glasgow; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. Styrup, Shrewsbury; M.R.C.S.; Mr. W. H. Booth, Sheffield; Mr. E. W. Symes, Leeds; Dr. H. Simpson, Manchester; Dr. W. T. Greene, London; Dr. G. Moore, Hartlepool; The President of the Royal College of Surgeons, Edinburgh; Mr. T. Underhill, Tipton; The Secretary of the Royal College of Physicians, London; Dr. Charlton, Newcastle-on-Tyne; etc.

CLINICAL LECTURE

ON

TWO CASES OF EPILEPTIFORM DISORDER, WITH PECULIAR PHENOMENA.

By C. HANDFIELD JONES, M.B., F.R.S.,
Physician to St. Mary's Hospital.

CASE I.—W. Robbins, aged 35, carpenter, was admitted on February 19th, 1869. On admission, he gave us the following history. He had been ill since last May. He had first a violent cold at his chest, for which he was at the Brompton Hospital three months as an out-patient. He got better, and went to work; and, as he was beginning, was seized with a terrible trembling at the back of his neck, which made him drop his tools. At the same time, he felt pain, which passed upwards and spread over the top of his head. He shook all over from head to foot, and continued to tremble half the day. He was unconscious from the time he was attacked all the day; the next day, he felt better, and was conscious. He was taken home after the seizure, and remained at home until his admission to the hospital. The trembling returned after this first attack at irregular times; it might be absent for a day or two, and lasted sometimes three days. Sometimes he was unconscious. He was apt to be very cold, his feet especially. His appetite was bad; his bowels generally regular. He had been badly off lately. He did not know that he ever had fits. He never passed worms, and liked meat well done. He denied syphilis positively. He had no children. Nine of his family, brothers and sisters, had died phthisical, besides both his parents. He never had enlarged glands. When he was first attacked, he was very much worse than now; he used to have the tremor continually, and was insensible repeatedly. At the time of the attack, he quite lost the use of his limbs.

When seen after admission, his hands trembled; but the tremor seemed to be easily restrained. His feet did not tremble now; tickling did not cause reflex action. While I was speaking to him, he closed his eyes, and ceased to speak or answer, though pressed. His right hand trembled violently; his left did not, but was closed tolerably firmly. His feet and legs trembled forcibly. This lasted perhaps a minute; then he sighed, and became quiet. After a time he opened his eyes; and, on being questioned, spoke, and said that he had lost himself, and that that was the way in which he was seized. He made signs that he wanted something to drink; and, on being lifted up, and his head and trunk raised, the tremor returned strongly. His eyelids were frequently twitching. Pulse 112, of moderate force; skin cool. He said there was a dimness before his eyes. The pupils were rather large. He was not notably emaciated. No pain was felt on rotation or rotation of the head, but there was when the vertex was forcibly pressed downwards. Pressure on the spines produced pain about the sixth dorsal; higher up, there was no pain; but, at the sixth cervical spine, pain was again felt, and also a little below, as well as across, the occiput. He had some cough and expectoration. The next day, he looked and felt very much better. He had no tremor at all; he had slept well and eaten well; his hands were warm; his urine was pale, of specific gravity 1012, not albuminous. He was taking half a grain of extract of belladonna four times a day, and three grains of iodide of potassium with an ounce of liquor ammoniæ acetatis three times a day. I desired that his head and neck should be kept quite still.

Feb. 22nd. There was no pain now on pressure of the cervical or upper dorsal spinous processes. He was allowed ordinary diet and porter.

Feb. 24th. He was up and dressed. There was no pain whatever in the spine; no tremor at all. He seemed quite well, and went out soon afterwards. On March 24th, he stated that on the 16th instant trembling came on; he shook all over. He did not lose consciousness at any time, but felt cold. The attack lasted from 9 A.M. till the next morning, more or less. When he became warm, he was better. No other attack occurred since he left the hospital. He was not strong, and had not been able to work. The more he was in the air, the better he felt. A note with which Dr. Hay, his former medical attendant, avouched me, stated that, from the history and symptoms described, he had no doubt that the fits were epileptic. He never saw him in one, but found him recovering, being drowsy, and complaining of pain under the left nipple and a numbness and shaking in the back of the head and neck. He treated him throughout with twenty grains of bromide of potassium three times a day, and found that he was always much relieved even with the first dose. I prescribed the same remedy, and etherised cod-liver oil. He was readmitted on April 12th. He

stated that he went to work on the 5th; and, on leaving the railway, giddiness came on, and he did not feel in a condition to go into the shop. The giddiness lasted an hour and a half; he then went home. Since then he had had pain across the back of his neck, and had felt low and been badly off. The pupils were of moderate size. He was ordered half a grain of extract of belladonna four times a day, a sinapism to the back of the neck, ordinary diet, pudding, cocoa, and porter. The pain was much relieved by the sinapism, and he went on quite well till the 21st, soon after which he went out. There was no recurrence of the attacks till June 5th, and in July I heard that they happened occasionally.

CASE II.—W. J. M., aged 28, of slight make, was admitted January 24th, 1870. He had been ill in much the same way seven years previously, while in Paris, and recovered in three months, under MM. Trousseau and Jaccoud. They differed as to whether his disorder was hysterical or epileptic. The disorder had now continued three months. At first he had great pain in the dorsal region of the spine, and great difficulty in defæcation. Subsequently he became weak in his legs as high as his knees; the weakness afterwards extended all over him as high as his shoulders, involving his hands also. At present, he stated that he had the same symptoms, except that the bowel had recovered its function; and he had a sense of weight and constant hunger at his stomach. He vomited a little blood a few days before admission. The epigastrium was rather tender. His nerves felt excited; he did not sleep well, and dreamed much. Pulse weak, 84; tongue coated. He could not stand. He could grasp strongly with his left hand, but not at all with his right, which was rigid in a state of semiflexion, and the arm half flexed at the elbow. The right leg was completely extended, rigid at all its joints, including the hip. The foot of this side was curved upon itself, and turned inwards. Sensation was good in the left limbs, but very deficient in the right. The right arm and leg had been as at present during five or six days. He had always a sensation of something dancing before his right eye, like a butterfly. The sphincters acted well. He had threadworms when young, but no other parasite. He had been six months in England, and found that the climate did not suit him. He had studied hard lately, and was mentally fatigued. No posture was easy. He was ordered ten grains of hydrate of chloral in camphor mixture four times a day, ordinary diet, beef-tea and arrowroot, and three ounces of port wine daily. On the 26th, he said that he had slept better than he had done for six months. The sleep produced was much more natural than that procured by the inhalation of ether, chloroform mixture, or opium. Pulse 80, good; temperature 37.4 deg. C. (99.3 F.) in both axillæ. The urine was pale, of specific gravity 1030, without albumen. The limbs were rigid, as before. He had some sensation at the right knee over rather more than the extent of the patella; but below this part, and for some way above, the skin was quite anæsthetic; he did not feel the pricking of a pin. The outer part of the thigh was in the same state; but the upper and internal part was sensitive. The whole of the right side of the body was numb from the median line in front nearly round to the spine; and the numbness continued all the way up to about the level of the thyroid cartilage. There was no sensation in the forearm or hand; but the arm was sensitive at its anterior and internal part, though two days previously it was devoid of feeling as high up as the shoulder. The tongue was put out quite straight; there was no distortion of the face.

Jan. 27th. His arm had now so far recovered that he had written four lines (of his own composition) in quite legible characters. He felt the prick of a pin in his fingers; but the forearm and back of the hand were insensible. The leg was in the same state.

Jan. 28th. About six o'clock last evening, he had a convulsive attack. He was stiff all over; all his limbs were rigid; his head was drawn back, and his neck prominent. He was quite unconscious. The fit continued about ten minutes; and he recovered consciousness almost directly it had ceased, but slept afterwards. Both legs were equally stiff during the attack; but the left soon became normal, the right remaining stiff. This attack was the first he had had for seven years. He felt extremely weak this morning, and much more (unnaturally) hungry than yesterday. The temperature of the right knee was 98.2 deg.; of the left, 100 deg.; of the right first cleft of the toes, 85 deg.; of the left, 91 deg.

Jan. 29th. He had another similar attack last evening; the arm was rather stiffer to-day. He felt altogether in a state of malaise—"dans un très mauvais humeur," as he expressed it. He was ordered ten grains of bromide of potassium in camphor mixture every three hours. The chloral was omitted.

Jan. 31st. He had no more fits. Some motion was returning in the leg; he could move the arm a little, but could not bring his hand to his mouth. The leg was still insensible. The pupils were large. He had not slept since he left off the chloral.

Feb. 3rd. He was improving. The leg was still rigid; he had no power of flexion at the knee; he could walk fairly well, but dragged his leg, trailing the foot along the ground. The toes of this foot were apt to turn inwards, as well as the foot itself, so that he walked then on the outer edge. He felt well in himself—much better. I injected one-fiftieth of a grain of atropine subcutaneously.

Feb. 5th. No benefit had resulted from the atropine; it caused marked physiological effects, but did not lessen the rigidity in the least. He could walk better; but his foot still was curved inwards when he walked. In about an hour after I had made this note, I saw him in a severe epileptic attack, in which all his limbs were quite rigid, and he ground his teeth. The dose of bromide of potassium was increased to thirty grains every three hours, and a warm bath ordered.

Feb. 9th. He had no more fits; but, in consequence of a *fracas* with one of the officials, he wished to go out.

Both these were undoubtedly cases of epilepsy; yet they were not ordinary cases. In the first, the attacks were often much more prolonged than usual; and indeed it was not always easy to distinguish between the paroxysmal and interparoxysmal disorders. In the attack of March 16th there was prolonged general tremor, but the patient did not lose consciousness at all. So, again, on April 5th, the disorder seems to have consisted solely of giddiness, though it lasted an hour and a half. I do not see how we can refuse to regard these as manifestations of epilepsy, quite as much as the more complete and regular fits which he had previously had. Indeed, if they occurred in a patient who had never had a complete attack, we should feel doubtful as to their exact nature; but in the case before us I can take no other view than that which I have above expressed. And this brings me to a point which I wish to notice on the present occasion; viz., the liability of epilepsy to occur in modes which vary so much from the accepted types, that an inexperienced observer might very easily mistake such cases for instances of some other disease. Unconsciousness, of longer or shorter duration, is one of the most constant phenomena of epilepsy; but it seems quite established that it is not invariably present. Dr. Russell Reynolds, who is not at all inclined to laxity in marking off epilepsy from other disorders, admits among the four modes of attack cases of convulsion having the general form of an ordinary epileptic paroxysm, but in which there is either no loss of consciousness or such slight obscuration as to be at first completely denied by the patient. Such paroxysms may occur at intervals for many years. Dr. Beigel tells us that, out of one hundred and fifty-three cases in which he obtained reliable information, one hundred and three had loss of consciousness and general convulsion; thirty had the former without the latter; six had the same with partial convulsion; four had no loss of consciousness, but general convulsion; seven, no loss of consciousness, and no general convulsion; two, no unconsciousness, but partial convulsion; and one, loss of consciousness, and sometimes general, sometimes partial, convulsion. Trousseau affirmed that nothing was more irregular than epilepsy in its manifestations, its course, and the frequency of its attacks, either in the same or in different patients. He has had large opportunities of noticing, in his consulting practice, how often the best informed and most enlightened physicians fail to recognise even well marked and grave cases of epileptic disorder, especially of the vertiginous kind (*petit mal*).

Our second case affords a curious example of one-sided spasm occurring in connexion with epilepsy, and, as I believe, as one of its manifestations. Both pathemata, the tonic spasm of arm and leg, and the epileptic paroxysms, occurred twice at the same periods, which were separated by an interval of seven years. This is certainly strong evidence of their homogeneousness, if I may use the term—of their being both essentially dependent on the same fundamental morbid state. There seems, indeed, to be a wide difference between a sudden violent explosion of convulsion and insensibility occurring at uncertain intervals, and continuous unrelaxing spasm without loss of consciousness; yet it is most certain that the very same causes—viz., irritation of the cerebral membranes from an endostosis, or a *tænia* in the intestines—may give rise either to continuous giddiness without any convulsion, or to epileptic paroxysms. And, in some cases of epilepsy, giddiness of considerable duration is a frequent interparoxysmal phenomenon. Again, the same organic lesion may produce a more or less continuous or a strictly periodic neuralgia, the difference of effect being evidently due to some peculiarity in the working of the individual nervous systems. There seems to me, therefore, no great difficulty in comprehending that the same cause might generate both the permanent spasm and the temporary convulsion. Such a case as the one we are reviewing is, however, but an exaggerated instance of the common experience that the interparoxysmal period is occupied by more or less indication of derangement of nervous functions.

The anæsthesia was a remarkable symptom, evidently co-related to

the spasm, with which it was in great measure coterminous. I do not know how to explain it, any more than I do the spasm; for of course it is no explanation to say that they both depend on some peculiar state of the motor nervous centres. But it is worth notice, that the two disorders—viz., paralysis and spasm—are constantly found associated together, evidently depending on the same morbid condition; so that it would be quite incorrect to regard them, as you might be inclined to do, as opposites. On account of the spasm being confined to one side—the right—some would be inclined to place the seat of the disorder in the left corpus striatum. On this view, the spasm would be the analogue of the hemiplegic paralysis which occasionally is a sequel of the epileptic paroxysms, and which I suppose to have its seat in the same ganglion. However, as there is no record of any fit having preceded the tonic spasm, and as the latter remained unaffected by the subsequent fits, it must rather be regarded as an independent phenomenon than as a sequel.

The vaso-motor nerves of the right lower limb do not seem to have been involved in the spasm, inasmuch as the temperature of the limb was quite normal. It was curious, however, that the corresponding region of the left was nearly two degrees Fahr. warmer; though, as this statement rests on a single observation, and as it is rather contradicted by a previous one showing that the temperature in both axillæ was only 99.3 deg., I admit that it needs confirmation.

It may well be asked, What was the cause of disorder in this case? And to this question I fear we cannot give a very precise reply. One thing may be affirmed, I am pretty sure; viz., that there was no organic lesion or coarse disease of the nervous centres. Had any such existed, it is tolerably certain that the malady would not have subsided and remained in abeyance for so long a period as seven years. Rather, we may be sure that the symptoms would have become intensified, even if a fatal termination had not ensued. To a certain extent, the recurrence of disorder may be explained by the fact that the patient had been greatly over-exerting his mental faculties for some considerable time before he became ill. The same overstrain has been known to cause delirium, and I have known it produce epileptic attacks; it is, therefore, not unreasonable to regard it as the motor of the disorder in our case. Here, however, as in many other instances, we are obliged to fall back upon some inscrutable peculiarity of the nervous system, which makes the result of the acting of the same cause so different in different individuals. So far, it may be said, the hemispheres in this patient were affected, that he suffered from sleeplessness to a great degree. Translating this into pathological language, we may say that the cerebral exhaustion assumed the form of morbid excitability, as is so commonly the case; and this state did not confine itself to the originally affected centres, but diffused itself to the motor, and in a modified form to the sensory.

The peculiar hunger felt by our patient (which he actually asked me to give him some medicine to quell) was doubtless not a genuine desire for food. I should interpret it as a morbid sensation referred to the gastric nerves, and probably depending on some affection of the solar plexus analogous to that which prevailed in the superior centres.

The treatment indicated in both these cases was evidently calmative and restorative, and was pretty well fulfilled by the remedies we employed. The bromide of potassium answered very well in the first case, but was less decidedly efficacious than I had hoped it would be in the second. I have not yet as much experience of its action in the various kinds of spasm as I hope soon to obtain; but it has not appeared to me so efficacious as I had hoped it would be. This is the experience of others also with regard to this drug in cases of chorea. Of the chloral I need only say that it acted admirably as an hypnotic, as it has in many other cases, but did not materially influence the spasm.

WHAT IS A DIURETIC?*

By J. MILNER FOTHERGILL, M.D.,

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A DIURETIC is an agent that increases the flow of urine, is the ordinary answer; and a very incomplete one it is. What do we mean by increasing the flow of urine? Do we mean an increase in its mere bulk—that is, a mere increase of elimination of water—or do we mean an increase of all, or a great part of, the constituents of urine? Certainly we ought to mean the latter, I think. The one action depends to a great extent on the pressure of the circulation merely; the other is a special property of the epithelial cells lining the tubuli uriniferi. It may be desirable to consider each action separately; firstly, of the pres-

* Read before the Leeds Medical Society, June 1st, 1870.

sure of the blood within the circulatory organs, or rather arterial tension. The walls of the glomeruli within the Malpighian bodies are excessively thin, and admit of rapid dialysis. Thus, any increase of pressure on the blood on one side causes a rapid passage of its watery constituents to the other: this is the elimination of water. As each drop trickles down the uriniferous tubule it passes along from cell to cell, becoming, in passing, more and more laden with urine excreta. We know well, however, that there is no fixed proportion of action between the amount of water passing in from the glomeruli and the activity of the cells as excretors. We may have a small quantity of urine passed of high specific gravity—as in the decreased urine of advanced cardiac disease, or of profuse perspiration; or we may have a large bulk of urine passed of very low specific gravity; as low as 1.003, or even lower, as in the early stages of granular kidney, or during a hysterical paroxysm. We may then see how, according to different actions, totally different results may follow: we may have a fair elimination of urinary excreta with an accumulating dropsy; we may have a gradually increasing blood-poisoning going on hand in hand with an active excretion of water by the kidneys. Each condition requires its appropriate treatment. It would be as futile in the first condition to administer an agent acting on the renal secreting cells without acting on the circulation and increasing the blood-pressure, as it would be in the other to administer agents which increase the blood-pressure without acting on the secreting cells.

In order to better illustrate this, it may be as well to review the different modes of action in each case and contrast them. In illustration of the effect of increased blood-pressure, take for instance the result of a draught of pure water. If the body be quiet, and there be no unusual activity of skin or bowel—conditions which affect the result as affecting the conditions on which the result depends—there is soon a flow of limpid, odourless urine; there is a rapid absorption of the fluid from the stomach into the blood, increased blood-pressure, and rapid flow in the glomeruli of the kidney. A similar result will follow any great excitement affecting the circulation and increasing the heart's activity, as witness an examination or any similar trying occasion. A like result follows from the action of a hysterical paroxysm. There is an alteration in the blood-pressure again in this condition. There is here a contracted condition of the arteries and violent action of the heart to overcome it. The researches of MM. Cyon, Ludwig, Thiry, and Von Bezold, have demonstrated the connection between the state of the arteries and the palpitation: thus we have, from the opposition of the arteries and the heart's efforts to overcome it, an increased arterial tension, and consequently an increased flow of water from the kidneys, as does actually occur. In a similar manner we have a decided increase of bulk of urine in the earlier stages of granular kidney. The reason of this is intelligible enough. So much of the cortical substance of the kidney is cut off by interstitial inflammation, or increase of connective tissue, and thus their quota is longer added to the acting kidney. Thus there is so much of the secreting substance cut off, but there is no corresponding diminution of the calibre of the renal artery; the pressure in it is unchanged, and thus there must be an abnormal pressure on the portion left intact, and thus increased flow of urine of low specific gravity, as is notoriously the case. Thus we see that the mere bulk of urine depends to a great extent on mere blood-pressure without any increase of vital action on the part of the kidneys themselves.

The second proposition may now be considered. There are agents which act on the renal secreting cells and stimulate them to an increased activity by which an increase in the bulk of urine may be occasioned as well as an increase in the amount of urinary solids. Thus we explain the diuretic action of gin as compared to brandy; the action of buchu as compared to uva ursi; the action of potash as compared to magnesia; the action of belladonna as contrasted with opium; the action of colchicum as contrasted with digitalis. Substances which act as stimuli to the renal secreting cells and increase their activity, cause them to attract an increased quantity of water by some power which we cannot explain as yet, and so call it vital action. Thus the administration of urea is followed by increased renal action and elimination of it. The kidneys, however, are subject to derangements: thus there may be evidence of great blood-pressure, as in active congestion (Jenner), and the formation of bloody tube-casts, and at the same time a condition of uræmia with a total suppression of urine. Then the decrease of blood-pressure by cupping or purgation is followed by increased renal activity, and soon the flow and elimination of solids may be much over the average on a course of bread-pills, as George Johnson has shown. But here the kidney is in a condition of acute disease. In cases of renal engorgement, we have yet to learn a great deal about the effect exercised by the vasa recta of Virchow and Beale; or, in other words, of the collateral circulation within the kidney itself. Without this

safety-valve it is difficult to see how the kidney, with its large afferent artery, could be preserved from utter disorganisation when the convolute circulation is arrested. But without attempting to carry any refinements into the condition of acute renal disturbance, and admitting that it may not yet be possible to explain all the anomalies apparently occurring in these conditions, we may still be able to elucidate, to a great extent, the action of external agents on the kidney in a normal, or comparatively normal, condition, and to understand the distinction between increased pressure on the glomeruli and increased action of the renal secreting cells. We can thus appreciate the distinctive difference in the therapeutic agents required in the small and highly dense urine of an enfeebled circulation and the large bulk and low specific gravity of the urine in the early stages of granular kidney. Jenner has told us much about the pressure on the glomeruli, and the distinction, in a diagnostic point of view, between the free flow of primary renal dropsy and the lessened flow where its origin is cardiac. So in the conditions of uræmia or the typhoid condition of fevers, where there is an accumulation of urinary excreta in the blood—the natural stimulus to the kidney secreting cells—the urine may fall off in quantity hand in hand with a growing feebleness of the circulation. There is not sufficient pressure on the glomeruli to produce flow; and without the washing action of the flow, the secretion of the renal cells cannot be removed: here stimulants become diuretics from their action on the circulatory centre. In the hypostatic congestion of typhus, the rolling of the patient over on to one side, and thus mechanically unloading the elevated kidney, is productive of increased diuresis. The dependent condition of the kidneys in the recumbent posture is always a source of danger in enfeebled and acute asthenic conditions. They being placed lower than the general current, a gradual decrease in the bulk of urine passed may be our earliest indication of engorgement of the kidney, and of the danger looming from abolition of renal function; and this may occur when a fair radial pulse may indicate a pretty good general arterial tension.

In the administration of diuretics, too little regard is paid to the manner of action of the agent employed. A mere empirical idea of their agency too frequently prompts their choice, when an accurate knowledge of their special mode of action should determine their selection; and thus the want of success. Without attempting to state that by the selection of agents acting on the circulation, and of others acting on the renal secreting cells, we can produce diuresis with the certainty of mathematics, or forgetting that there are morbid conditions of the kidney where the vicarious action of other organs is the best restorer of renal action, still by a recognition of the different actions, their modes of production, and the means of acting on them, we may practise with greater precision. Thus, in the free flow of granular kidney, some agent which acts on the secreting cells may be required urgently, as potash, colchicum, juniper, or buchu. A real true diuretic may be desirable—indeed, imperative; or even a vicarious action in another organ. Some diuretics have a double action; as, for instance, the scilla maritima. Hilton Fagge and Stevenson found squill to exercise a decided effect on the hearts of frogs, increasing the ventricular contractions in a similar manner to hellebore and digitalis. This, then, is a light as to the diuretic action of squill in asthenic conditions, though no doubt squill is eliminated by the kidneys, as well as the lungs. Belladonna, according to Harley, is also a true double diuretic, being a stimulus to the renal cells, as well as a cardiac tonic; which last it undoubtedly is. The action of gin—that is, alcohol and juniper—combines the two; as does also the spiritus ætheris nitrosi, which, however, acts only slightly on the elimination of urinary solids. Alcohol, ether, and ammonia act by their general stimulant action affecting the circulation. Digitalis is chiefly a diuretic in asthenic cardiac conditions, under which circumstances its action is sometimes magical.

It is, then, no slight matter, the selecting of a diuretic to meet the exact requirements of the patient. The happy-go-lucky choice of past times must be abandoned; and a choice depending on an accurate comprehension of the existing circumstances, and of the action of the agent it is proposed to employ, should take its place. The different conditions of circulation and of the arterial tension must to a great extent guide us in our selection. The effect of position, the portal circulation as affecting the renal circulation, the use and effect of purgation and diaphoresis, must have a value attached to them which a scientific knowledge can alone apportion. The effect of opium and astringents, as tannin, etc., on the kidney, must not be overlooked. How many men dare not drink port wine, under fear of gout, which will show itself even next day! The action of the renal cells is checked by the astringent, and thus the uric acid is no longer converted by them into urea and carbonic acid; while the stimulus may be producing increased flow from increased pressure. It is of no use, then, in the acute passive congestion of Jenner, to use agents acting on the renal cells, without

others acting on the blood-tension. It is of no avail to goad the renal secreting cells with stimuli to them in cardiac dropsy, without giving tone to the enfeebled circulation. Thus, when other diuretics have failed, digitalis will usually, in these conditions, produce the expected result. In the removal of accumulations of urinary solids, as after scarlatinal dropsy, etc., plain water may be a most effective agent, and be followed by increased flow of urine of fair specific gravity. We must understand clearly what we mean by a diuretic, and what we propose to accomplish, before determining upon the use of any agent or combination of agents, if we wish our efforts to be successful. And the choice of diuretics cannot be a mere matter of toss-up by any one who aspires to the character of a scientific practitioner, or of being capable of giving a reason for the faith that is in him.

ON THE TREATMENT OF SCARLATINA AND OF SCARLATINAL DROPSY.*

By RICHARD C. SHETTLE, M.D.,

Physician to the Royal Berkshire Hospital, Reading.

AT the last meeting of this Society, some cases were related in which epileptiform convulsions attacked individuals suffering from dropsy after scarlatina; the convulsions and dropsy yielded to hot air baths and active purgation by means of compound jalap powder; but, after a slight interval of freedom from anything abnormal, sudden and fatal congestion of the lungs supervened.

A case having recently come under my own observation, of an identical character, so far as the epileptic convulsions and dropsy, but which yielded to treatment of a different nature, I considered I was only doing my duty as a member of this Society in making mention of it. Thereupon I was requested to bring the matter forward for discussion at the next meeting, and, as it was considered that the line of practice which I advocated in scarlatina was somewhat unusual, to state the principles of that practice and the grounds upon which I based it. I have much pleasure in acceding to the request.

The notes of the case in question have been kindly forwarded to me by Mr. Moore, in conjunction with whom I attended the patient. They are as follows. "My attendance had ceased on 27th November, as Mr. L. was considered well from an attack of scarlatina. On December 3rd, at 5 p.m., I was sent for, as he had severe headache, and said he must go mad. I gave him one grain of opium, which was rejected; I gave him another grain at 9 p.m., and he went to sleep, and slept till 3 a.m., when his mother found him tossing his arms about; he said he thought he was going to have a fit; he went to sleep again, and, at 5 a.m. he had a violent epileptic fit. I was sent for at that time, viz., 5 a.m., December 4th. He continued to have these fits every hour until one o'clock, and then he had two in one hour. Dr. Shettle came about 2 p.m., and prescribed as follows. *R Argenti nitratis gr. iss; acid. nitrici diluti ʒj; potassæ nitratis ʒj; aquæ dest. ʒvi.* A sixth part to be taken every hour. Two hot mustard baths were also administered. Mr. L. had no fit after Dr. Shettle came; and the urine, which was highly albuminous, after two days became free from albumen, and in a fortnight's time he went to the Isle of Wight, and has remained well since."

It is now, I believe, universally considered that scarlatina is absolutely due to blood-poisoning, and all the premonitory symptoms may be said to indicate exhaustion or malnutrition of the nervous system; but superadded to the general symptoms we have others, such as the throat affection and the rash on the skin.

The throat affection, which varies in intensity in accordance with the severity of the attack, is very characteristic of the channel by means of which the virus enters the system; and it appears to me that the lecture lately delivered by Professor Tyndall at the Royal Institution pretty closely establishes this point. To use the Professor's own words: "In all probability the protection of the lungs will be the protection of the entire system; for it is exceedingly probable that the germs which lodge in the air-passages and which at their leisure can work their way across the mucous membrane, are those which sow in the body epidemic disease."

Now, as under healthy respiration oxygen is attracted from the air, and absorbed by the corpuscles of the blood, and is then carried by those corpuscles to the tissues of the body, to impart life and heat, so, also, must these germs of organic matter be absorbed and carried away by the same means; but, instead of adding to the vitality, they would, according to the proof afforded by Pasteur, give rise to a process of fermentation, by finding in the corpuscles the necessary food for their

support. The result of such a fermentative process on the corpuscles primarily, and the whole body secondarily, would be, first, the increased development of heat, and, secondly, the impairment of vitality, because that vitality would be more or less destroyed in supporting the parasitic growth. These effects would be modified, first, by the nature or peculiar character of the organic particles, and, secondly, by the extent to which the atmosphere was charged with them, and also by the degree of health or vigour in which they found the corpuscles to which they attached themselves. If this opinion be correct, we at once establish a cause for the increase of temperature in fevers generally, as they doubtless have a common origin, and also for the depression of the vital powers. In scarlatina, the blood-poisoning appears to be well-marked from the commencement in all stages and degrees of the complaint; and, such being the case, the most successful treatment must depend upon the most rapid and safe method of destroying or eliminating the virus; and, whatever means we use to facilitate this process, the skin or kidneys must be great channels for its removal. The skin, however, from the amount of action which takes place in it under an ordinary attack of scarlatina, becomes almost useless for the purpose: whilst the kidneys are frequently altogether prevented from performing their functions from the congested state in which they exist. How then shall we best remedy the evil? I reply, by assisting nature to effect her own cures: first, by removing the dried cuticle, by means of diaphoretics, warm baths, and friction, so as to enable the skin to do its work; secondly, by relieving the congested state of the kidneys; thirdly, by giving tone or power to the nervous system for the due performance of its accustomed duty; for it would be of but very little service to use means for the relief of the skin or kidneys if those means were not calculated to raise the powers of life, already more or less impaired. Thus, a bath administered for too long a time, or of too high temperature, would diminish the vital powers; nay, more, it might so depress as to cause death; whilst active purging by compound jalap powder, or remedies of the same class, might, and I believe often does, cause irremediable mischief. By such means, it is true, a large quantity of fluid may be carried out of the circulation with considerable rapidity; and so that state of congestion of the kidneys which gives rise to dropsy would be relieved; but the ultimate issue of a case so treated would depend materially, if not entirely, upon the degree of reparative power which the individual was capable of exerting. If the powers of life were strong, speedy and permanent relief might be afforded; but if these powers were already considerably exhausted, there can be no question that active purging or depletion of any kind would either destroy life, or so materially depress, that the temporary relief would speedily be followed by a much greater amount of depression, and congestion of some one or more of the internal organs. Indeed, nothing is more common than the occurrence of passive congestion in diseases attended with great and sudden prostration, as is the case in fevers of a typhoid or malignant character. It is also well known that the operation of evacuant medicines may produce the same result.

After what I have already pointed out as the chief points to be observed in the treatment of scarlatina, I think it will be readily understood that, whilst on the one hand I should support the system by means of beef-tea and other articles of diet that can be readily conveyed into the blood, I should, on the other, avoid as much as possible alcoholic stimulants: first, because to benefit the patient by their administration we must continue their use until the disease had in great measure subsided, or the depression which invariably follows their exhibition would be a source of mischief; secondly, because I believe that, with but few exceptions, they may be supplanted by remedies which act almost as immediately upon the nervous system, and of which the stimulating or tonic effects are more persistent. The nitrate of silver is one of these; and, indeed, I believe there are few remedies of this class that act so rapidly, so energetically, and so persistently as this does.

As a form of combination for the treatment of scarlatina, I may say that that prescribed in the case referred to is generally adopted by me; and as to the *modus operandi*, I may express my belief that the nitrate of silver acts directly on the peripheral nerves, and so stimulates the whole nervous system, whilst the nitric acid gives tone to the blood (it is known to promote the formation of fibrine), and especially strengthens the kidneys; and the nitrate of potash promotes the secretion of urine and rapid elimination of the virus of the disease. In any case of scarlatina, I am of opinion that we cannot begin to assist nature too soon, by means of baths, with or without mustard, the internal remedies to which I have just alluded, and such others as specialities of cases may render necessary. The throat-affection, I believe, best met by administering sulphurous acid spray, and at the same time the system must be well supported with food. Were such treatment adopted, I believe we should hear much less of scarlatina dropsy or any of the other

* Read before the Reading Pathological Society.

frequent sequelæ of the complaint. I have not touched upon the treatment of the malignant form of the disease with nitrate of silver, because it appears to me that when the system is so charged with the virus, as then occurs (so that an individual may be carried off within twenty-four hours), it is almost hopeless to expect any remedy taken by the mouth to be beneficial, and for this reason—that the absorbents on the surface of the mucous membrane are in such a state of paralysis that remedies cannot be absorbed. I do not think, however, that in the earlier stages of such cases we ought to be without hope so long as we have mustard and hot water, and the hypodermic syringe with atropine and liquor ammoniæ at our command; and it may be that at no far distant day, some remedy having a very decided action on the virus of scarlatina may be discovered, which, injected subcutaneously, or taken into the lungs in the act of respiration, may act as a charm in destroying the effects of it on the blood.

I may add that, upon taxing my memory very closely, I cannot remember a single case of dropsy succeeding scarlatina treated upon the above principle, that did not yield, provided such cases had not previously been depressed by active purgation, or some other remedy of an equally lowering nature.

CLINICAL NOTES.

(Reported from the Practice of Dr. WILKS, at Guy's Hospital.)

VIII.—CHOREA.

THE following case was reported by Mr. Murphy.

Charlotte P., aged 17, was admitted on March 16th, 1870, with chorea. She had always had good health; never had rheumatism. Four months ago, a brother of the patient's died. She was a good deal alarmed at the sight of the body, and was afraid to sleep in the house until after the funeral: after this she was observed to be silly and knock herself about; she would fall down whilst walking and strike herself against the furniture. During the three weeks before admission, she became rapidly worse, and could only talk with difficulty. She had been in a country infirmary, and was said to have been discharged incurable. She was a well-developed girl; had choreic movements of all parts of the body, the limbs being thrown about. She was scarcely able to articulate, and her answers were foolish and without reference to the question asked. She was quite unable to stand. The heart-sounds were normal. She was ordered two drachms of the succus conii four times a day, and to have good living. She continued this treatment for a fortnight. For a few days she appeared somewhat better; she then became worse, and the pulse reduced to 56. At the end of the fortnight, sulphate of zinc was ordered in grain-doses, to be increased every third day; good living, with wine, as before. In about a week she was evidently improving, and then gradually got better, gaining strength and the movements less; and at the present time is able to walk about the ward.

Chorea is a very common disease, and several cases are always in the hospital. Dr. Wilks would therefore give the result of his experience. Having seen a host of remedies given, he was anxious to watch the disease unaffected by any drug; and he had observed that there was always a tendency for the symptoms to abate soon after admission to the hospital. He had placed the fact beyond all doubt by taking cases into the wards and administering no medicine. Some of the most striking results were seen in those who had been out-patients and had taken medicines, but, daily growing worse, were at last admitted within the building. Such children often rapidly recovered; and he attributed the change to their withdrawal from all those surrounding circumstances which were fostering the complaint at home, and to their being placed under moral control, and to the advantages of good living. Such instances might be mentioned without number; but of late there was the case of a girl who was so bad that she was obliged to be protected by sideboards to the bed, but who was well in a month; also the case of another girl who had been under a very intelligent practitioner for a great many months and nothing had been found of service; every medicine which had been proposed for the complaint had been administered, as well as every external remedy, but all of no avail. There was no other medicine left for trial; she was therefore simply placed in bed and ordered good living. She began slowly to recover. Having said so much, Dr. Wilks wished to declare his belief in the great value of tonics, and at the same time in the inutility of all those medicines which have a physiological action on the nervous system. He regarded chorea as a disease of debility, where the cerebro-spinal centres were weakened, and where restoration could be accomplished only by time, good living, and tonics. Thus although in many cases recovery took place as rapidly

as could be where no medicines were given, yet in many the cure was expedited by the use of tonic remedies. These were the well-known nervine metallic tonics, as zinc, iron, and arsenic. It was well known that the late Dr. Elliotson obtained deserved repute by the success with which he administered the hydrated oxide of iron: this and the sulphate of zinc in increasing doses were the usual remedies at Guy's Hospital. The late Dr. Hughes having an opinion that there was often gastrointestinal derangement, was in the habit of ordering a draught composed of wine in which rhubarb had been steeped, three times a day. Now, since it would appear from a superficial view of a complaint where there is constant excitement of the nervous system that a sedative would be the appropriate remedy, it is not to be wondered at that there are those in the profession who are always seeking for some drug which will at once cure the complaint. Now from what has been said of the nature of the disease this is most unlikely or even impossible, and thus no surprise need be experienced at the complete failure of such remedies as opium or chloroform. Such medicines will quiet the system for a time, but as soon as their effects are passed off the symptoms return; seeing that the cause, being a chronic one, remains. It is much the same thing as rendering a madman insensible by opium, by which you merely neutralise the effects of the complaint without combating it. With these views and with this experience, Dr. Wilks admitted his incredulity with respect to conium: as, however, it had been so much vaunted, he had used it largely and fairly, but with no very favourable result. In very many cases he had changed it for the older and long approved remedies, when an improvement at once commenced. He warned his class against an error into which many of his pupils fell—that a chorea patient was necessarily better because he was quieter. The child in the first instance had slight irregular movements; subsequently these became more violent, and the patient was unable to stand; then not infrequently the limbs became utterly powerless, whilst the movements became less. He had many cases of children who, after violent chorea, lay perfectly quiet in bed, but were almost completely paralysed in every part of the body. One of the best cases of relief by conium which had been shown him was the case of a girl who, a few days after taking the drug, became quiet, but although quiet she could not move a limb. Now this condition is often a later stage of the disorder, and does not necessarily show improvement. Even had it been produced by the conium and a condition to be sought for, it was evident that there was need then of the class of medicines which had been advocated; for, probably, no one would recommend conium in choreal paralysis. A patient with chorea cannot be said to be better unless he is stronger at the same time as the movements cease. It may be observed that in most of the published cases of cure by conium, the disease had run a very ordinary course. Dr. Wilks therefore advised his pupils when they had a case of chorea, to remove it if possible from the place where the complaint originated, then to give good living and tonic medicines of the kind indicated. The complaint being a chronic one of debility, they must remove the child from all those conditions which tend to prolong it, and then adopt all the well-known means to restore the tone of the nervous system.

OBSTETRIC MEMORANDA.

A CASE OF ACEPHALOUS MONSTER.

By W. T. GREENE, M.B., Old Kent Road.

ON the 1st of July, 1870, I was called to attend Mrs. M., in labour with her fifth child. On my arrival, I found the membranes ruptured, and the face presenting. Everything went on satisfactorily; and the child, a large fat one, was born after a few pains, entirely destitute of brain and skull, with the exception of the basilar and two condyloid portions of the occipital bone. The eyes were large, round, and prominent, but without optic nerves; the spinal cord terminated in a rounded extremity about the size of a hazel-nut, just within the foramen magnum; all the other organs of the body were perfect and fully developed, with the exception of the testicles, which were altogether wanting. The child was not weighed, but I should think it would have turned the scale at ten pounds. It was still-born.

It is remarkable that this was the third time the woman had given birth to similar monsters—her first, third, and fifth. The second and fourth, now living, are perfect and healthy children, girl and boy. She attributes the deformity of her first-born to having been frightened by a bull, and clasping her hands together at the back of her head; that of the others, to falls, in which the occiput came severely into contact with the ground—a series, to say the least, of curious coincidences.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN
THE HOSPITALS OF GREAT BRITAIN.

UNIVERSITY COLLEGE HOSPITAL.

RUPTURE OF THE FEMORAL ARTERY BY A CART-WHEEL, WITHOUT
FRACTURE OF BONE: AMPUTATION: DEATH.

(Under the care of Mr. MARSHALL.)

FOR the following notes we are indebted to Mr. A. Shewen, House-Surgeon.

C. L., aged 50, was driving a two-wheeled cart loaded with manure down a steep incline, when it overpowered the horse; the shaft, glancing off a post, knocked down the carter, and one of the wheels passed over his thigh. Half an hour afterwards, about 4.30 P.M., the patient was brought to the hospital in a state of extreme collapse. The right leg was much swollen, and very tense to above the middle of the thigh. There was loss of sensation and motion in the foot, which was cold; and no pulsation could be felt in the dorsal or posterior tibial arteries. The course of the wheel was indicated by a few slight abrasions obliquely downwards over the front of the thigh; but there was scarcely any visible bruising, and the bone was uninjured. As the patient was very weak, Mr. Marshall determined to wait till he had somewhat rallied, and to be guided by the progress of the case. The patient was therefore put to bed, with the limb raised; hot bottles were applied, and a sedative draught given. Next morning, the patient was sensible; the pulse was soft and jerking, 92. The limb was very livid. There was no increase in the circumference, but the extravasation had extended somewhat higher on the inner side. No pulsation was felt, or *bruit* heard, in any part of the thigh. There was a slight appearance of vesication about the sole of the foot. As there was no improvement in the limb, but the contrary, Mr. Marshall strongly advised the patient to submit to its removal. It was accordingly amputated about two inches below the trochanters; but the patient gradually sank, and died soon after the completion of the operation.

On dissecting the limb, all the intermuscular septa were found distended with clots. On the inner side of the limb, above the popliteal space, was a large pulpy cavity. The muscles were crushed and stripped off the bone for about three inches. The femoral artery and vein were both torn across in this cavity; both were plugged at each end with a firm coagulum. The artery was much contracted for two inches above the rupture, and the torn end nearly closed. The sciatic nerve was quite entire. The artery was atheromatous, and slightly calcified here and there.

SKIN DEPARTMENT.

(Under the care of Dr. TILBURY FOX.)

Tinea Circinata of the Hand.—A youth, aged 12, presented himself on June 14th with a large circular patch of *tinea circinata*, about three inches in diameter (ringworm of the general surface), involving part of the front of the wrist and part of the palm of the hand; and it was remarkable in this respect, that, whereas that portion of the disease about the wrist itself had the ordinary characters of *tinea circinata*, viz., a herpetic edge, and a slightly furfuraceous but pale centre, that seated at the palm had an appearance of slight psoriasis, presenting the appearance of a peeling of the cuticle, rather than anything else; and the resemblance to psoriasis was all the more distinctly shown by covering over the part of the disease on the wrist. Dr. Fox remarked that he had elsewhere described a species of erythema as occurring on the hands and fingers, the skin becoming red "in little circular spots, from which the epidermis peels off by a centrifugal death, as it were, leaving behind a red dry surface, marked by circular ridges of what appeared to be normal papillæ; the disease looking like the death of the epidermis, between which is seen the reddened derma, marked by circular ridges of prominent papillæ." He had come to regard these cases of disease as parasitic, and examples of *tinea circinata* modified on account of the difference of structure of the skin or palmar surface of the hand. The parasite (*trichophyton*) disturbed the epithelial formation, inducing peeling, but did not give rise to an herpetic eruption or serous effusion beneath it. The difference in aspect of the two portions of the same batch of disease in the present case proved that the aspect of *tinea circinata* varied when it attacked the palmar surface of the hand. It differed from psoriasis in the absence of any thickening

or heaping up of epithelial scales, or stasis in the vessels of the papillæ. When the epidermis simply peeled off in circular patches about the palmar aspect of the hand, the disease was likely to be parasitic.

TUNBRIDGE WELLS INFIRMARY.

DIFFUSE ANEURISM OF THE ABDOMINAL AORTA: DEATH BY
ULCERATION THROUGH THE DIAPHRAGM AND HÆMOR-
RHAGE INTO THE LEFT THORAX.

(Under the care of Dr. WARDELL.)

J. J., aged 38, a bricklayer, was admitted into the hospital May 2nd, 1870. In August last, he was first attended by Dr. De Havilland Hall, the house-surgeon, as an out-patient. He then complained of lumbar pains extending down the left thigh and into the leg. He also complained of some aching pains in the thorax; but these were far less urgent than the pains in the back and left lower limb. Various remedies were tried, but they gave not more than temporary relief; and he continued to lose flesh and decline in strength. In the spring, his malady seemed to increase, and it became evident that he laboured under some grave disease.

On admission, he had an anæmic, cachectic appearance; and the facial aspect was suggestive of malignant disease. He had been a hard-working man, and on two or three occasions he had received injuries and been severely contused. Between two and three years ago, he was partially buried by a quantity of earth which fell upon him when he was digging. About eighteen months prior to his coming into the Infirmary, he began to have grinding dull pains in the back, which were attributed to lumbago. On examination of the chest, no morbid conditions were detected by auscultation or percussion. The liver-dulness was normal. No tumour could be felt, nor did he at any part complain of pain on pressure. The tongue was moist and tolerably clean; the bowels were inclined to costiveness. The urine was passed in ordinary quantity, and the usual tests gave no evidence of morbid products. The pulse was 120, and somewhat sharp beneath the finger. He was treated with opiates, mild laxatives, cod-liver oil, and the iodide of potassium in a bitter infusion; and an external application, consisting of belladonna, opium, chloroform, and the linimentum camphoræ, was night and morning painted over the loins, which for a time gave relief. He had wine and a nourishing diet. He became worse, and the facial indications of suffering became more marked. After he had been about three weeks in the hospital, a swelling began to appear in the left back. On the morning of the 30th, he was last carefully examined. The tumour was now six inches by five; and it seemed to project about a couple of inches from the surface, its greatest depth being in the centre. Towards the circumference it became thinner, until its margins were lost in the subcutaneous tissues. There was no pointing, nor any discoloration, nor yet any throbbing; nor had there been rigors. It was elastic on manipulation. On placing the flat hand upon it, slight pulsation could be felt; and, on mediate auscultation, an ill-pronounced but distant *bruit* could be heard. It was bounded by the latero-posterior thoracic border, the quadratus lumborum, and the crest of the ilium. He complained of considerable pain in the left groin, which was continuous down the limb. Auscultation at this date, as before, discovered no cardiac disease; but now there was great dulness on percussion in the lower third of the left thorax; and at this part the breath-sound was weak and partly abolished. The pulse was 120, and intermitted. In the afternoon of this day (30th), he became more and more exhausted; the features grew paler and more sunken, when he gradually expired, being conscious to the close.

The autopsy was made by Dr. Hall, eighteen hours after death. On opening the chest, a couple of pints of serum were taken out of the left side. On the removal of the left lung, four or five pounds of moulded bloody coagula were removed. On sponging out the cavity, and making a careful examination, a hole which would admit the little finger, existed in the diaphragm, from which, on pressing the place of tumour externally, dark blood flowed. The finger readily passed into a large sacculated pouch. The right lung and heart were next removed, and no pulmonary or cardiac disease was discovered. The abdominal viscera were then taken out, none of which gave the least appearance of morbid change. In the left side, below the diaphragm, beneath the peritoneum, occupying the lumbar space, an irregularly defined enlargement was revealed. On making a free incision from the hole in the diaphragm, a diffuse aneurismal sac, which would hold a pint of fluid, was found; it was connected with the descending aorta. The laminæ had formed walls at some points an inch in thickness. The inner surface of this sac was semi-organised, rugose, and with moderate pressure could be broken up by the fingers. It contained some coagula resembling those formed in the left chest. Blood had evidently become extra-

vasated about the parts of lesion, and hence the sudden appearance of the pulsating tumour in the back. The—and probably gradual—giving way of the diaphragm would account for the manner in which death occurred. The first, second, and third lumbar vertebræ were eroded with caries; the intercostal cartilages being little affected, as they seldom are in such cases.

It is possible, and even probable, that the accidents to which this man had been subject were the remote cause of the tumour. Most likely the coats of this great vessel had received some injury, as there were no appearances of atheroma; and, again, atheromatous deposits are rather the heterologous changes of more advanced life. The pressure which this mass would necessarily produce upon the lumbar and sacral nerves, and its absorptive effect upon the vertebræ, fully explained the persistent and almost irremediable pains under which he had so long suffered.

ABSTRACTS OF LECTURES ON HYGIENE.

Delivered at University College, London.

By W. H. CORFIELD, M.A., M.B.Oxon., M.R.C.P.London,
Professor of Hygiene.

LECTURE I.

In the following course, a great deal of time will be devoted to the scientific principles which form the basis of the study of hygiene, while the more practical part will be introduced by way of illustration, so that the knowledge thus imparted will rest on sound, well-arranged principles, and not be a mere confused mass of facts.

Such divisions of our subject matter as are well explained in the various hand-books with which you are acquainted will not receive so much attention here, though they will none the less be required in the terminal examination. We have so much new matter to run over, that I must leave you to the books for such things as are well explained therein. According to our programme, we have, first, to consider the "subject" of hygiene; that is to say, man: man individually, with his varieties of constitution, temperaments, age, sex, habits, idiosyncracies, professions, liabilities to particular diseases (or hereditary tendencies) and states of convalescence; man also collectively, as races, nations, families.

First, then, in considering man as an individual being, we start at once with difficulties. What is the standard of health? In the *Dictionary of the French Academy*, I find "La santé—l'état de celui qui est sain"; and really, considering the latitude of the limits within which an individual may be considered healthy, it would be difficult to give a better definition. It is much easier to define diseases; and if one of these exists, the individual ceases to be in a healthy state. Now just at this point we meet with certain classic terms which require to be explained: constitution, temperament, idiosyncrasy.

The *constitution* may be said to be the foundation of the nature of the individual; it is the *resultant* of all the physiological actions of the economy, and is of course strong or weak according to the force and direction of its components, which are hereditary tendencies, height, muscular development, digestive action, pulmonary capacity, etc. It is only to a certain extent inherent in the individual, being continually altered by habits.

Temperament may be said to be due to the predominance of one of the general systems of the economy over the others. We shall see that these divisions rest on no scientific basis whatever, and rather tend to confuse than to enlighten us. We have, then, the *sanguine* temperament, so called from its being characterised by a supposed excess of blood, especially of red corpuscles, which seems rather like talking of an excess of life. Such people are said to have strong hearts and lungs; diseases with them are frank, with pronounced symptoms and acute forms, seldom becoming chronic; they cure easily, and the convalescence is prompt; in fact, they are typically healthy people as a general rule.

In the *nervous* temperament, the nervous system preponderates over the other general systems. Read the description of this temperament and you will see what it really is—a state of chronic superexcitability of the nervous system. The fact is that, in these days of railways and telegraphs, it is a diseased state that is so widely spread and so often exhibited from early childhood that we shut our eyes to it as a disease, call it a temperament, do not study the means for its prevention or cure, and so make little or no opposition to one of the most potent of the causes of the fearful increase in the number of inmates of our lunatic asylums. What is it in the way of an argument to say that

such proclivity is shown in childhood? Is a deaf and dumb boy any the less diseased because he was born so? Is it a strange thing that a child should be like his father?

The *lymphatic* temperament includes people who come of a scrofulous stock, but whom it would not do to call scrofulous. Combine the fact that people of this temperament are said to be especially subject to scrofulous diseases, with the opinion of Villemin, who went so far as to say that the scrofulous state itself was not a disease, and you will see that my opinion is not without foundation.

The *bilious* or *melancholic* temperament has been wisely rejected by some authors, as not being due to the predominance of one of the general systems of the economy. Its definition, as usually given, would include all Italians and Spaniards, and most Frenchmen: the absurdity of this is manifest.

We have yet another temperament. As the great majority of individuals could not be brought under either of the above divisions, it was found necessary to invent one to include this large and varied residue, and so the *mixed* temperament was devised. And here we have a good example of the way in which pseudo-workers in science proceed. These temperaments not having proceeded from facts, but being, as Mantegazza says, "an artificial abstraction of our thought", it was thought necessary to find some scientific basis on which to rest them, and so three means have been afforded to the medical practitioner by which he may diagnose them. We must ascertain (1) the composition of the blood of the patient, (2) the state of the nervous system, (3) the relation existing between the circulatory and nervous systems. Compare this nonsense with the common-sense requisitions of Galen: (1) a general glance at the patient, (2) the external examination of organs, (3) the state of the pulse; and as practical men choose between them.

Idiosyncrasy is defined as "the stamp of the individual"; a special or individual variety of the organism due to the predominance of one organ or of one whole apparatus of the economy. It is illustrated by the various actions of a draught, of exposure to wet, of a march through marshes, etc., on different persons. But have we no scientific means by which we can diagnose a healthy state? We have comparative ones. We can, by taking into account the age and sex of the person, and determining the force that he can exercise; the state of the pulse; the lung capacity, and its relation with the weight and height; the amount of aliment that he can digest, and the amount of residues—pulmonary, cutaneous, renal, faecal—determine whether in any of these particulars he is far from the normal standard: into this account we must also bring the existence of any hereditary tendencies or of any previously incurred diseases.

We now come to *ages*. The influence of age on disease was insisted on by Hippocrates. The foetal state is not usually considered as one of the ages of man, although it obviously is one: the great danger is of course from abortion. Then Depaul has conclusively shown that bad hygienic conditions of the mother, as regards nutrition, atmosphere, etc., affect very considerably the foetus; and also that blood-letting practised on pregnant women retards the development of the offspring.

The first ten days of life constitute the period in which most lives are lost: the great danger is from the *external cold*, the evaporating surface exposed by an infant being so very much greater in proportion to its bulk than it is in the case of grown-up persons. The next great enemy of the neonati is insufficiency in quantity, and especially indifferent quality, of their nourishment. Mother's milk is the natural food. In some cases the mother cannot suckle her child, as when the nipples are absent, or extremely long or short; in others she must not, as in cases of cancer, tubercle, or syphilis; nor even when there is fissure of the nipple, before it is cured; nor in infectious fevers. With these exceptions, it is her duty to do so. The influence of suckling on tubercle has been much disputed, but is undoubtedly bad: tubercle may even be brought on by this drain on the system in weakly mothers—especially if the woman have again become pregnant while still suckling her former child. If the milk be in too large quantity, or too rich, it may cause colic, diarrhoea, etc.; then more time should be left between the applications of the child to the nipple; thus it has more time to digest, and the milk becomes more watery while in the galactophorous canals.

Nurses must not change abruptly their mode of living, nor indulge in excesses. Do not forbid sexual intercourse to nurses; the prohibition is usually disregarded; and, if rigorously regarded, causes in women of strong sexual feelings nervous disturbances, which influence the secretion of milk and its quality. A nurse should not be changed because her monthly courses come on; the change of the source of milk will probably be more injurious to the child than the somewhat questionable influence of the menstrual period. Donne's rule is that the child should be allowed to suck at frequent intervals, but not continually, about once every two hours as a rule; but it should not be awakened for it.

The various forms of diarrhoea of children are mostly due to their not being fed exclusively in the natural way. If, however, they have been so fed, something is probably wrong with the milk, and the nurse should be changed.

In cases of choliform enteritis, when milk is often rejected, give raw meat, chopped up very fine, which will frequently effect a cure.

Ophthalmia neonatorum usually appears on the third day after birth. It is both contagious and epidemic. Let me advise theorists who dispute this latter point not to let the children of their patients remain near one that has purulent ophthalmia of infants: it is one of those contagious purulent infections of which some are manifested in the puerperal state by women, some by infants, and some by both; in fact, in the puerperal state there is in both mother and child a general tendency to the formation of pus; thus we have puerperal fever, puerperal peritonitis—which latter may be shared by the child also; pleurisy becomes empyema; ophthalmia is purulent, etc.

In the period of lactation, after the first ten days we have a host of diseases; but the great predisposer is bad or insufficient nutrition. "Children do not well support a fast", as Hippocrates truly said, and you *must* feed them. In the hospitals for diseases of children, I am sure that I have seen more good done by the administration of raw meat than by anything else, or than by the whole array of medicines: and here what Rollet of Lyons said of hygiene is most markedly true, that "while medicine cures individuals, hygiene saves masses." The bodies of children should be covered moderately, their heads less; they should have rings to chew, or they will bite their fingers; above all things, they should not be kept in malarious districts—they always get a bad form of malarious fever.

During this period, children are especially liable to cephalic hyperæmia, apoplexy of the meninges, tubercles in the same locality, hydrocephalus, chorea, epileptic convulsions.

In the next period, from weaning to puberty, hæmorrhages are rare; incontinence of urine frequent; sediment is often formed and not swept out of the bladder. Stone is very common in children. Civiale says that half the calculous people are children. Contagious diseases are to be encountered: it is to be wished that the Compulsory Vaccination Act were more completely enforced. With regard to measles, let the children take it if the character of the epidemic be mild, as it is dangerous to catch the disease in after-life. Note that in hospitals children take a bad form of this fever and of scarlatina.

Croup and diphtheria, tracheo-bronchitis, and lobular pneumonia, and especially whooping-cough, are common at this period; so is typhoid fever; rickets, from bad nourishment; scrofula—which is often overcome at puberty, though still communicable to offspring (Bouchut)—and tubercle (especially of the brain and mesentery), from insufficient nourishment and exercise, especially in the large towns. These are diseases due to the "misère physiologique."

From puberty to manhood, we have epistaxis common in man, uterine hæmorrhage in woman; tubercles, especially in lungs; contagious diseases; diseases due to exposure—rheumatism, bronchitis, etc.; nervous diseases; chlorosis, the results of venereal excesses, syphilis, gonorrhoea, etc. At the close of this period, we have local congestions—especially towards the rectum—and piles are the result; they are due often to continued constipation, from want of exercise.

After manhood, the diseases tend to become chronic: we have heart-disease, chronic rheumatism, ascites from cirrhosis of the liver, displacements of the uterus and ovarian disease, strictures of the urethra and enlarged prostate, diabetes, Bright's disease, asthma, dysentery, etc.; in fact, the results of habits begin to show themselves.

After the critical period, hæmorrhages are very common; the menstrual flow in women ceases; fibroid tumours of the uterus are common; the capacity of the lungs is diminished; cancer is very common, tubercle very rare; diseases which had disappeared reappear; the results of intermittent fever show themselves; diabetes, gout, heart-disease, are common. Excitement—especially venereal—should be avoided; the mode of living should be simple, and alcohol not indulged in; the action of the skin should be encouraged by baths and moderate exercise; in cases of weakness, tonics should be given.

In commencing old age, cold should be especially avoided; the old man finds a difficulty in keeping up his animal heat, on account of the lessened oxydation of his blood from his diminished pulmonary capacity; the excretions must be regulated, and the food divided carefully (M. Bouchardat attempts to trace the frequency of cancers of the stomach in men to want of this precaution). Among all the numerous diseases of this period, I must mention especially bronchitis, due to the excess of work thrown on the bronchi by the insufficient action of the skin. A deposition of phosphate of lime occurs in many organs, especially in the coats of the arteries; atheroma of arteries, stagnation of the circulation, lesions of the heart, embolies of the brain, gangrene of limbs from

coagulation of blood in the vessels, etc., are very common, and so are hernias from looseness of the abdominal walls. In decrepit old age, heart-disease is the great agent of death. The two periods of life which perhaps interest the hygienist most are infancy and old age; on the one hand to prevent diseases and death, and, on the other, to act on chronic diseases.

MUSEUM NOTES.

ROYAL COLLEGE OF SURGEONS.

WE continue from page 38 our notes from some of the more interesting specimens which have been added during the past year to our great national museum. The collection of them, which was on display on the day of election of Council, and for a week afterwards, contained many very valuable preparations. Amongst them, the following appeared to us worthy of special illustration.

3071 H. A purchased specimen, which was dug up in a field, shows a very large exostosis on the bones of the fore-leg ("cannon bone" and "long pastern bone") of a horse. It is a common form of disease, but has advanced to a very unusual extent. The exostoses are numerous, and resemble closely masses of coral. Many of them



are of small size, and pedunculated. At the lower part they coalesce into one enormous mass, part of which grows from the metacarpal bone and part from the first phalanx; and these, growing across the joint, effect a complete ankylosis. The cause of this remarkable disease is well worth careful investigation, since the outgrowths are numerous and at distant parts. When similar exostoses are met with in the human subject, they are met with on many different bones, and arranged with more or less of symmetry. They are most usually met with in young subjects. It would be interesting to know whether these facts are true also of the disease as it occurs in the lower animals.

Dendritic Growths in Uterine Appendages.—The specimen delineated in our woodcut consists of the uterus and its appendages. The whole of the broad ligaments, together with the ovaries, are covered with large masses of cauliflower or dendritic growths. These growths com-



pletely conceal the structures upon which they occur. The uterus is almost free from them. The specimen is unique so far as the College

collection shows, and there can be no doubt that it illustrates an extremely rare form of disease. Unfortunately, no history is obtainable. The specimen was presented to the College by a gentleman who found it amongst other miscellaneous treasures which he obtained by the purchase of a practice together with the surgery and its contents. His predecessor was dead.

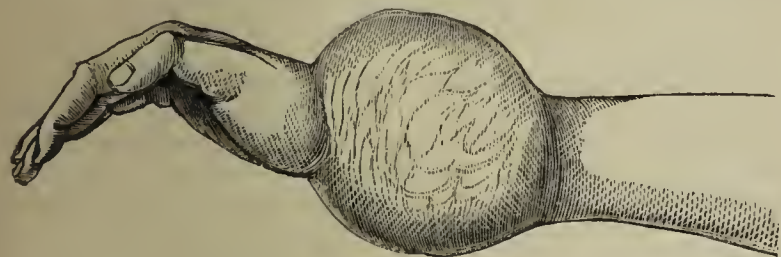
Fracture of Carpal end of Radius.—The rarity of recent specimens of what is called Colles' fracture, induces us to give a woodcut of a valuable preparation which Mr. Busk has this year presented. The fragments are partially united, but the condition of the fracture is still not in the least concealed. The carpal fragment has been detached obliquely, and displaced backwards and to the radial border. It has



been displaced so much that the sharp extremity of the upper fragment projects below the level of the articular surface. This sharp end of bone is well shown in the woodcut, close to the radial aspect of the ulna. The oblique displacement of the carpal fragment can also easily be appreciated. The carpal fragment shows several lines of vertical fracture. The extremity of the ulna is also fissured. The specimen is valuable as an illustration of what we believe to be the fact, that scarcely any two cases of what are called Colles' fracture are exactly alike, and that to describe them as being uniformly transverse and at one definite position is a great mistake. That there should be more or less comminution of the lower fragment is, we believe, very common. We cannot but regret that no history is appended to Mr. Busk's specimen, and this regret must extend to a not inconsiderable proportion of those under notice.

Excision of large Tumour of Radius.—Mr. Hancock has presented a very important illustration of conservative surgery. It consists of the lower fourth of a radius very greatly enlarged by a cystic and erectile growth, and which, together with the adjacent portion of the ulna, was

Before the operation.



After the operation.

excised with a very satisfactory result. The patient (a young lady) now possesses, it is stated, a very useful hand. The appearance presented by her forearm, before and after the operation, is well shown by the accompanying woodcuts, which are taken from Mr. Hancock's casts.

Case of Ligature of Subclavian and Carotid Arteries.—Undoubtedly

the most interesting addition to the College collection made during the year is the preparation from the woman in whom Mr. Heath tied the carotid and subclavian arteries for supposed innominate aneurism. This case has already been published in detail. The preparation comprises the upper part of the trunk with the neck and part of the head. It is a model of patience and skill in dissection, and has perhaps rarely been equalled in the accuracy and beauty with which the parts are displayed. It must have cost Mr. Moseley many weeks of labour. The aneurism was of the aorta, not of the innominate; but there appears reason to think that the operation may have had some influence in retarding its increase.

REVIEWS AND NOTICES.

A SYSTEM OF SURGERY: Theoretical and Practical; in Treatises by Various Authors. Edited by T. HOLMES, M.A. Cantab., F.R.C.S., Surgeon to St. George's Hospital, etc. Vol. III. Second Edition. London, 1870.

THE value of the different treatises contained in this volume has been greatly enhanced by the addition of the illustrations. Beyond this, there are no very notable alterations. The whole bears traces of very careful revision.

The first article, on Diseases of the Eye, by Mr. Dixon, now consists of 256 pages, is illustrated by a fair sprinkling of woodcuts, and is embellished by the addition of three lithographic plates of views of the fundus of the eye, as seen with the ophthalmoscope, from drawings by Burgess. They are remarkably well done, and have the merit of being original ones, though they are so few as to give, of necessity, a very imperfect indication of the varied changes to be made out in diseased eyes. The figures of syphilitic choroiditis (Fig. 1, Plate 2) and of retinitis pigmentosa (Fig. 2) are very truthful copies from nature.

The article on Diseases of the Ear is again from the pen of Mr. Hinton, and has been brought up to the present date.

Diseases of the Veins, by Mr. Callender, remains without much alteration.

The article on Diseases of the Arteries generally was revised by Mr. Moore before his death. The subject of Aneurism is now in the hands of Mr. Holmes himself. A number of cases, which bear on the different divisions of the subject, have been added, in the form of tables or narratives. We may note the table of cases of distal ligature for aneurisms at the root of the neck, compiled by Mr. Heath; and the narrative of a case of ligature of the first part of the subclavian, in an appendix at the end of the essay.

Affections of the Muscular System have been treated by Dr. Lockhart Clarke, in the place of Mr. Tatum.

The article on Orthopædic Surgery, by Dr. Little, has been made much more instructive and useful by the addition of woodcuts illustrating some of the chief deformities and of the apparatus necessary for their cure. The letter-press remains for the most part as before, but seems to have been carefully re-edited.

The essay on Diseases of the Bones is written by Mr. Holmes, and is illustrated by about twenty woodcuts, which form a considerable addition to its value, several of them being of great interest. The figures 186 and 187 should be reversed, in order to represent the views described.

NOTES ON BOOKS.

Eczema: its Nature and Treatment. By TILBURY FOX, M.D. Renshaw. London: 1870.—This pamphlet contains the Lettsomian Lectures for 1869-70, delivered by Dr. Fox before the Medical Society. They have been in great part already published in the *Lancet*. The author first of all points out certain pernicious methods of observing and describing cutaneous diseases in use amongst writers on modern dermatology. He then defends Willan most warmly against writers who have not, in his opinion, rightly represented Willan's views, and have therefore failed to render honour where honour was due. Dr. Fox thinks that the classification of eczema into the three varieties, simplex, rubrum, and impetiginodes, is still the best. In his opinion, the most trustworthy characteristic of eczema is the "discharge" attending it. Eczema passes through certain stages, and its general description should be taken from a well developed case. Each of the three varieties mentioned has, more or less perfectly marked, its stage of erythema, papulation, vesiculation, pustulation, and squamation. These stages ought not to be regarded as constituting clinical varieties of eczema. In the third lecture, principles of treatment are laid down.

Pleuro-Pneumonia and its Treatment by Inoculation. By ALEXANDER BRUCE, Chief Inspector of Stock for New South Wales.—We notice this lengthy Government Report, chiefly to say that it does not seem to throw any new light on the subject of which it treats. The balance of opinion in Australia is strongly in favour of inoculation; but we cannot see that the methods which have been adopted there for testing its real efficacy are free from the numerous fallacies which always beset the investigation of a technical subject by persons for the most part unskilled in it. To mention one such source of error, we would notice that, in estimating the preventive power of inoculation, no allowance is made for cattle suffering from mild attacks of pleuro-pneumonia. The Report is valuable as indicating the state of agricultural opinion in Australia with reference to legislation on the subject, but for comparatively little besides.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Monday, 25th July, 1870.

1. *Decrease in Mortality from Small-pox.*—2. *Latest Mortality Returns in London and Paris.*—3. *Society for the Medical Education of Women.*—4. *Medical Volunteers to the War.*—5. *Contributions for the Warriors Wounded and Unwounded.*—6. *Aggregation or Non-aggregation of the Sick and Wounded.*—7. *Postscript.*

DECREASE IN MORTALITY FROM SMALL-POX.—There is again a slight decrease in the mortality from small-pox. During the week ending Friday, 22nd July, the number of deaths returned was 215, being 10 less than during the preceding week. The returns for the last four weeks stand thus:—

Week end. July 1.	Week end. July 8.	Week end July 15.	Week end. July 22.
210	267	225	215.

LATEST MORTALITY RETURNS IN LONDON AND PARIS.—Subjoined is a condensed view of the mortuary statistics of London and Paris for the latest weeks:—

Cause of Death.	Paris : Week ending 22d July.	London : Week ending July 15.
Small-pox	215	11
Scarlatina.....	15	85
Measles	19	31
Typhoid Fever	20	18
Typhus.....	—	14
Erysipelas	7	7
Bronchitis	39	61
Pneumonia	48	34
Diarrhoea	69	259
Dysentery	3	4
Cholera	9	22
Membranous Sore-throat ...	6	7
Croup	3	10
Puerperal Affections	6	9
Other causes	701	926

Total	1160	1498
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SOCIETY FOR THE MEDICAL EDUCATION OF WOMEN.—In my last letter (p. 91), I referred to the movement headed by M. Nélaton and others to found a medical school for women. This movement may be said to have succeeded so far as the establishment of the new institution is concerned, for the programme has been published, and in it the Empress appears as "Présidente d'honneur". The financial organisation is that of a joint-stock company. I subjoin a translation of the entire prospectus, which is headed "Société pour l'Instruction Médicale des Femmes."

"1. An association for the medical instruction of women has been constituted at Paris under the patronage of the Empress, who is honorary president of the association. By this association, a free school of medicine (école libre de médecine) has been founded.

"2. The association consists of original members (membres fondateurs) who have contributed not less than 200 francs, and annual subscribers of 20 francs. Women may be members.

"3. The instruction given in the school is theoretical and practical. The pupils will attend the lectures and examinations announced in the programme; and, in addition—*a.* They will attend extra lectures and demonstrations giving additional development to the subjects treated by the professors; *b.* They will write out their notes of the lectures. *c.* They

will be frequently examined by tutors upon the subjects treated in the lectures. *d.* They will dissect, and perform chemical and pharmaceutical manipulations. *e.* They will perform the minor surgical operations.

"4. The pupils will attend hospitals appointed for them, where they will study practical medicine, and become familiar with the treatment of patients. Within the hospitals, they will be placed in the wards of physicians and surgeons, professors of the association; and they will be specially confided to the sisters of charity attached to those services, under the paternal watchfulness of the directors of the establishments.

"5. Tutors selected from the doctors of the Faculties, or hospital internes, will give the lectures and demonstrations, examine the pupils, and correct their written exercises.

"6. Examinations will be held at the end of each year, which the pupils will have to pass before being authorised to proceed to higher studies.

"7. During the three years' curriculum, there will be given courses of instruction in the Turkish and Arabic languages, with the view of teaching the speaking of these languages to pupils who propose to practise in the countries in which they are spoken.

"8. At the end of the curriculum of study, the association will deliver a medical diploma (diplôme d'études médicales) to those who pass a satisfactory examination before a jury of professors.

"9. The school will receive two classes of pupils; viz., those who come for instruction only, and those who are day-boarders as well as students. The former will attend the theoretical and clinical courses; the latter will be received at eight in the morning and remain till five in the evening, in a house provided with studios, libraries, collections of instruments, and anatomical preparations. This house will be placed under the direction of a lady selected by the administrative board. In this house the pupils will take their meals at noon.

"10. The affairs of the society will be managed by an administrative board, consisting of five members of the committee of original contributors (comité fondateur), and five other members elected by the general body of shareholders.

"11. The administrative board will, on receiving evidence of good moral character, admit pupils, who must be at least 18 years of age, and have passed an entrance examination showing that they possess a prescribed amount of general knowledge. This board will regulate the financial affairs of the society; appoint the professors and tutors; award the bursaries and half-bursaries (bourses et demi-bourses) placed at its disposal; and order all other matters pertaining to the management of the school.

"12. The administrative board will intrust the principal direction of the school to one or two of its members.

"13. The association will supply its pupils either directly, or through public or private establishments, with all the means necessary for their studies. The expenses will be covered by the inscription fees, the money paid for board, the bursaries, and half-bursaries, the donations which constitute membership of the society, or by the gifts of benevolent individuals.

"14. The administrative board will, in the capacity of a committee of patrons, promote the interests of those pupils who leave the school with diplomas.

"15. The administrative board will annually, at a general meeting, give an account of the state of the school and the progress of the work."

The medical profession in France, except in Paris and four or five large provincial towns, is miserably remunerated, and is in a state of extreme poverty. This arises from the inadequacy of fees, the enormous increase during recent years in the expenses of living, and the excessive number of practitioners, who settle wherever there is a chance of an income being made. It is not easy to see how either the public or poor women are, in the face of this fact, to benefit by the manufactory of women-doctors, which M. Nélaton and others are trying to institute under feminine Imperial patronage. That a certain amount of apparent success may, so far as the issue of a new order of doctors is concerned, attend the enterprise, seems probable.

MEDICAL VOLUNTEERS TO THE WAR.—The number of young practitioners and medical students volunteering for the professional service in the vast armies which France is now mustering on the Prussian frontier, in the north of France, at Châlons, and elsewhere, is, from all accounts, enormous; but the requirements of the Minister of War do not yet seem satisfied. Provision is unquestionably being made on a vast scale for the possibility of wholesale mutilation of the human race such as has never occurred before.

The garde mobile (or militia) has been called out, and will soon muster 140,000 men. They require surgeons of all grades, dressers, hospitals, and ambulances. Should the war continue for a month or

two, and during that period should the Prussians advance into France, a large portion of this force will have to fight. The garde mobile, except as accepted volunteers, cannot be called upon to cross the frontier. It is for the organisation of field-hospitals and ambulances around Metz, Strasbourg, Nancy, etc., that our colleagues are at present rushing to the south; but many will likewise be required at Châlons; and not a few will, ere long, be wanted in Paris itself, for in the first instance at least the garde mobile and garde nationale will garrison the capital and occupy the fortifications which encircle it. The fortifications of Paris are now being put into a state of defensive completeness: this unpleasantly tells us that we may see much bloody surgery without going to the Rhine or the Moselle.

Besides patriotism—which has (for the time being) been successfully evoked—there are two circumstances which induce our young colleagues gladly to respond to the call of offering their professional services at this crisis. It gives a great field for medical and surgical experience; and it protects them from the risk of having to serve as common soldiers in the militia. From the subjoined official advertisement, you will perceive that all medical students, irrespective of their period of study, are invited to exchange common for professional service in the garde mobile.

“MM. les étudiants en médecine qui appartiennent aux classes de la garde nationale mobile 1865, 1866, 1867, et 1868, appelées à l'activité, et qui ont satisfait aux examens d'aptitude subis au Val-de-Grâce, sont invités à se faire inscrire, pour le service médical de la garde nationale mobile, chez M. Champouillon, médecin principal de première classe, rue du Cherche-Midi, 13.”

Students appointed to the ambulances are receiving instruction in operative surgery daily, from one to three o'clock, in the pavillions of the Ecole Pratique. This instruction is given gratuitously, and is much appreciated by the recipients.

I have learned that surgeons and senior students who can speak German—even a little German—are particularly in demand. All foreigners who wish to see the coming surgical scenes ought to make their applications for employment at once, and if possible in person, at the office at the Palais de l'Industrie in the Champs Elysées.

Many English and American young surgeons are said to have offered their professional services to the French Government; and in some cases these services have already been accepted. Mr. Edmund B. Owen, Demonstrator of Anatomy at St. Mary's Hospital, London (who has been passing the summer months in hospital studies in Paris), tells me to-day that he has just been named to ambulance duty in accordance with his request.

CONTRIBUTIONS FOR THE WARRIORS WOUNDED AND UNWOUNDED.
—A great deal of money is being raised in various ways to provide extra comforts (tobacco and brandy are those named) for the soldiers who have so suddenly taken the field; and contributions are likewise being made for the succour of the wounded, the widow, and the orphan. Many of our profession appear in the lists of donors; among others, Dr. Barth (of auscultatory celebrity), who gives 1000 francs (£40). A friend (a medical student) writes from Strasbourg to say that he has got through his examination earlier and more easily than he expected; that he has been appointed to an ambulance; and that the prize-competing students have asked that the prize-money of the year be given to those about to be wounded. “Presque tous les étudiants en état de rendre des services dans les hôpitaux et ambulances, se sont fait inscrire à l'intendance militaire. Strasbourg est une ville de pantalons rouges.”

AGGREGATION OR NON-AGGREGATION OF THE SICK AND WOUNDED.
—Action has been differently taken in respect of this momentous question. The war authorities have established a military hospital at Nancy, containing two thousand beds. To contemplate so enormous a consort of sick and wounded seems most reprehensible.

In an opposite sanitary spirit, the Minister of the Interior (Emile Martin) has issued a circular to the Préfets of the Departments on the northern and eastern frontiers, in which he points out the utility “de la dissémination des blessés et des malades sur un espace étendu”. He recommends immediate measures being taken to provide on the frontier and close to railways, provisional accommodation for the wounded, and also to have in readiness numerous small hospitals. He suggests that these “petits hôpitaux” should be established in buildings belonging to different communes, in special wooden erections, or better still, in private houses. It is suggested that the medical practitioners of the frontier country will, if need be, serve these little hospitals.

POSTSCRIPT.—Everybody here growls at the stoppage of all information as to the movements of the fleet and army. Even singing the “Marseillaise” and the “Depart” are flagging for want of news excitement. The streets are unpleasantly silent.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 30TH, 1870.

THE APPROACHING ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

OUR fellow-members are aware that the next annual meeting of the Association will be held at Newcastle-upon-Tyne, on the 9th, 10th, 11th, and 12th of August. We have pleasure in stating that we have every reason to believe that the Newcastle meeting will prove a worthy successor of the brilliant and important gatherings at Dublin, Oxford, and Leeds. Our northern brethren are animated by the best spirit, and are exerting themselves in various ways to ensure not only the success of the meeting, but also the comfort and entertainment of all who visit the Tyneside; and we apprehend that no one will fail to meet with a cordial welcome, such as the north country people justly pride themselves upon giving.

We cannot doubt that, from a scientific point of view, the coming meeting will worthily uphold the high reputation of the Association; while, as regards the entertainment and diversion of visitors, we may, without betraying the confidence reposed in us, say that considerable attention has been devoted to these important matters by the members of the Reception Committee, who, with the kindest spirit, are most anxious to do all that the peculiar resources of their locality will enable them to do.

Those who contemplate a visit to the Scottish lakes or moors will have an excellent inducement to break their journey at Newcastle, whence they may very readily go further north; or, if they wish to visit the English lakes, a short run westward will bring them into the heart of that lovely region. The grand old cathedral and city of Durham, so magnificently placed on the river Wear, will doubtless have attractions for many. The cathedral is allowed to be the purest specimen of Norman architecture, in the ecclesiastical form, in these realms. The handsome castle, now used for university purposes, will also attract archaeologists; and the ceremony of conferring honorary degrees on distinguished members of the Association will doubtless throw an air of gaiety over the place.

But for the lamented death of Lady Boyne, the noble owner of Brancepeth Castle would have entertained the Association as a body at Brancepeth during the meeting. As it is, visitors will be welcomed, and every attention shown them by Dr. Hardy and the agent, Mr. Parlington.

Within easy reach of Newcastle are Alnwick Castle, the finest baronial residence in England, and noteworthy as the home of the Percies; Warkworth Castle, a beautiful ruin, also the property of the Duke of Northumberland; Chillingham Castle, the seat of the Earl of Tankerville, where a herd of wild cattle still roam at large; Bamborough Castle and the Farne Islands, near which Grace Darling and her father performed their deed of daring; Flodden Field and Otter-

burn, the latter the scene of the battle celebrated in the ballad of Chevy Chase; and other places of interest.

Near Newcastle, too, is the river Coquet, famed for its fishing. The lovely scenery of the North Tyne, a part of the Waverley route, will amply repay a visit. To the lovers of archæology the Tyneside will afford much pleasure; for near it run Watling Street and the great Roman Wall, which ends a little to the east of Newcastle, at a place known as Wallsend. The church and chair of the Venerable Bede are at Jarrow-on-Tyne, near South Shields.

Abundant opportunities will be afforded for the inspection of the coal-mines which abound on both sides of the Tyne, and which furnish the well known staple of Newcastle. Here are also numerous manufactories which will greatly interest scientific men—notably the chemical and ordnance works.

It is rumoured that the profession in Sunderland will give a special welcome to the Association; and those interested in the manufacture of glass will be courteously received at Messrs. Hartley's works.

Finally, we may assure our fellow-members that nothing that kindly consideration and forethought can devise will be wanting to ensure their comfort and pleasure; for the high position that our esteemed President holds in Newcastle will ensure a fitting reception from the authorities of the town, while his popularity with his medical brethren will win for him the support of the profession of the district; and, aided as he is in the work of preparation by the tact, urbanity, and courteous consideration of Dr. Philipson, we think the meeting cannot fail to be successful.

THE ABANDONMENT OF THE MEDICAL BILL.

Now that the Medical Bill has been withdrawn, its friends and its opponents will be able to look more calmly into its character. Inasmuch as it has been defeated in part by the action of our Association, it is not for us to lament its overthrow. Its very incomplete character undoubtedly placed reformers in a difficult position. The Bill itself was good, but it did not go far enough. It gave to a central board the powers which all admit must of necessity be vested in some such body, but it left the organisation of that board on a most objectionable footing. It proposed to confirm the privileges possessed by certain mediæval corporations, to dignify those bodies by the title of "medical authorities", and seemingly to fasten them about the necks of the profession for ever. There is no doubt that, although it would have made amalgamation for examination purposes compulsory, yet the success of the Bill would have been a victory to the minor licensing bodies. It would have perpetuated their influence, and it would have made more distant the prospect that the profession should gain a direct voice in the matter, and become in some sense its own authority. This was the view taken by those who opposed it. If, said they, we allow this measure to pass, if we accept it as an instalment, what guarantee have we that we shall be listened to afterwards as regards our further wants. If, on the contrary, we defeat the present proposal, is it not certain that the subject must be brought forward again? The indifference of Government and its advisers as to any large measures for the reorganisation of the Medical Council was, we believe, scarcely concealed. Had the Bill been allowed to pass, it would have done so without the slightest shadow of an engagement on the part of the Executive that anything further would be attempted. It followed that those who believed reorganisation of the Council essential to the working of such a measure, had no option but to agitate for its rejection. Such was the policy adopted by our Association. Before we give more power to the Council, let us know that it is well organised; that it represents fairly the opinions of those who are the best qualified to understand the matter, and the interests of those whose interests are really concerned. Put aside your trumpety medical authorities—a considerable proportion of which can scarcely be said to have a real existence—and place the power and the responsibility in the hands of the profession itself. Such was in effect the language of those whose opposition has brought

about the withdrawal of the Bill. There can be no doubt that it is straightforward, and to a large extent reasonable. There can be equally little doubt that any future measure which may be brought forward must in some way provide an answer to the objections which have been fatal to this.

We trust, however, that there were but few who understood the matter who did not on Wednesday morning experience a pang of real regret in reading, in the list of "dropped bills", the title of that for the Amendment of the Medical Acts. It was one upon which much very meritorious labour had been expended by the medical advisers of the Privy Council, and it was one which would have done an immense deal for the consolidation of medical education. It would practically have reduced our examining boards to one for each kingdom, and it would have put an end to the disgraceful competition which has for so long existed.

HELP FOR THE SICK AND WOUNDED.

AT its sitting on Feb. 9th, 1863, the Société Générale d'Utilité publique discussed the question in accordance with the proposition of one of its members, M. Henri Dunant, whether means might not be taken "to form during a time of peace and tranquillity relief societies, whose aim should be to help the wounded in time of war, by means of volunteers, zealous, devoted, and well qualified for such a work." After full consideration by a committee, an international conference was summoned, which met in the rooms of the Athenæum at Geneva, under the presidency of M. Moynier, and the vice-presidency of his Highness Prince Henry XIII, of Reuss. The members of the conference consisted of the delegates of fourteen governments, including that of Great Britain, six delegates of different associations, seven accredited visitors, with five members of the Geneva Committee. After four days' sitting, the International Conference adopted resolutions, the chief of which were to the following effect: that "a Society be formed with the desire to give aid to wounded soldiers in all cases where the medical service shall be inadequate"; that "there shall be in every country a committee to co-operate in time of war, by all the means in its power, with the sanitary service of the army"; that "every committee shall place itself in communication with the government of its own country, in order that its offers of assistance, in case of need, be accepted"; that each society should be self-supporting and self-organised; that they should, in time of peace, utilise the time in organising and perfecting in every way the training of volunteer nurses, etc.; that the members of the Society should be guaranteed full protection from both combatants; and that each country at war should furnish relief to its own armies, and solicit the assistance of committees of neutral nations. The nurses provided by the Society were to wear a white band with a red cross upon it around the arm as a distinctive badge; a similar flag being recommended by the delegates for adoption by all armies for field and stationary hospitals. The neutrality of the wounded and sick was also strongly advocated. The details are too long for our space here, but we have given the chief features of the scheme recommended by the Society. The result of this Conference was the formation of national committees in various countries.

A second Conference was held in 1864 at Geneva, chiefly for the purpose of considering the neutralisation of the sick and wounded of belligerent nations, besides the *personnel* and *matériel* required for their treatment. The deliberations lasted a fortnight, and the various articles of the treaty in which these principles were adopted received the most careful consideration from the delegates. Sixteen governments finally agreed upon the terms arrived at by the Conventions of 1863 and 1864.

A third Conference was held at Würzburg, when several additional modifications were recommended; and in August 1867, a meeting of the representatives of the National Societies established in the various countries, and delegates of the leading European governments, assembled at Paris.

The essential modifications in the Articles of the Geneva Convention

recommended at this Conference were the extension of the advantages of neutrality to the naval as well as military hospital services, and the extension of the same advantages to the *personnel* and *matériel* of the Societies for the relief of the sick and wounded. Both these modifications have been accepted by the Governments who signed the Convention of Geneva.

In 1869 a fifth Conference was held at Berlin, which was attended by one hundred and sixty delegates from almost every state in Europe, including, from this country, Professor Longmore, C.B., who had acted as delegate for the Government at the previous Conferences, Captain J. Burgess, and Mr. John Furley. Numerous detailed suggestions were recommended for adoption.

Although almost every European country long since organised a national committee for the relief of the sick and wounded, it was not until Saturday last that this country took a similar step. A meeting was then held at No. 8, St. Martin's Place, Col. Loyd Lindsay, M.P., in the chair, at which it was resolved to establish forthwith a central national committee. The meeting was very influentially attended, and it was announced that His Royal Highness the Prince of Wales had consented to become President. It is satisfactory to know that this country will not now be behind in affording that relief which will, so far as we can judge, be urgently required in the present conflict. Organised and equipped as it may be, no nation ever has, or ever will have, in readiness a sufficient medical staff to afford anything like immediate relief to the sick and wounded in a great and rapid war such as is now being waged. But by the assistance of the Society for the Relief of the Sick and Wounded the regular military medical officers receive much valuable aid, and they themselves will thus be again enabled to send larger numbers to go sooner to the front. Besides, the National Committees in the various countries offer to receive the supplies of clothing and comforts which are usually sent in from all quarters, but which, for want of some system, have been hitherto largely wasted or misapplied. Lord Eliot, Captain Burgess, and Mr. John Furley are Honorary Secretaries to the British National Committee, and to them all communications may be addressed. Full particulars regarding the history of the National Aid Societies are given in an excellent book published byotten, Piccadilly, entitled *Help for Sick and Wounded*. The work consists of a translation, by Mr. Furley and Captain Burgess, of *La Guerre et la Charité*, by MM. Moynier and Appia, together with writings by Prof. Longmore and others on the same subject.

THE will of the late Sir James Clark, Bart., has just been proved under £25,000.

MR. EDWARD BELLAMY has been appointed Assistant-Surgeon to Charing Cross Hospital.

THE Maharajah of Vizianagram has given £20,000 for the foundation of an "Alfred Medical College" at Allahabad, to commemorate an interview with His Royal Highness the Duke of Edinburgh.

GUY'S HOSPITAL.

R. HILTON has resigned the office of Surgeon to this Hospital, and has been appointed Consulting-Surgeon. Mr. Cooper Forster succeeds in the vacancy as Surgeon, and Mr. H. S. Howse has been appointed Assistant-Surgeon to the Hospital.

BARON LARREY.

BARON LARREY accompanies the Emperor to the Army of the Rhine, in the capacity of personal surgeon, and also of Chief of the Medical Service of the whole French Army. Baron Larrey is of the same age as the Emperor, having been born in the year 1808.

A STATUE OF HARVEY IN NEW YORK.

WE learn from the *New York Medical Gazette* that Mr. Horatio Stone has recently finished a colossal bust of Harvey, the renowned discoverer of the circulation of the blood, and a sketch model for a colossal statue of the portrait by Domenichino, which statue it is in contemplation to erect in the Central Park of New York.

INSPECTORSHIP IN VACCINATION.

LORD DE GREY AND RIPON, the Lord President of the Privy Council, has appointed Dr. C. J. Beard of Brighton to succeed Dr. Goddard Rogers as one of the Inspectors of Public Vaccination in the Medical Department of the Privy Council. Dr. Beard has recently been elected to fill the office of President of the Brighton and Sussex Medico-Chirurgical Society.

CHARING CROSS HOSPITAL MEDICAL SCHOOL.

DEAN STANLEY distributed the Prizes to the Students of this School on Monday last, in the Board Room of the Hospital. There was a large attendance of the friends of the Medical School. After Dr. Pollock, the Dean of the School, had presented his annual report, and congratulated the school upon its continued prosperity, the prizes were distributed. The Very Rev. Chairman then briefly addressed the meeting.

BRITISH ASSOCIATION SEWAGE COMMITTEE.

WE understand that, in addition to the protest entered by Messrs. Paul and Wanklyn against the proceedings of this Committee, another of the original members finds the work now being performed at Mr. Hope's Farm, in the name of the Committee, so very unsatisfactory, that he is led to suggest the propriety of its being discontinued until the British Association has fully considered the position in which the Committee has been placed by Professor Williamson's resolution applying the rules of the Association to the funds contributed by towns. He adds: "Had we been told that we were only to watch Mr. Hope's operations in sewage farming through the eyes of a subordinate, at a cost of five guineas a week, and be excluded from bringing to bear, as varying circumstances would suggest, our own more extended experiences, we should have proclaimed the arrangement to be comparatively useless, and have declined to expend the town's money upon it."

PROPOSED MEDICAL BARONETS.

OUR profession has recently lost, in Sir James Simpson and Sir James Clark, two out of its very small number of baronets. As we hear that the Government is at present contemplating the distribution of titles on a liberal scale amongst men of note in politics and science, we venture to express a hope that our own ranks will not be forgotten. Dr. Christison of Edinburgh, Dr. Stokes of Dublin, and Mr. Paget of London, are men whom the whole profession of the three kingdoms, and many others not belonging to it, would rejoice to congratulate on such a recognition of their services to the State. They are men who would do honour to any title. If, in consideration of its size, we might select more than one for London, the task would present no difficulties. Every one would be glad to be able to address Mr. Hilton as Sir John, to give a like title to William Bowman, and to know as Sir John Simon the indefatigable sanitarian to whose labours our land owes so much. We trust that the matter will receive the attention it deserves in the proper quarter. The members of our profession are never found cowards in the battle-fields of human progress—they rarely spare themselves; and we believe they have of late years done as much to earn their Sovereign's approbation as any other class of her subjects. A few honours judiciously conferred on our acknowledged leaders will be received with due appreciation and gratitude by the rank and file.

BABOO GOPAUL CHUNDER ROY ON INDIAN MEDICINE.

THE Hunterian Society is about to hold a special meeting (after the conclusion of its session) in order to hear a lecture from Baboo Gopaul Chunder Roy on the history of Medicine in India. The Society is fortunate in the possession of a magnificent room for its meetings,—the Lecture Theatre of the London Institution,—which is lofty enough and cool enough for a summer assembly, and capable of accommodating any number. A large attendance is expected. Baboo Keshub Chunder Sen, the well-known religious reformer, is to be present, and will address the meeting. He is, we understand, a cousin of Baboo Roy. The meeting will be an open one; and any member of the profession desirous of

attending, or of introducing friends, will be admitted on presenting his card. The London Institution is in Finsbury Circus, and the meeting will take place at 8 o'clock, on Wednesday, August 3rd.

THE WAR AND OUR ANNIVERSARY MEETING.

IT is to be hoped that the old proverb as to ill winds will not fail to be of some advantage to our Newcastle Meeting. The terrible war which has so suddenly blazed up in mid-Europe will cheat many a doctor out of the continental tour which he had planned. We trust a fair share of those kept at home thus unwillingly will combine business and pleasure by a trip northwards, taking Newcastle on the way. The Yorkshire coast is very fine; Whitby and its moors and cliffs are well worth a visit. At Newcastle itself, there is much to be seen; and no effort will be spared to make the seeing of much a pleasure to many. Tynemouth is close by; and those who do not desire to work too hard, can have lodgings close to its glorious sea, and come up by train each day to the meetings and evening festivities, or to such of them as they may elect to attend. For antiquarians and those who take interest in the study of local peculiarities and customs, the Roman wall, Bewcastle and the border district will have their attractions. And, lastly, when the meetings are over, there is Scotland close at hand.

QUEKETT MICROSCOPICAL CLUB.

THE Fifth Annual General Meeting of this Club was held on Friday, July 22nd, at University College, Peter le Neve Foster, Esq., President, in the Chair. According to the Annual Report of the Committee, the Club still maintains its popularity and success. It numbers over five hundred members, and meets twice a month throughout the year. Mr. Foster, in vacating the presidential chair which he had ably filled during the past year, delivered a valedictory address, in which he called attention to various open questions in microscopical science, which were fields well worth the labour required in their investigation, and which, he considered, the members might undertake with pleasure to themselves and advantage to the world at large. Dr. L. S. Beale, F.R.S., was elected President for the ensuing year; and Messrs. Henry Lee, A. E. Durham, P. Le Neve Foster, and Dr. R. Braithwaite, were elected Vice-Presidents; Messrs. Allbon, T. W. Burr, W. M. Bywater, and C. F. White were elected to fill four vacancies on the Committee. The proceedings terminated in a *Conversazione*.

POST MORTEM EXAMINATIONS.

AT the adjourned summons against Dr. Steele, which was heard at Southwark a few days since, the magistrate dismissed the case, believing that the nurse did not convey the proper message from the son of the deceased to the medical gentleman, and that, therefore, there was no evidence against Dr. Steele. Assuming that the evidence was true, and that the *post mortem* examination was conducted for scientific purposes, he was of opinion that, after the protest from the son, it was illegal. The authorities at Guy's Hospital were, we believe, prepared to carry the matter to a higher court had the decision been given against them, and thus obtain a decided opinion as to the rendering of the Anatomy Act. As it is, the matter remains undecided as ever, the illegality of the proceeding resting in the present case, according to the magistrate, on the examination of the body being made *after* the protest of the son. We have previously expressed our strong opinion, that *post mortem* examinations do not come within the scope of the Anatomy Act; and the decision in the present case supports our opinion. Hospital authorities should place no obstruction to carrying out *post mortem* examinations, unless strictly prohibited by the friends.

THE WAR.

No news of medical interest has as yet been received from either army. In both, we believe, preparations are made for the speedy conveyance of the sick and wounded to hospitals at a distance from the battle-fields, and at the earliest possible opportunity. Wherever practicable, railways will of course be made available for this purpose. In the Prussian army, very extensive trials of carbolic acid as a dressing

for compound fractures will be made. It is probable that several well-known English surgeons will offer their services. Mr. Bryant of Guy's Hospital is, we believe, already with the Prussians. From the French and German schools the students have, in many instances, volunteered *en masse*. Those engaged in medicine will be employed in various capacities in which their training can be made useful; but few, probably, being enlisted as combatants. Some medical men resident in London are, we believe, liable to be called upon, and the German Hospital has already lost both its resident medical officers. The letter of our Paris correspondent gives some interesting information respecting the demand for medical aid in the French army.

ROYAL COLLEGE OF PHYSICIANS.

AT the meeting of the College of Physicians, held on Thursday, a resolution was unanimously adopted, recommending the President and Council of the College to invite the heads of Universities and medical corporations, *and such other medical bodies* as they may think desirable, to confer together with the view of drawing up another Medical Bill to be submitted to the next session of Parliament. The words in italics were added at the suggestion of Dr. Sibson.

THE NATIONAL COMMITTEE FOR THE AID OF THE SICK AND WOUNDED.

WE are requested to mention that a public meeting is convened for Thursday, at Willis's Rooms, at 3 P.M., when it is expected that His Royal Highness the Prince of Wales (President), will take the Chair. Amongst the medical members of the Committee are Mr. Paget, Dr. Sieveking, Dr. Beale, Mr. Prescott Hewett, Dr. Julius Pollock, and Surgeon-Major Bostock.

DEATH OF VON GRAEFE.

PROFESSOR VON GRAEFE, who has long been in precarious health from phthisis, died last week. He had for some months been away from his practice; but the fact that he had survived several severe illnesses of a similar nature made his friends more hopeful than they would otherwise have been. In him the world loses its foremost ophthalmologist, one whose brilliant originality was equalled only by his steady industry. Not only was Graefe great in the practice of his profession, but as a teacher his influence was almost unbounded. Although comparatively young himself, he had taught almost all the present school of ophthalmic surgeons. His introduction of iridectomy was, without doubt, the greatest step in the operative surgery of the eye since the introduction of operations for the cure of cataract. Probably, there are now living some thousands in the possession of sight, who but for him would have been in darkness. It is one of those gains which is complete in itself, permanent, and beyond the reach of scepticism. It is priceless. Graefe was an untiring observer, and never allowed his pressing engagements to interfere with the record of his vast experience for the good of others. Although he had done a vast amount of other work, still, however, his discovery of iridectomy shines with such pre-eminent lustre that the inscription,

"HE CURED GLAUCOMA",

would be by no means inappropriate. As a man, Graefe was every thing that is admirable, and secured the love of all who knew him. He was open, generous, unostentatious, eager both to give and receive knowledge. His personal appearance was as remarkable as the qualities of his mind. His face so closely resembled one of the extant portraits of our Saviour, that he was known amongst some of the less reverent of his countrymen by the cognomen of *Christus*, a fact which sufficiently implies its highly spiritual type of beauty. Some excellent photographs are in England, and one of the best is now in our artist's hands. We hope next week to present our readers with a good likeness of one of the most remarkable men that our profession has produced, whose loss in the prime of life we cannot sufficiently lament. The *Wiener Medizin. Wochenschrift*, in announcing Graefe's death says: "German science loses in him one of her greatest celebrities, and suffering humanity one of its greatest benefactors. With

Græfe, a combination of geniality, erudition, self-devotion, energy, and amiability, such as is rarely found in one man, has descended into the grave. His name will ever remain most prominently connected with the history of ophthalmic surgery." According to the same journal, he was only forty-one years of age at the time of his death.

SCOTLAND.

THE ROYAL MATERNITY HOSPITAL, EDINBURGH.

DR. J. MATTHEWS DUNCAN has been unanimously elected one of the ordinary physicians to this hospital.

THE TOWN COUNCIL CURATORS ON THE RECENT MIDWIFERY ELECTION AT EDINBURGH.

COMMUNICATIONS, whether more amusing than painful we cannot say, were read at the meeting of the Town Council on Tuesday last from Lord Provost Law and Bailie Skinner, two of the Curators of the University, which will have the effect of increasing, if possible, more than ever the feeling in the public mind that the Town Councillors are quite unfit to exercise the privilege of electing Professors to the University. More self-criminative Provost Law's explanation could not be; he appears quite satisfied, after vainly trying to defend his choice, to console himself with the thought that, as evil existed elsewhere, there was no reason why he should not occasionally try his hand at it also. We cannot deny our readers the rare pleasure of perusing Bailie Skinner's reasons for selecting his candidate. They are the following:—

"1. Because Dr. Simpson is the son of that worthy brother (still living) who was the acknowledged means of Sir James Simpson's professional success, from which the world has received, and will receive, a lasting blessing. 2. Because Sir James Simpson often expressed a wish that his nephew might succeed him in the Chair, as the person best fitted to continue and expound to the students his system of obstetrics. Added to this, Dr. Alex. Simpson will have the advantage of possessing his uncle's invaluable museum, medical library, diagrams, apparatus, and other appurtenances used in lecturing. 3. Because the City and University (reflected as these communities are in the Court of Curators), by electing Dr. Alexander Simpson, will pay the highest tribute of respect and gratitude to the memory of his uncle, and do honour to themselves by retaining the beloved name of 'Simpson' in connection with the Edinburgh University."

IRELAND.

COUNTY LIABILITY TO MAINTAIN HOSPITALS AND INFIRMARIES.

AT the Summer Assizes recently held in the County Kerry, Mr. O'Hagan, Q.C., at the instance of the Grand Jury, submitted to Mr. Justice Keogh the question whether under the Medical Charities Act, 1851, the county funds were relieved from the support of the County Infirmary and Fever Hospital; in other words, whether these institutions were at present subject to Poor-law administration, or were not. From a careful examination of the various Acts of Parliament bearing on the subject, Mr. O'Hagan was led to the opinion that dispensaries only, and no other medical charities, were matter of Poor-law administration, and that consequently Grand Juries were still bound to present for the County Hospitals and Infirmarys. He also referred to a Bill brought in by Sir John Young in 1854, to effect the object of putting all medical charities under the Poor-law management, but which never became law; and, again, to a decision on the subject by Mr. Justice Lawson, at the last Spring Assizes for the County Antrim. Judge Keogh said he entirely concurred in the view of the question taken by Mr. O'Hagan; while Mr. Waters, Q.C., M.P., on behalf of the Fever Hospital, observed that the Grand Jury should continue liberally to support such institutions, as many patients would gladly avail themselves of them who could never be induced to become inmates of a workhouse. He also stated that it had been decided by Baron Hughes that a person who entered the hospital of a workhouse as a patient, thereby forfeited his franchise.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-eighth Annual Meeting of the British Medical Association will be held in Newcastle-upon-Tyne, on Tuesday, Wednesday, Thursday, and Friday, the 9th, 10th, 11th, and 12th of August next.

President—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

President-elect—EDWARD CHARLTON, M.D., Senior Physician to the Newcastle-upon-Tyne Infirmary.

An *Address in Medicine* will be delivered by FRANCIS SIBSON, M.D., F.R.S., F.R.C.P., Physician to St. Mary's Hospital.

An *Address in Surgery* will be delivered by G. Y. HEATH, M.D., M.R.C.S., Senior Surgeon to the Newcastle-upon-Tyne Infirmary.

The business of the meeting will be conducted under six Sections:

Section A. *MEDICINE*.—*President*: Dr. Embleton. *Vice-Presidents*: Dr. Simpson and Dr. Lyons. *Secretaries*: Dr. H. Barnes, Carlisle, and Dr. Morell Mackenzie, 13, Weymouth Street, London.

Section B. *SURGERY*.—*President*: Professor Lister. *Vice-Presidents*: Charles Trotter, Esq., and Timothy Holmes, Esq. *Secretaries*: Dr. Arnison, Newcastle-upon-Tyne, and W. H. Favell, Esq., Sheffield.

Section C. *PHYSIOLOGY*.—*President*: Dr. A. Clark. *Vice-Presidents*: Dr. Sanderson and Dr. Hayden. *Secretaries*: T. C. Nesham, M.D., Newcastle-upon-Tyne, and J. G. McKendrick, M.D., 29, Castle Terrace, Edinburgh.

Section D. *MIDWIFERY*.—*President*: Dr. Robert Barnes. *Vice-Presidents*: Dr. Gibson and Dr. Graily Hewitt. *Secretaries*: Luke Armstrong, Esq., Newcastle-upon-Tyne, and J. H. Aveling, M.D., Rochester.

Section E. *PUBLIC MEDICINE*.—*President*: Dr. Rumsey. *Vice-Presidents*: Dr. Druitt and Dr. Morgan. *Secretaries*: Anthony Bell, Esq., Newcastle-upon-Tyne, and Dr. A. Ransome, Bowden, Cheshire.

Section F. *PSYCHOLOGY*.—*President*: Professor Laycock, M.D. *Vice-Presidents*: Dr. Sankey and Dr. Maudsley. *Secretaries*: Grainger Stewart, M.D., Borough Asylum, Newcastle-upon-Tyne, and T. Harrington Tuke, M.D., 37, Albemarle Street, London.

TUESDAY, August 9th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Council Chamber, New Town Hall.

3 P.M.—MEETING OF COUNCIL—Council Chamber, New Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—The retiring President, Dr. CHADWICK, will resign his office.—The new President, Dr. CHARLTON, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Any motions of which notice may have been given.

WEDNESDAY, August 10th.

8.30 A.M.—SHERIFF OF NEWCASTLE'S BREAKFAST to the Association in the New Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Council Chamber.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—Appointment of Place of Meeting for 1871 and President-elect.

12 NOON.—Address in Medicine by Dr. SIBSON, F.R.S.

2 P.M.—MEETINGS OF SECTIONS.—Adjourn at 5.

9 P.M.—PRESIDENT'S SOIRÉE—New Town Hall.

THURSDAY, August 11th.

10 A.M.—THIRD GENERAL MEETING—Lecture Room of Literary and Philosophical Society.—Reception of Reports of Committees.

11 A.M.—Address in Surgery by Dr. HEATH.

12 NOON.—SECTIONAL MEETINGS.

6 P.M.—PUBLIC DINNER of the Association—New Town Hall.

FRIDAY, August 12th.

9 A.M.—SECTIONAL MEETINGS.—Adjourn at 12.

12 NOON.—CONCLUDING GENERAL MEETING.

2 P.M.—SPECIAL CONVOCATION OF THE UNIVERSITY OF DURHAM for granting Honorary Degrees.

4 P.M.—SPECIAL SERVICE in Durham Cathedral.

Reception Room.—A room will be opened in the New Town Hall as a reception room on Tuesday, August 9th, at 10 A.M., and on the fol-

lowing days at 8 A.M., for the issue of tickets to members; for the supplying lists and prices of lodgings, and other information.

Members and others requiring information with regard to the meeting are requested to make application in this room.

Gentlemen are requested to proceed to this room immediately on their arrival, to enter their names and addresses, and to obtain the tickets necessary for admission to all the proceedings.

Letters, parcels, etc., may be left in this room in the care of the clerks. Arrangements will be made for the receipt and postage of letters in this room.

Gentlemen intending to visit Newcastle during the Meeting, are requested to send their names, without delay, to Dr. Arnison, 45, Northumberland Street, Newcastle upon Tyne.

The *Local Secretaries* are: G. H. Philipson, M.A., M.D., 1, Saville Row; W. C. Arnison, M.D., 45, Northumberland Street; Luke Armstrong, Esq., Clayton Street West; T. C. Nesham, M.D., 43, Northumberland Street; R. J. Banning, M.D., 136, High Street, Gateshead.

Hotels.—The principal hotels are: the Station Hotel; the Queen's Head, Pilgrim Street; the Turk's Head, Grey Street; the Turf Hotel, Collingwood Street; the Central Exchange, Grey Street; the Royal Exchange, Grey Street; the Neville Hotel, Neville Street; the Adelphi (Temperance), Clayton Street; the Norfolk Hotel (Temperance), Grey Street. Any information respecting hotels or lodgings will be willingly furnished by Dr. Nesham, 43, Northumberland Street, Newcastle-upon-Tyne.

Post-office and Telegraph-office.—Royal Arcade, Pilgrim Street.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary at their *earliest* convenience. All papers must be in the hands of the General Secretary, or one of the Secretaries of the Section to which the paper belongs, on or before Monday, August 1st.

Authors are requested to prepare beforehand short abstracts of their papers for publication. The papers (and abstracts) read in the different Sections are to be handed to the Secretaries of the Sections for publication in the JOURNAL of the Association.

No paper shall occupy more than *twenty* minutes in delivery. All subsequent speakers not to exceed *ten* minutes.

Annual Museum and Annual Library.—It is intended to exhibit objects of interest belonging to the following classes. 1. New Instruments and Appliances in Medicine, Surgery and Midwifery. 2. New Drugs and Preparations. 3. New Books, English and Foreign. 4. Pathological, Physiological, Anatomical, and Microscopical Specimens. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions, relating to Public Health, etc. 7. New Preparations of Food, etc. Rooms will be provided at the Newcastle Infirmary, for the Museum, which will be opened on Tuesday morning, August 9th, and closed on Friday evening, August 12th. All the objects intended for exhibition must be addressed, "Care of Dr. Page, Infirmary, Newcastle-upon-Tyne," be delivered on or before Monday, August 1st, and be removed on or before Monday, August 15th. Every object must be accompanied by a written or printed description, together with a short reference, for insertion in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects will be provided, but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the exhibitors. Intending exhibitors are requested to apply to Dr. Banning, Gateshead-upon-Tyne, for any information that they may require, and to inform him, as early as convenient, what they intend to exhibit, and how much space they are likely to require. Exhibitors who may prefer personally delivering their Specimens, are earnestly requested to forward a short description, on or before Monday, August 1st, in order that the Catalogue may be complete.

Notice.—Any gentleman who is conversant with the subject of Medical Poor Relief, and the Irish Dispensary System as applicable to large towns, is requested to favour the Public Medicine Section with any remarks thereon, in connection with the organisation of a Medico-Sanitary Staff. The question may be discussed on Friday, August 12th, at 9 A.M.

Notices of Motion.—The following notices have been given.

The Rev. Dr. BELL: That a Committee be appointed for the purpose of inquiring into the present constitution and operation of the Committee of Council; and whether it might not be better to have only one well constituted Council, consisting of a limited number—say fifty—to be elected by the general body of members through the medium of voting-papers: and that the Committee report to an ordinary general meeting, or to a special general meeting convened according to law.

Dr. STYRAP: That, considering the nature of the duties of the office of General Secretary, the great assistance rendered by the Honorary

Local Secretaries, and the financial position of the Association, the increase of his original salary of £100 to £250 in 1866; £313 in 1867; £370 in 1868; and £364:9 in 1869, has been excessive.

That, in the opinion of this meeting, a stipend of £250 (inclusive) would be ample.

Dr. ELLIOT: That a volume of *Transactions* be annually published by this Association, to contain such essays or communications as are either too lengthy for admission into the JOURNAL, or may be deemed worthy of a more permanent record than a hebdomadal serial can secure.

The Rev. Dr. BELL will ask why a report was not made on his Oxford Committee to the General Meeting last year by the Committee of Council, and if it will be made this year.

Papers.—The following papers have been promised.

D. Embleton, M.D. On the Shoulder-tip Pain in Liver-Diseases.

J. Henry Bennet, M.D. On the Climate of Algeria. On the Influence of Inflammation in the production of Uterine Displacement.

E. J. Tilt, M.D. On Uterine Pathology at the Change of Life and after the Menopause.

J. Althaus, M.D. On the Treatment of Rheumatic Gout by Galvanisation of the Cervical Sympathetic.

W. Adams, F.R.C.S. On the Subcutaneous Division of the Neck of the Thigh-bone, as compared with other operations for rectifying extreme distortions at the hip-joint with bony ankylosis. Illustrated by a successful case of the subcutaneous division.

A. E. Sansom, M.D. The Sulpho-carbolates; and the Antiseptic Method in Medicine.

G. Y. Heath, M.D. On the Rapid Pressure Treatment of Aneurism.

W. H. C. Tessier, M.D. Remarks upon an Epidemic of Intermittent Fever in the Mauritius, during 1866-7-8.

J. C. Murray, M.D. On Snuff-taking; its utility in preventing Bronchitis and Consumption.

G. H. Philipson, M.A., M.D. On the Health and Meteorology of Newcastle and Gateshead during 1868 and 1869. Notes of a Case of Biliary Fistula.

J. Hutchinson, F.R.C.S. On Xanthelasma Palpebrarum as a Symptom of Diathesis. On Syphilitic Rupia.

W. Spencer Watson, F.R.C.S. On the use of the Seton in the treatment of Vascular Ulcers of the Cornea; with illustrative cases and drawings. Cases of Traumatic Ophthalmitis.

Anthony Bell, M.R.C.S. Notes of a case of Epilepsy of Sixteen Years' Duration, from Parietal Depression of Cranium: Trephining: Recovery.

W. F. Teevan, F.R.C.S. On Spermatorrhœa. Twenty cases of Stone in the Bladder.

J. W. Eastwood, M.D. On Intemperance in its Medical and Social Aspects.

Robt. Elliot, M.D. Lobelia Inflata; its Action as a Poison: evidence and autopsies at eighteen inquests.

R. H. Meade, F.R.C.S. On a case of Ovariectomy, in which the tumour was removed by enucleation, without the necessity of the application of either clamp or ligature to the pedicle.

B. Foster, M.D. The Murmur of Mitral Stenosis.

D. De B. Hovell, F.R.C.S. On the Treatment of Paralysis.

John Couper, F.R.C.S. The Diagnosis of Astigmatism by the Ophthalmoscope.

W. Fairlie Clarke, M.A., F.R.C.S. On some rare forms of Opacity of the Cornea.

J. H. Aveling, M.D. On the Advantages to be Derived from Curving the Handles of Midwifery Forceps.

J. M. Fothergill, M.D. On the Preservative Agency of Lowered Vitality.

F. Waterhouse, M.R.C.S. On a New Form of Elevator for Depressed Cranium in Childhood.

Thomas Skinner, M.D. On a new Pessary for Prolapsus Uteri, Rectocele, and Vesicocele.

George Oliver, M.B. The Therapeutics of the Sea-side.

Walter Whitehead, F.R.C.S. Ed. On Mucus Disease.

M. W. Taylor, M.D. On the Transmission of the Virus of Fevers by Fluids.

T. Clifford Allbutt, M.A., M.D. On Functional Hemiplegia in Child-bearing Women.

Wm. Roberts, M.D. The case of a man who had a Vesicular Eruption on the Abdomen, which discharged at times great quantities of a Chylous Fluid.

Henry Lee, F.R.C.S. On Transplantation of Skin in the Centre of an Old Ulcer: with Observations and Drawings.

Graily Hewitt, M.D. 1. On a New Instrument for Securing the Pedicle in Ovariectomy. 2. On Strangulation of the Uterus.

B. W. Richardson, M.D., F.R.S. On Anæsthetics.

Thomas Laycock, M.D. 1. On the Practical and Scientific Investigation of the Relations of Body and Mind. 2. An Inquiry into the Relations of the Thyroid Body to Cerebral Nutrition and Development: with Illustrations of Cretinism. 3. Case of Epileptic Chorea of Right Arm.

R. H. B. Wickham, L.R.C.P.Ed. Case of Rhythmical Chorea of Right Arm and Palsy of Leg.

Arthur Ransome, M.D. On the Registration of Disease and Meteorology in Manchester and Salford during the Ten Years 1861-1870.

D. Campbell Black, M.D. On Certain Circumstances which Contribute to Impede the Progress of Scientific Medicine and Surgery.

T. S. Clouston, M.D. The Use of the Thermometer in the Diagnosis and Treatment of Insanity.

H. Grainger Stewart, M.D. On Syphilitic Insanity.

Furneaux Jordan, F.R.C.S. On the Treatment of Enlarged Cervical Glands.

J. Hughes Bennett, M.D. On the Antagonism between Chloral and Strychnine: with Experiments.

J. A. Bolton, M.D. The Naked Man and his Photograph, *in re* the Turkish Bath.

The Rev. D. Bell, M.D. Remarks on the Beneficial Effects of Combining Tonics with Aperients in Chronic Constipation.

D. C. McVail, L.R.C.P.Ed. Some Principles in Respiratory Mechanics.

Hugh Miller, M.D. The Diet of Parturient Women.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, June 6th, 1870.

MIDLAND BRANCH.

THE Annual Meeting of this Branch will be held in the Guildhall, Leicester, on Thursday, 4th August, under the Presidency of Dr. MITCHINSON.

The following papers and cases will be read and discussed:—On Lithotomy and Lithotripsy. By R. M. Craven, Esq.—The Use of the Turkish Bath in Albuminuria. By Edwin Morris, M.D.—Deligation of the Umbilical Cord. By E. M. Thompson, Esq.—Resection of the Os Calcis. By T. Sympton, Esq.—Case of Traumatic Tetanus, and Case of Hernia. By C. Brook, Esq.—Dr. Morris will call the attention of the members to the Medical Bill which recently passed the House of Lords.

The members and friends will afterwards dine together at the Great Northern Hotel. To facilitate the arrangements for dinner, Members are requested to communicate not later than August 1st whether they intend to be present. C. HARRISON, M.D., *Honorary Secretary*.

WEST SOMERSET BRANCH: ANNUAL MEETING.

THE twenty-seventh annual meeting of this Branch was held at the York Hotel, Weston-super-Mare, on Tuesday, July 12th, at 12.30 P.M., under the presidency of JOHN CORNWALL, Esq., of Ashcott. Eighteen members and visitors were present.

A letter from Mr. H. J. Alford (Taunton), the retiring President, expressing his sorrow that he was unable to be present, was read. The Secretary also gave the names of sixteen other members from whom he had received letters of regret at their being unavoidably absent.

A vote of thanks to Mr. H. J. Alford for the manner in which he had performed the duties of his office was carried by acclamation.

The minutes of the last annual meeting were read.

Report of Council.—The following report of Council was read, received, and adopted:—

"1. As the result of a resolution passed at the last annual meeting, the Council have the pleasure of now presenting their report, on the present anniversary, in the town of Weston-super-Mare; and in connection with this subject they beg to announce that as soon as the routine business, now to be transacted, is over, it is arranged that this Branch shall join the Central Somerset Medical Society at the Sanatorium, and there, after partaking of the hospitality kindly provided by the medical staff of that institution, the combined meeting shall be united for the remainder of the day's proceedings.

"2. The general prosperity of the Branch continues to be maintained. The usual autumnal and spring meetings were fairly well attended, and interesting papers and cases were communicated. The number of members is identical with that reported last year; several losses by death and removal having been replaced by new admissions.

"The Treasurer's report shows that the finances are carefully managed, and that he has a good working balance in hand.

"4. It is in the knowledge of all the members that a special meeting of the Branch was convened, and held on the 4th May last, to consider the Government Medical Bill, and that resolutions on the subject were then passed. The Council have now to report that those resolutions were duly acted on, and that a petition to the House of Lords embodying the same was afterwards prepared and signed on behalf of the Branch by the President and Secretary, and forwarded to the general Secretary for presentation."

The Treasurer's Balance-sheet and Accounts, audited by Mr. Gillett, were received and adopted.

Next Annual Meeting and President-elect.—It was resolved that the next annual meeting be held at Bridgwater, and that W. H. Axford, Esq., M.B., be President-elect.

Intermediate Meetings.—It was resolved that two intermediate meetings be held as usual.

Representatives in the General Council.—It was resolved that the President (John Cornwall, Esq.) and John Pranker, Esq. (Langport), be the representatives of the Branch in the General Council for the ensuing year.

Members of Council of the Branch.—Messrs: G. Gillett, W. L. Winterbotham, and John Pranker were elected to take the places of the three members who went out by rotation.

Secretary and Treasurer.—W. M. Kelly, M.D. (Taunton) was re-elected as Secretary and Treasurer.

Some discussion on the Medical Bill took place, and the ordinary business of the meeting terminated.

Visit to the Sanatorium.—At half-past one o'clock the party was taken in carriages, provided for the purpose, from the York Hotel to the Sanatorium, where they were courteously received by Mr. Pooley, Honorary Surgeon; Dr. Swete, Honorary Medical Superintendent; the Rev. Mr. Bigby, Chaplain; and other gentlemen connected with the institution.

The "West of England Sanatorium, or Convalescent Home", was established in 1868. It at present receives thirty patients; but the number of beds will, it is expected, soon be increased to fifty. Children, as well as men and women from all parts of the country, are admitted at the rate of ten shillings a-week each, or, if recommended by subscribers, on a reduced scale. The cases found to be most benefited are convalescents after acute rheumatism, pneumonia, serous and synovial effusions, and after surgical operations. A bracing air, which, with the prevailing westerly wind, comes up the channel direct from the Atlantic, no land intervening; sea-bathing, which is effected in the open sea from the private bathing-house belonging to the institution; a generous diet; and most comfortable domestic arrangements—conduce to re-establish health in a manner, and with a rapidity unattainable without such adjuvants. The Sanatorium is situate about a mile south of the town of Weston-super-Mare, on the Uphill Road, close to the shore. The entrance to the building from the road is through a glazed corridor, in which shrubs and flowers are kept, giving it a cheerful greenhouse-like appearance; another glazed corridor extends the whole length of the building on the opposite side, facing the sea. These corridors enable the patients to obtain air and light, with recreation in all weathers.

Having viewed the whole of the building, the garden with its terraces, the bathing-house, the earth-closets (which alone are used and answer well), and having been informed of the general arrangements of the institution, the party sat down at two o'clock to an elegant luncheon provided by Dr. Swete, and laid out in a wooden house which has just been erected as a day-room for the children, and which is also used as a chapel. Speeches by Dr. Swete, Mr. Pooley, the Rev. Mr. Hunt, Mr. Arthur Kinglake, and others, touching the origin, the progress, and the work of the institution, were listened to with great interest; and appropriate toasts with thanks were duly drunk and honoured.

The party then drove back to Weston, and round the town, getting fine views of the neighbouring scenery and of the bay; they visited the Albert Memorial School, Workshop, and Museum; the Hospital and new Building for Infectious Cases; the Pier, etc. Having returned to the York Hotel at 5 P.M., the President, Mr. Cornwall, delivered an address of a comprehensive character. He commented on the medical life from apprenticeship onwards, contrasting the past with the present in every aspect; he also noticed the leading topics of the day connected with the profession in all its departments.

A discussion followed, in which Dr. Swete, Dr. Cordwint, Mr. Pranker, and others joined.

The Dinner was served at 6.30. Several Weston gentlemen were present; and a very agreeable evening terminated a day's enjoyment, which will not soon be forgotten by those who were so fortunate as to participate in it.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 28TH, 1870.

GEORGE BURROWS, M.D., F.R.S., President, in the Chair.

A CASE OF EXTROVERSION OF THE BLADDER IN A FEMALE, TREATED BY OPERATION. BY EDWARD BARKER, ESQ., MELBOURNE.

(Communicated by T. HOLMES, F.R.C.S.)

THIS paper recorded the cure, by operation, of a case of congenital exposure of the bladder in an adult female. The proceeding adopted consisted in denuding the opposite margins of the opening, and bringing the parts together with deep metallic sutures and superficial horse-hair sutures. Incisions were made to relieve tension. After three operations, the deformity was cured, and the patient was able to retain her urine, when lying down, for two hours.

ON THE ANATOMY OF A CASE OF MOLLUSCUM FIBROSUM.

BY C. HILTON FAGGE, M.D.

This paper was based on the results of the dissection of portions of the integument of a woman, aged forty, affected with molluscum fibrosum, who died in Guy's Hospital of another disease. The author examined some of the most minute tumours—scarcely bigger than pin's heads—by dissecting them out of the cutis, and submitting them to a low power of the microscope. An independent examination of some of the larger growths was made by his colleague, Mr. H. S. Howse. These were hardened in chromic acid, and fine sections of them were viewed with higher objectives.

The conclusions arrived at by the author and Mr. Howse were as follows. 1. Each tumour is originally developed round a hair-follicle, enclosing at the same time the sebaceous glands belonging to the follicle. 2. The smallest tumours consist of two distinct elements. a central glandular body, itself surrounding a hair; and a peripheral mass of very fine connective tissue, containing numerous minute oval nuclei. 3. The glandular body is a sebaceous gland, enlarged by the separation of its sacculi from one another, and perhaps also by the actual multiplication and increase in size of the sacculi themselves. 4. The peripheral mass of nucleated connective tissue is developed from the two external layers of the dermal coat of the hair-follicle and sebaceous glands. The structure of one of the smallest tumours was shown in the microscopical drawing which accompanied the paper. The centre of the tumour was occupied by a hair, surrounded by a beautifully branching glandular body, itself enclosed in a translucent fibrous mass.

A coloured drawing illustrated the appearance of the under surface of a portion of integument affected with molluscum, when it has been dissected so as to expose the numerous soft red tumours scattered throughout its substance.

The latter part of the paper was devoted to an examination of the literature of molluscum, and of the views propounded by previous writers. The only observations irreconcilable with the author's were those published in the year 1858 by Förster.

In conclusion, it was maintained that the author's investigations rendered the name "molluscum fibrosum" a more appropriate one for the disease under consideration than that of "fibroma molluscum" used by Virchow and other German writers.

REPORT OF THE COMMITTEE APPOINTED TO INVESTIGATE BAIN'S AND PACINI'S METHOD OF RESTORING SUSPENDED ANIMATION.

Members of the Committee.—Mr. Savory (Chairman); Dr. Burdon Sanderson; Mr. Henry Power; Mr. T. P. Pick (Secretary); Mr. Gascoyen (*ex officio*).

The means adopted by the committee for pursuing the inquiry were by experiment upon the dead human body; and, in order to test the relative merits of the methods proposed, they were contrasted with the plan adopted by Dr. Silvester. Details of a large number of observations were given in the Report. The conclusions at which the Committee arrived from these observations might be summed up as follows. It appeared that more air is introduced, as a rule, by traction from the shoulders than from the forearms and arms. Nevertheless, in the amount of air introduced, there is a greater difference when the same method is adopted with different bodies than there is between the two plans when practised upon the same body; this great difference being chiefly due to the size of the body, especially the amount of fat, the mobility of the walls of the chest, and the rigidity of the muscles. By either plan, the committee were of opinion that a sufficiently large quantity of air is, without difficulty, introduced. And it might be observed that, in either case, on an average, more air is changed than in the act

of ordinary tranquil respiration. In estimating the relative merits of the two plans, they were anxious to observe that other considerations are involved than that of the absolute and comparative quantity of air changed. They were unanimously of the opinion that the method advocated and practised by Dr. Bain was but a modification of the plan usually known as Silvester's, and involved no new principle of action. Indeed, in his more recent publications, Dr. Silvester had not limited his point of traction to any one part in particular of the forearm or arm. They were therefore of opinion that, in the great majority of cases, it is of comparatively little moment which method of manipulation is practised, provided the common principle on which both are founded be fairly carried out.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 6TH, 1870.

GRAILY HEWITT, M.D., President, in the Chair.

Dr. BARNES exhibited an improved Antihæmorrhagic Case, prepared by Krohne and Sesemann. It contained a Higginson's syringe, three cervical caoutchouc dilators, an uterine tube, perchloride of iron, permanganate of potash, and ergot. The improvements consisted: first, in making the uterine tube of vulcanite, in disposing the perforations at the uterine end, and in doing away with all metal in the apparatus; secondly, in substituting the solid perchloride of iron for the solution, thus obviating risk of injuring the instruments by leakage. The ergot was in powder. Thus no fluid was contained in the case.

Dr. PROTHEROE SMITH exhibited his Exploring Needle-Trocars. Since he first showed them in 1867, he had improved the instrument, which consisted of hollow steel needles, gilt, adjusted to a powerful glass exhausting air-syringe, or, as it had been called, "pneumatic aspirator." This, by means of a spring stop on the piston rod, and a double action tap at its distal end, formed an air-pump, which enabled the operator easily to explore distant or deeply seated tumours, and to withdraw their contents when fluid, without pain or wound more than that of a pin. He had found this instrument of the greatest use in the diagnosis of tumours, and in their treatment, since it enabled one without shifting the needle to introduce, by the same syringe, iodine or any other remedy into cysts. For the purpose of diagnosing solid tumours, he had invented another trochar, which gave the power to cut off a pencil-shaped piece of any structure for examination.

Dr. BRAXTON HICKS exhibited a large Fibrous Tumour, which he had removed by enucleation from the anterior wall of the cervix and os uteri of a multipara, who had been in labour for twelve hours when he was called to her. The uterus was firmly contracted around the foetus, and the child's head was at the brim of the pelvis, pressing against a firm tumour which occupied the whole upper vagina, so as to render it difficult to reach the head. Delivery could not be accomplished by version, or by the use of the forceps, and it was believed that, under the circumstances, perforation was not likely to be more useful. A small incision was made with a bistoury into the lower portion of the tumour, and the opening was distended, and the tumour enucleated without any hæmorrhage. The child was born alive. The mother showed no evidence of shock.

Dr. J. J. PHILLIPS read a paper on a case of Prolapsus Uteri, which ended fatally soon after admission into Guy's Hospital, from the pressure of the procident uterus on the ureters, leading to their dilatation, and to suppuration of the kidneys. After referring to the anatomical connection of the neck of the uterus and the vagina with the bladder, he pointed out that urine might be retained in a prolapsed pouch of bladder, and lead not only to inflammation of its mucous lining, but also to the extension of that inflammation, and to death by pyelitis. Or the ureters, as they descended with the prolapsed bladder in the anterior portion of the hernial mass, under the pubic arch, were liable to be pressed upon, as in the case related. Probably the reason why the ureters escaped pressure in the great majority of cases, was that the vaginal and vesical prolapse took place in a very gradual manner, and that the ureters became elongated and adapted to their altered position; and also that, in most cases of procidentia, not only was there a wide pubic arch, but also much laxity of the soft parts. Notwithstanding the extreme rarity of the case, such a complication of prolapsus uteri was not to be overlooked.

Dr. RASCH read a paper on Air in the Vagina, and arrived at the following conclusions. 1. No air enters the vagina of a female placed on her back. 2. In the prone position, the abdominal walls and the contents of the abdomen fall outwards, and cause a diminished pressure in that cavity. If the vaginal orifice be open, air will enter, and so compress the expanded intestinal gases to their previous volume. 3. The force with which it enters, and consequently the quantity which distends

the vagina, varies with the resistance offered by the abdominal walls to the gravitation and the degree of mobility of the viscera. 4. In replacing the female on her back, the abdominal walls and contents fall inwards, and expel the air again from the vagina. 5. Air will not enter the uterus unless distended by foetus, hand, or instruments. 6. In the position on the back, we have an efficient means of keeping the air out of the vagina and uterus, and so preventing the deleterious consequences ascribed to its action on the vaginal and uterine contents. 7. In abscesses communicating with the upper part of the vagina, this will be of equal importance.—Dr. HICKS could not entirely assent to the first proposition. If the uterus were prolapsed and the patient laid down, the uterus receded a certain distance upwards; if so, the vulva being open, air could enter.—Dr. ROUTH said the causes specified by the author were in action in all women. Why, then, was the disease so rare? A reversed vermicular action of certain mucous membranes was admitted. Why should it not occur in the vagina? The kinometer showed vaginal inspiration and expulsion of fluid or gas in every woman. He had found this rare disease mostly in women of sedentary habits, not in those who presented the conditions most favourable to suction of air upwards into the vagina, such as cooks and charwomen used to the stooping posture in scrubbing floors.—Dr. GERVIS said that Dr. Routh had overlooked the condition laid down as essential, viz., that in addition to the force of gravitation acting upon the abdominal viscera in the semiprone position, the vaginal inlet must be open; and in stooping this condition was not necessarily fulfilled. He advocated the position on the back in *post partum* hæmorrhage.—Dr. HEYWOOD SMITH referred to the rarity of the condition described by Dr. Rasch. Its presence was more frequent in cases where the upper part of the vagina has been rendered abnormal by any cicatrices, by any version of the uterus, or shortening of the cervix uteri.

Dr. ROUTH read the particulars of a case of Bilocular Uterus, the true nature of which was made out, after some difficulty. The patient suffered from dysmenorrhœa, but was relieved by treatment.

Dr. ROGERS read the history of a case in which the Uterus and the Vagina were divided by a Septum. The vaginal septum gave rise to great pain *in coitu*, which necessitated its division.—Dr. WILLSHIRE remarked that this condition might explain some of the cases of superfœtation.

Dr. PHILLIPS exhibited a Bifid Uterus, the division being indicated by a moderate notch.

CORRESPONDENCE.

AID TO THE SICK AND WOUNDED IN WAR.

SIR,—I have received so many letters, more than I can fully reply to, from medical gentlemen as well as others, making inquiries on the subject of volunteer aid to the sick and wounded of the hostile armies on the Continent, in consequence of my name and address having been mentioned by Colonel Loyd Lindsay, V.C., in a recent letter to the *Times* on the subject, that I shall feel obliged if you will make the following information known through your columns. A full account of the constitution and regulations of the "Help Societies" existing in the various countries of Europe may be found in a little book entitled *Help to Sick and Wounded*, recently published by Messrs. Hotten, Piccadilly. A provisional Committee for forming a National Society for help to sick and wounded in time of war, in connexion with the other national societies of Europe, has just been constituted in London; Lord Eliot, Captain Burgess, and Mr. Furley acting as Secretaries. The present address of this Committee is 8, St. Martin's Place, Trafalgar Square, London. I am, etc.,

THOMAS LONGMORE.

Netley, 27th July, 1870.

THE MEDICAL BILL.

SIR,—Pardon me if I am wrong; but do you think we are acting wisely in continuing to oppose the Bill, because it does not contain all we desire? Those of us who recollect the difficulties with which we had to contend with in the introduction of the first Medical Reform Bill—how reluctant Government was to undertake it at all—may well hesitate before they jeopardise the Bill in its present state.

You say "the opinion of reformers will be divided as to the expediency of accepting half a loaf or none. Almost all approve the Bill as far as its main principle goes, and almost all disapprove of its great omission—the absence of reform in the Medical Council." Much as I disapprove of the "omission", past experience should make us act very cautiously in the matter; especially when we bear in mind the reply made by Earl De Grey to the able advocacy of Lord Lichfield.

Believing, as we must do, that Government is much more inclined to do justice to the hard-working members of our profession than formerly, I should be sorry to throw anything in the way of this movement, or anything that would risk the doing away with some strange anomalies in the first Medical Bill—especially that clause which has been read in such various ways, that any man may assume a title he does not legally possess with apparent impunity. I am, etc.,

Derby, July 1870.

JAMES HEYGATE.

TREATMENT OF CHRONIC EMPYEMA.

SIR,—Dr. Sutton's remarks, recorded this week in your JOURNAL, bearing upon the treatment of chronic empyema, were read by me with great interest. In such cases, where the unhappy combination of a greatly thickened pleura, binding down the lung with a strong and rigid chest-wall, exists, the treatment which Dr. Sutton recommends is, I am persuaded, the best; viz., that of producing a partial vacuum, or, more correctly speaking, a certain degree of negative pressure within the pleural cavity. This, however, can only be effected by means of a syringe, or far better by means of a syphon-tube attached to the trochar, and conducted under water. By this latter means, which I advocated at the Clinical Society last session, any desirable amount of syphon power may be brought to bear upon the contents of the pleura by simply lengthening the tube. A mercurial pressure-gauge, attached by a side branch to the syphon-tube, is of great practical utility; first, in registering the amount of intrapleural pressure before the fluid begins to escape; secondly, in giving accurate information as to the amount of atmospheric pressure brought to bear upon the chest-wall and the inner surface of the lung at the end of the operation.

I have had a convenient apparatus adapted for the attainment of these objects made for me by Mr. Hawksley, of Blenheim Street, Bond Street, which I exhibited at the Clinical Society, and a description of which will appear in the transactions.

An earlier and more effective treatment of cases of empyema will, I am convinced, render such cases as that described by Dr. Sutton of more and more rare occurrence. I am, etc.,

Nottingham Place, July, 1870.

R. DOUGLAS POWELL.

THE CONTAGIOUS DISEASES ACT.

SIR,—It is a great pity that those who object to any existing or proposed law do not state what is the exact provision to which they object, instead of indulging in vague declamation, it may be, about something else. For example, your able correspondent, Dr. Drysdale, enlarges upon evils done, or supposed to be done, by the law of France for regulating prostitution, apparently for the purpose of inducing the impression (for he cannot suppose it is proving) that the wholly different Contagious Diseases Act of England should be repealed. Even those who think him right in his conclusion must perceive that he is quite wrong in his reasoning. Again, he says he cannot admit Mr. Acton's or Mr. B. Hill's arguments as to the necessity of infringing the Habeas Corpus Act with respect to all our women, for the sake of the army and navy. Neither of those gentlemen ever did so argue; and one is tempted to ask, Does he who says they did know what the Habeas Corpus Act is? I own that I doubt it; for it would not be an infringement of that Act if there were in the Contagious Diseases Act, which there is not, something to render *legal* interference with the liberty of modest women. And I have yet to learn that, even under the pretended or supposed authority of that Act, the liberty of modest women has been illegally interfered with, with impunity. Of course, any woman, or man either, may be subjected to great hardship, if wrongfully accused. Not a few have been put to death on false or erroneous evidence, and multitudes must have been unjustly imprisoned; but such errors are not infringements of the Habeas Corpus Act, but miscarriages of justice, from which no human law can be wholly free—grievous errors, to be guarded against as carefully as possible, but submitted to only where inevitable. Let Dr. Drysdale, if he can, point out what additional precautions are needed to guard the innocent from annoyance or injury. I think I can do so best. Because an Act has defects, that is no good reason for opposing the Act itself, but for amending its faults and supplying its defects.

If Dr. Drysdale's account of the working of the French system be correct, it is evidently essentially different from that of our Act. That system, he tells us, necessarily condemns the registered woman to lifelong prostitution. I do not believe this; but it is Dr. Drysdale's argument. The working of our Act is exactly the reverse; for it has rescued, or, more properly, has assisted to rescue, a large proportion of the women from a life of prostitution; and it has deterred others

from entering upon that course of shame and misery. It is probable that the real is not so great as the apparent diminution of prostitutes in the inspected districts; and that some, who before were practising prostitution openly, continue to do so secretly. But even such a change is a benefit to the public of no small value; and this benefit, at least, has been attained; while it is also certain that a considerable number, though probably not so many as some hope, have been rescued from a fate far worse than death.

Dr. Drysdale says that the working classes and many able women have expressed their dislike to the Acts of 1866 and 1869. They have, or at least a very small proportion of them have, indeed, expressed a strong and very natural and just dislike to a gross misrepresentation of those Acts, described to them by those who either had not taken the trouble to learn what the provisions of those Acts really are, or who have very little regard for truth; but certainly I am quite unaware of any strong opposition that has shown itself to the Acts themselves. These have been condemned for licensing women to pursue a shameful trade, though they do nothing of the sort. A prostitute still continues to be in law a disorderly character, liable to be treated as such; while the proved operation of the Acts has been to diminish very largely the number of *known* prostitutes, and to render those who continue the trade less public nuisances than they were.

Secondly, the Acts have been condemned for certifying that women who have been examined are safe. Not only is this not done, but it is expressly forbidden to be done under authority of the Act of 1869.

Thirdly, it is alleged that any woman, however modest, may be imprisoned for life, unless she will submit to an indecent examination. It might as justly be said that any woman may be committed to prison unless she can prove she is not a thief or a murderess. Before she can be committed, it must be proved to the satisfaction of the committing justices that there is evidence of guilt; she is not required to prove innocence. And so likewise, under the Contagious Diseases Act, no women are affected but those proved to be known common prostitutes—a fact scarcely ever disputed; and it is absurd, or worse than absurd, to say that the liberty of all women is endangered, for the great majority neither are nor can be suspected to be common prostitutes. I allow, however, that there is the possible, though extremely improbable, danger to be guarded against, of a modest woman being falsely accused, just as an innocent one may be falsely accused of theft. If a woman is suspected to have stolen property concealed about her person, she is examined, not by a man, but by a female searcher; and thus the hardship of a possible erroneous accusation is not aggravated by a grossly indecent search. I think the same course should be adopted with respect to women not known, but suspected, to be affected with contagious disease. The fact to be first ascertained is, Is there any evident sore, or any unnatural discharge? which would be quite as well ascertained by a trustworthy and well instructed nurse as by a skilful surgeon; and such cases only need be examined by him as appear to require remedial treatment. If this simple change of the law were made, almost all reasonable opposition to it would cease, while that arising from misrepresentation will soon die. Lies, though troublesome, are happily not long lived.

I am, etc., P. H. H.

Brompton, July 25th, 1870.

OBITUARY.

WARREN J. ISBELL, Esq., PLYMOUTH.

MR. W. J. ISBELL, late of Plymouth, died on July 18th, at Hampstead. The deceased gentleman was a member of a family which has held a prominent position in East Stonehouse for several generations. His father practised there as a physician for many years, and the deceased was also in practice there for about twenty-four years—in fact, until his removal to Plymouth, which took place about eleven years ago, and was necessitated by the large increase of his practice. Mr. Isbell was a Fellow of the Royal College of Surgeons, and a Licentiate of the College of Physicians of Edinburgh. He was very highly and deservedly respected, and beloved by his numerous patients for his uniform kindness, assiduous attention, and undoubted abilities, and his loss will be lamented by a very large circle besides his personal friends. For the past three months he had been in very ill health, but about three weeks ago he was so much better as to be able to bear a journey to London. He continued to improve for ten days after his arrival there, but a relapse proved fatal. The cause of death was pyæmia following prostatic abscess. Mr. Isbell was about fifty-seven years of age, and had been

in partnership for fourteen years with Mr. Bulteel, surgeon to the Royal Albert Hospital at Devonport.

Mr. Isbell was two or three times requested to stand as a candidate for municipal honours, but he invariably declined. Three years ago he received her Majesty's commission as a justice of the peace for Plymouth. Mr. Isbell was one of the senior members of the Royal Western Yacht Club, to which he was surgeon. Mrs. Isbell survives him, but he leaves no children.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, July 21st.

BRITISH MILITARY SURGEONS.—Major Anson asked the Secretary of State for War whether he intended to request permission for a British military surgeon of experience to be attached to the head quarters of the French and Prussian armies for the purpose of studying and reporting upon the effects of the more recent inventions of modern warfare, and the most approved methods of transporting sick and wounded men during rapid movements of troops.—Mr. Secretary Cardwell replied that the Army Medical Department attached great importance to the suggestion. He also recognised its importance, and should be glad to have the opportunity of carrying it into effect.

Friday, July 22nd.

SUPPLY.—On the vote of £4,046 to complete the charges and expenses of the Board of Lunacy (Scotland), Mr. M'Laren moved to reduce the vote by £1,500. The expenditure for lunacy for Scotland was £6,000; and if that were a proper sum, the expenditure for England, which was seven times larger than Scotland, should be £42,000 instead of only £20,000. For Ireland, which had one-and-three-quarters more population than Scotland, the expenditure, to be in the same proportion as that for Scotland, should be £10,500 instead of £3,800. He should like to know how it was Scotland required an expenditure of £6,000 for lunacy.—The Lord-Advocate defended the grant, and said the Board had so changed the state of lunatics in Scotland that, from being the worst cared for in any part of the country, they were now the best. The late Sir James Clark, so lately as January last, bore testimony to the efficiency of the Board, in which he said he took a deep interest. The duties of inspectors extended to an inspection of all the asylums in Scotland, and therefore when one of them resigned a few years ago it was found necessary to appoint a successor instead of leaving the whole work to be done by one inspector.—Mr. Rylands and Mr. Craufurd supported the motion for the reduction of the vote.—Mr. Secretary Bruce said the services rendered by the lunacy commission in Scotland had been very valuable. As to the difference in the cost between England and Scotland, the establishment charges of a small institution were necessarily relatively larger than the establishment charges of a large one; and while in England the assistant commissioners visited a number of lunatics collected together in asylums, in Scotland there were one thousand lunatics scattered very sparsely over large districts.—The amendment was then negatived without a division, and the vote agreed to.

Monday, July 25th.

THE MEDICAL ACTS AMENDMENT BILL.—In reply to a question from Dr. Playfair, Mr. Forster said that the Government had decided to withdraw this Bill.

Tuesday, July 26th.

AMENDMENT OF THE MEDICAL ACTS.—Dr. Brewer gave notice that he will next session ask leave to introduce a Bill for the consolidation and amendment of the Medical Acts.

SYDENHAM DISTRICT MEDICAL SOCIETY.—The Members for West Kent presented a petition to the House of Commons from the above Society in favour of the Direct Representation of the Profession in the General Medical Council; and, in the event of this being not granted, to reject the Bill. The following is the list of officers elected at the Annual Meeting for the ensuing year. *President*, F. E. Wilkinson, M.D. *Vice-Presidents*: G. Grayling, M.D.; F. Hetley, M.D. *Treasurer*: C. B. Waller, Esq. *Committee*: W. R. Bell, M.D.; B. N. Dalton, Esq.; Lord Huntley, Esq.; Edward Ray, Esq.; H. J. Philpot, M.D.; W. H. Tayler, M.D. *Honorary Secretaries*: J. M. Bright, M.D.; J. S. Turner, Esq. *Honorary Librarians*: J. M. Bright, M.D.; A. A. Duke, M.D. The Annual Dinner will take place at the Crystal Palace about the middle of October.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At an extraordinary meeting of the College, on July 18th, the following gentlemen, having conformed to the bye-laws and regulations, and passed the required examinations, were granted Licences to practise physic, including therein the practice of medicine, surgery, and midwifery.

Allen, Thomas, King's College Hospital
Bateley, John, M.R.C.S., Southtown, Great Yarmouth
Butt, William Frederick, M.R.C.S., 12, South Street, Park Lane
Davies, William Bowen, M.R.C.S., 15, Edmund Terrace, Cornwall Road
Goodsall, David Henry, M.R.C.S., St. Mark's Hospital, City Road
Hodges, William, M.R.C.S., 12, Ashley Road, Bristol
Millson, George, Donington, Spalding
Price, William, M.R.C.S., University College Hospital
Raynor, Arthur, M.R.C.S., 16, Warden Road, Kentish Town
Robinson, Tom, M.R.C.S., London Hospital
Smith, Wm. Wilberforce, M.R.C.S., 20, Bishop's Road
Spencer, Henry Banks, M.D. St. And., High Street, Oxford
Thorne, William Bezley, M.R.C.S., 38, Upper Baker Street
Timothy, Peter Vincent, M.R.C.S., 72, Worship Street
Way, Edward Willis, M.R.C.S., Adelaide, South Australia

The following candidate, having passed in Medicine and Midwifery, will receive the College License on his obtaining a qualification in Surgery recognised by the College.

Holmes, Charles, 46, Ogden Street, Ardwick, Manchester

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology, at a meeting of the Court of Examiners, on July 19th; and, when eligible, will be admitted to the pass examination.

Messrs. F. G. A. Rogers, Ebenezer Cullen, J. P. Brumwell, and C. A. G. Barrow (Students of Guy's Hospital); E. B. Aveling, A. P. Gould, Luther Eminson, and S. H. Blake (of University College); W. E. Battersby and G. P. O'Farrell (of the Dublin School); S. H. Robey, Thomas Gould, and G. F. Blake (of the Birmingham School); A. H. Anthom (of the Aberdeen School); T. L. Tims (of Calcutta and Guy's Hospital); G. M. Warren (of Toronto); John L. Whitmarsh (of the London Hospital); Frederick Clark (of Toronto and St. Thomas's Hospital); W. D. James (of the Sheffield School); W. A. Ward (of St. Bartholomew's Hospital); R. E. Deane (of the Leeds School); and H. W. Davies (of St. Mary's Hospital).

The following gentlemen passed on July 20th.

Arthur, Hands (Birmingham School); Edmund F. Thomas, Arthur R. Dunnage, Vaughan D. W. Jones, John L. Morley, William E. Bennett, Norman B. Elliott, and Clement F. Bryan (Guy's); Philip W. G. Nunn, William G. Bland, and Abithar Wall (St. Bartholomew's); W. K. Henson (Hull School); John Appleyard and John Bellwood (University College); Frank Steele (Liverpool School); James K. White and Henry H. Cockerton (London); Harold Jenkinson (Leeds School); Henry Young (Edinburgh); and S. W. Hope (St. George's).

Mr. John Hasard, L.S.A., of Melbourne, Derbyshire, who passed in Surgery at a previous meeting of the Court, having subsequently obtained a License in Medicine recognised by the College, was admitted a member on the 19th inst.

The following gentlemen passed on July 21st.

William H. Spurgin, T. H. Fagg, and John Morris (Guy's); William H. Cripps, Reginald Wade, and C. L. M. Iredell (St. Bartholomew's); Alfred Edwards (University); F. W. Butler (Westminster); and E. J. Crouch (Charing Cross).

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, July 14th, 1870.

Crackle, Thomas Arthur, Nottingham
Lang, John Alfred Thomas, Stoke Newington

The following gentlemen also on the same day passed their first professional examination.

Aylen, Thomas Vaughan, St. Bartholomew's Hospital
Bonser, John Hanbury, St. Thomas's Hospital
Boodle, Robert Maxwell, St. Bartholomew's Hospital
Brewer, Reginald E. W., St. Bartholomew's Hospital
Corrie, Alfred Thomas, St. Bartholomew's Hospital
Cowley, John S., St. Bartholomew's Hospital
Davies, Arthur E., University College Hospital
Donahoo, Thomas B., Guy's Hospital
Finzi, Leon Moses, University College Hospital
Shelnilt, George R., University College Hospital

As Assistants in compounding and dispensing medicines.

Baker, William Ritchie, Wimbledon
Ritson, George, Sunderland

The following gentlemen passed on July 21st.

Aston, John Pitney, Eccleshill, near Leeds
Davies, William Bowen, Llandoverly
Hepworth, William Henry, Heathfield, Sussex
Peele, John Richard, Gower Street, Bedford Square
Shaw, Bernard John, Attercliffe, Yorkshire

The following gentlemen also on the same day passed their first professional examination.

Bridgman, Harry Edward, St. Bartholomew's Hospital

Glanville, John, St. Bartholomew's Hospital
Godfray, Amiraugh Godfray, St. Bartholomew's Hospital
Thomas, John Howell, London Hospital
Wall, William Barrow, University College Hospital
Watson, Walter George, St. Mary's Hospital
Weatherhead, John Frazer, St. Bartholomew's Hospital

As Assistants in compounding and dispensing medicines.

Haydon, William Frederic, Fordingbridge
Hogg, Joseph Fawcett, North Shields

MEDICAL VACANCIES.

The following vacancies are announced:—

ARDWICK and ANCOATS DISPENSARY, Manchester—Resident Junior House-Surgeon: applications, 30th.
BARNSELY, Yorkshire—Medical Officer to the Constabulary of District of.
BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon: applications, August 10th; duties, second week in September.
BRIGHTON and HOVE LYING-IN INSTITUTION—Resident House-Surgeon: applications, August 3rd; election, 11th.
CENTRAL LONDON SICK ASYLUM DISTRICT—Medical Officer and Assistant Medical Officer; applications, August 1st.
DONEGAL DISTRICT LUNATIC ASYLUM, Letterkenny—Consulting and Visiting Physician: August 3rd.
DUNGANNON UNION, co. Tyrone—Medical Officer for the Benburb Dispensary District: applications, August 5th; election, 6th.
EASTERN DISPENSARY, Bath—Resident Medical Officer and Apothecary applications, 31st.
HOLBORN UNION, ST. LUKE'S DIVISION—Medical Officers for District No. 7, and for the City Road and Bath Street Workhouses: applications, August 2nd; election 3rd.
JERSEY GENERAL DISPENSARY—Resident Visiting and Dispensing Officer: duties, October 1st.
MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: August 25th. Resident Physician's Assistant: applications, 30th.
NEWCASTLE-UPON-TYNE INFIRMARY—Assistant-Surgeon: August 4th.
NEWPORT UNION, Monmouthshire—Five Medical Officers for Districts of Bedwas, Risca, Marshfield, Caerleon (including Schools), and Magor: applications, August 12th; election, 20th.
NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh—Assistant Medical Officer: applications, August 9th.
PAISLEY—Parochial Medical Officer Third District Burgh.
PORTPATRICK, Wigtonshire—Parochial Medical Officer.
QUEEN'S COLLEGE, Birmingham—Medical Tutor and Demonstrator of Anatomy applications, August 27th.
RATHDOWN UNION, co. Dublin—Medical Officer for the Glencullen Branch of the Dundrum and Glencullen Dispensary District: August 8th.
ROYAL BERKSHIRE HOSPITAL, Reading—House-Surgeon: applications, August 1st; election, 16th.
ST. GEORGE'S HOSPITAL MEDICAL SCHOOL—Lecturer on Ophthalmic Surgery and Ophthalmic Surgeon: applications, 30th.
SOUTH DEVON and EAST CORNWALL HOSPITAL, Plymouth—House-Surgeon: applications, 31st.
STRONSAY, Orkney—Parochial Medical Officer and Public Vaccinator: applications, August 24th.
UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, Newcastle-upon-Tyne—Medical Tutor: applications, 30th.
WESTMINSTER HOSPITAL—Resident House-Surgeon: applications, Aug. 6th; election, 16th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BELLAMY, Edward, Esq., appointed Assistant-Surgeon to Charing Cross Hospital.
GODSON, Clement, Esq., appointed Surgeon-Accoucheur to the City of London Lying-in Hospital, *vice* Hetman C. Harris, Esq., deceased.

BIRTHS.

KENDAL.—On July 12th, at Wark, North Tyne, the wife of *C. R. Kendal, Esq., Surgeon, of a daughter.
PERCIVAL.—On July 14th, at Knottingley, the wife of *T. Percival, Esq., Surgeon, of a son.
PHILPOTS.—On July 25th, at Leamington, the wife of *E. P. Philpots, M.D., of a daughter.
TEALE.—On July 22nd, at 1, St. Nicholas Parade, Scarborough, the wife of *J. W. Teale, Esq., M.A. Oxon., F.R.C.S., of a daughter.
WILLIAMS.—On July 26th, at Broomfield Swinton, near Manchester, the wife of *John Williams, M.D., of a daughter.

MARRIAGES.

*IRVINE, John W., M.D., of Liverpool, to Mary, widow of John EDIE, Esq., Surgeon, at Liverpool, on July 19th.
*SIMPSON, George A., M.B., to Jane Hazell, second daughter of John MACROBIN, M.D., Professor of Medicine in the University of Aberdeen, on July 27th.

DEATHS.

MIDDLETON, J. W., M.D., at Brussels, aged 32, on July 20th.
*O'BRYEN, John Roche, M.D., at Thistle Grove, South Kensington, aged 58, on July 26th.
PHILLIPS, Edward England, Esq., Surgeon, late of Chilton Polden, Somerset, at Adelaide Road, aged 55, on July 5th.
UNDERWOOD.—On July 25th, at Hastings, aged 42, Jane Anne, wife of *John Underwood, M.D.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Hunterian Society. Special Meeting, 8 P.M. Baboo Gopaul Chunder Roy, "On the State of Medicine in India before the British Rule."

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE REV. DR. BELL.—We prefer to leave the enunciation of the opinions contained in your letter to some suitable occasion at one of the general meetings. To raise discussion on such subjects in the JOURNAL columns would, we think, not be profitable or convenient.

THE ABERDEEN INFIRMARY ELECTION.—We agree with our correspondent. Whether the gentleman in question is correct in asserting that he is the only practical candidate, or not, it would have been better taste on his part had he allowed the managers to form their own opinion on his comparative merits, without attempting to decry those of his opponents.

RAILWAY URINALS.—We would call the attention specially of the active Medical Officer of Health for Marylebone to the state of the urinals at the stations of the Metropolitan Railway in his district. They in some instances deserve his immediate attention.

THE ANNUAL MEETING.

SIR,—Probably many of the associates will make the meeting at Newcastle the opportunity of a Scotch tour. From a very courteous letter received from the Superintendent of the Great Northern Railway, I find that the holders of tourists tickets to stations north of Newcastle may break their journey for the whole duration of the meeting at Newcastle.

29, Duncan Terrace, N., July 26th, 1870.

I am, etc., A. ERNEST SANSOM, M.D.

CHEAP RAILWAY TICKETS FOR THE ANNUAL MEETING.

SIR,—I have been instructed by the Local Committee to inform you that a communication was addressed to, and a deputation had an interview with, the Directors of the North Eastern Railway Company, with the view of obtaining a reduction in the railway fares for members attending the annual meeting; and I regret to state that no change in the ordinary rates could be obtained.

For the guidance of members, I have pleasure in appending the regulation of the North Eastern Railway Company, respecting the issue of return tickets.

"First and Second Class Return Tickets, at or about one fare and a half, for distances above 60 miles, are available for two days; above 125 miles, for three days; and for 200 miles and above, for four days.

"The return journey may be made by any train in which the passenger can start before 12 o'clock the same night, provided such train stops at the station where the ticket was issued, even if it does not arrive there before that time."

I am, etc., G. H. PHILIPSON, M.D.,

Honorary Secretary of the Local Committee, Annual Meeting, 1870.
Newcastle-upon-Tyne, July 23rd, 1870.

DEGREES AND LICENCES OF TRINITY COLLEGE.

SIR,—Will you be good enough to inform me—through the medium of "Notices to Correspondents"—whether it is customary or correct for a Licentiate of Medicine of Trinity College, Dublin, to assume the title of "Doctor", and have the same printed on his card? Also, whether a Licentiate of Medicine of Trinity College, on passing a B.A. Degree, has M.D. conferred upon him by his College, without further medical examination?

I am, etc., RUSTICUS.

According to the Regulations of Trinity College, no Licentiate or Bachelor in Medicine can use the title of Doctor. The Bachelor in Medicine must be a Bachelor in Arts. The Doctor in Medicine must be of the standing of Master in Arts, and is examined for the Doctor's Degree by means of a thesis on some medical subject.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

MEDICAL AID TO THE WOUNDED IN THE WAR.

SIR,—The probabilities are that, within a very short time, a large number, it may be fifty or one hundred thousand, of our fellow creatures will be lying wounded on the field of battle. Do you not think it would be within the province of our Association to try to lend a helping hand in such a fearful emergency? I believe there are many of my professional brethren, whose age does not exceed forty years, and who have some colloquial knowledge of French or German or both, who would be willing to give their services on the field of battle, for a limited term, to dress the wounded. In this way, men of experience, skilled in the treatment of injuries, would at the very time that the ordinary medical officers of both armies were overwhelmed with work, be at hand to render valuable help; and no sooner had the need for their services passed away, than they would quietly withdraw.

Mr. R. Young, J.P., late M.P. for Cambridgeshire, and one of the Directors of the Great Eastern Railway Company, has written me as follows, in reply to a communication from me on the subject.

"Dear Sir,—On receipt of your letter, I immediately called a Continental Committee, who have directed that half-fare be charged to all surgeons going to or coming from the seat of war, *via* Rotterdam and Antwerp. Also, the half-fare will be charged to any surgeon coming to London and returning on that business. Those who wish to avail themselves of these rates, must produce an order from the Central Committee in London. Yours truly, RICHARD YOUNG.

"Board Room, Bishopsgate Station, July 25th."
This, I think, you will agree with me, is a very handsome offer on the part of the directors, and I have no doubt others will be found willing to give similar facilities.

Our Association might, having an organisation at once available, lend valuable aid. 1. By receiving subscriptions to aid in the supply of necessaries, as instruments, bandages, etc., for use on the field. 2. By those going to the field wearing an authorised distinctive mark, an useful fraternity would be established *en route* and in the field. 3. By forming in Paris and other cities near the field a rendezvous for men and material. 4. By obtaining for those going on this errand of mercy, from Commanding Officers, Ministers of War, Railway Companies, etc., facilities, recognition, and protection. I am, etc., GEORGE B. MEAD.

Mentmore House, Newmarket, July 26th, 1870.

** Our correspondent will observe elsewhere that a National Relief Society has been already formed in this country, which has no doubt, like those of other countries, received the recognition of France and Prussia. A large number of medical and other volunteers have already sent in their names to Captain Burgess, the Secretary. We can only advise others, who are desirous of offering their services in aid of the sick and wounded in the present war, to follow their example, as the Society is likely to be called into requisition. Personal application for appointments to the respective representatives of France and Prussia has in some instances already met with success.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, June 27th; The New York Medical Gazette, July 9th; The Parochial Critic, July 27th; The New York Medical Record, July 14th; The Boston Medical and Surgical Journal, July 14th; The Madras Mail, May 16th; The Gardeners' Chronicle, July 23rd; The Poor-Law Chronicle, July 19th; The Shield, July 25th; The Darlington and Stockton Times, July 16th; The Liverpool Daily Chronicle, July 22nd; The Scotsman, July 27th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Gibson, Dundee; Dr. Boggs, Paris; Anti-Advertiser; Dr. Walker, London; Dr. Lionel Beale, London; Dr. A. E. Sansom, London; Mr. Clement Godson, London; Mr. T. Charters White, London; Dr. Rumsey, Cheltenham; Dr. Bell, Goole; Dr. Falconer, Bath; A Ship Surgeon; etc.

LETTERS, ETC. (with enclosures) from:—

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LECTURES

ON

THE HISTOLOGY OF THE EYE:

(BEING THE ARRIS AND GALE ANATOMICAL LECTURES.)

Delivered at the Royal College of Surgeons of England, June 1870.

BY

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LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—In the course of lectures on the minute anatomy of the eye which I had the honour of delivering here, last summer, I described the histology of the cornea and vitreous humour, of the retina and tunica uvea. There remain for this course the parts concerned in the accommodation of the eye, and the conjunctiva, sclerotic, and optic nerve, an account of which will complete the normal anatomy of the eyeball. I propose to devote to-day to the apparatus of accommodation; Wednesday to the conjunctiva, sclerotic, and the optic nerve, including, if time permit, the histology of neuritis; and on Friday to give you some account of the anatomy of tumours and new growths originating on or inside the eyeball.

The Apparatus of Accommodation.—Let me, in the first place, endeavour to explain what the term *accommodation* technically means. That we cannot see perfectly distinctly at the same instant two objects placed at different distances before the eye, is a fact of the truth of which a moment's attention suffices to convince the most unobservant person. The fact is most easily realised when the objects are near; for when they lie at a great distance from the spectator the minor distinctness of one of them is less appreciable; but when they are relatively close to the spectator, it is impossible for him not to become aware of the phenomenon. Thus, when I look at the nearer of two trees placed several yards apart, nearly in the same line, in a distant field, the minor distinctness of the farther tree is so slight that I may fail to notice it; but when I look at a book through a veil, both being near me, and only a few inches apart, I find that when my eye is fixed on the print I see it quite distinctly, while I am scarcely conscious of the presence of the intervening veil; and, again, when I look intently at the veil, and perceive its texture distinctly, at that same moment the print becomes confused and unrecognisable. What is the explanation of this?

In order to see an object distinctly, an exact image of it must be formed on the bacillary layer of the spectator's retina. Every luminous point in the surface of the object turned towards the spectator must be represented by a corresponding image-point upon his retina. This is effected by the refractive power of the eye—that power which its transparent parts possess in common with inanimate transparent bodies, of changing the original direction of the luminous rays which enter it, and of giving these rays a new direction of a kind dependent on their relative densities and their curves.

Luminous pencils coming from remote objects consist of parallel rays; and, having regard to the small opening of the pupil, the pencils which enter the eye from an object twenty or more feet distant may be considered to be composed of parallel rays. Now, the refractive power of the eye is such that parallel rays entering it are collected in exact foci upon its retina without the exercise of any vital effort, the eye itself being quite passive. It would occur as well in a dead eye, so long as its media remained transparent, and while they retained their proper curves.

The luminous pencils which a near object sends to a spectator's eye consist of divergent rays, and the unaided refractive power of the eye which sufficed to unite the parallel rays from a distant object in the bacillary plane of the retina, is insufficient to collect divergent rays in exact foci in this plane. The foci of these rays lie behind the retina which the pencils strike as spots, the sections of cones, called circles of dispersion, and not as points. The result of this is a blurred confused image, and not a clear one, the production of which requires the rays to be brought to exact foci in the bacillary layer.

We are, however, conscious that we possess the power of seeing distinctly near objects as well as distant ones, which proves that the eye has the power to unite divergent as well as parallel rays in exact retinal foci; and this implies the possession of a power of altering its refractive state, so as to suit it to the distance of the object which we

desire to see distinctly, or, in other words, to adapt it to the degree of divergence of the luminous rays entering the eye from the object.

This adaptation of the refractive state of the eye is technically called its *accommodation*. It has been at different times attributed to a change of the figure of the eyeball, to an alteration of the curve of the cornea, and to a shifting of the position of the lens; but more delicate methods of observation than were formerly at the command of the physiologist have shewn all these views to be erroneous, and by the direct inspection of the human eye with instruments specially contrived for this investigation, it has been demonstrated that its accommodation for a nearer object is effected by increased convexity of the lens, and this chiefly of its anterior surface, the curve of its posterior surface being altered in a scarcely appreciable degree. With the increased convexity of the lens, its axis is proportionately lengthened, the pupillary region of the iris approaches the cornea, and the peripheral portion of the iris recedes from it.

There are not any grounds for supposing that this change of figure is wrought by any power inherent in the lens itself, which is plastic, but is not endowed with contractile irritability, and is not dominated by the will, being devoid of nerves.

The active factor of accommodation must, therefore, be external to the lens. Now, in close relation to the lens there are two muscular organs, the iris and the ciliary muscle. The existence of accommodation in persons from whom the iris is congenitally absent, and its persistence where the iris has been in part or entirely removed, demonstrate its independence in man of this diaphragm. There remains, therefore, only the ciliary muscle as the active agent of accommodation in the human eye. To the ciliary muscle and lens I would invite your attention to-day. I shall take the lens first.

Lens.—The lens of the human adult has a flattened bi-convex figure. The anterior surface is less convex than the posterior, the radius of curvature of the former being nearly twice as great as the radius of the latter surface. The infant's lens is more nearly spherical, which makes the distance between its summit and the cornea smaller than in the adult's eye. This circumstance is not without influence in the causation of the minute white speck on the front of the lens (the central subcapsular cataract) not infrequent in persons who have suffered from infantile purulent ophthalmia, even where this has not been complicated with perforation of the cornea. The compression of the cornea by the swollen eyelids and oedematous conjunctiva, and a slight amount of deep congestion pushing forward the lens, may bring the lens and cornea together, and thus disturb the nutrition of the growing lens at the point of contact, and induce a perverted growth and retrogressive changes in the lens-tissue.

In other mammalia and in the lower vertebrata the figure of the lens is less flattened than in adult man, resembling more nearly the shape of the human foetal lens.

The lens of vertebrate animals is formed almost entirely of a peculiar fibrous tissue with a very scanty formless interstitial substance. It is enclosed in a short capsule, the integrity of which is of the highest importance to its transparency. This capsule is a perfectly transparent, very elastic, yet brittle, membrane. It is little prone to degenerative metamorphoses, and never undergoes absorption. I have found it transparent and unchanged sixteen years after the extraction of the lens for cataract. Its chemical constitution and reactions resemble those of the other hyaloid membranes: it is unaffected by weak acids and alkalies, and it resists putrefaction. With high magnifying powers, no indications of structure are discernible in it, except faint marks of lamination in the stout capsules of the largest mammalia.

The front half of the capsule, or more exactly that part of it which lies in front of the attachment of the suspensory ligament, is thicker than the posterior half; at a rough estimate, its thickness may be taken to be three times as great.

This difference, and the unavoidable implication of the front half of the capsule in operations for the removal of cataract, have led to the adoption of the terms anterior and posterior capsule. As these terms are convenient, their use is not objectionable if it be borne in mind that they refer to two halves of one and the same sac, and not to two distinct sacs.

Besides being stouter, the front half of the capsule differs also from the posterior in being lined with an epithelium. This consists in the central region of a single layer of large, flat, polyhedral cells, each enclosing a circular nucleus. These nuclei are remarkably uniform in size and shape. At the edge of the lens the epithelial cells are much smaller, and so closely crowded that their nuclei are separated by very small interspaces. In mature lenses the marginal epithelium is composed of only a single layer of cells, but in young and growing lenses it is formed of several layers of cells with an imbricated arrangement, which constitute the matrix out of which the fibrous tissue of the lens is evolved.

The capsular epithelium plays an important rôle in the so-called capsular opacities accompanying various forms of cataract, congenital as well as acquired; for out of it are evolved, by what may be called a perverted development, nucleated fibrous webs, often of great toughness and density, underlying the inner surface of the capsule. It must not be forgotten that the capsule itself never becomes opaque; what are called opacities of the capsule being always deposits of opaque substances and adventitious growths upon its surfaces. These may exceptionally be overlaid by a transparent colloid substance, and then an opacity may seem to be seated in the capsule; but the colloid mass is not a part of the capsule, it is something superadded to it.

I am aware that some good observers deny this origin of these intracapsular fibrous webs, which are not optically distinguishable from a connective substance. They ask how can a connective substance be the derivative of an epithelium; and they maintain that in all these cases the capsule has not been entire, but it has had some rent through which these fibrous webs have intruded themselves from without. I cannot yield to this opinion, because I have found such webs on the inner surface of capsules which I could not doubt were entire, and where their intrusion was impossible, and because I have, as I believe, been able to trace the evolution of the fibrous tissue from the epithelial cells through intermediate phases. A normal lens-fibre, which all allow to be the final phase of a capsular epithelial cell, differs hardly less from its initial phase than do some of the elements of these fibro-nucleated webs.

The posterior half of the capsule has not any epithelial lining; but its inner surface frequently exhibits polyhedral marks, which have been mistaken for an epithelium. They really express the hexahedral oblique cross sections of the swollen posterior ends of the lens-fibres.

The tissue composing the lens itself consists in greatest part of long, flat ribbon-like fibres. These have two wide surfaces and four narrow ones meeting in two thin bevelled edges, which give to their cross sections a hexahedral figure. The fibres are really long tubes filled with the protein substance to which chemists have given the name of globulin. When the fibres are broken across, it transudes in the form of globules from their ends. It often accumulates in large masses between the layers of fibre in lenses, which have been hardened with chromic acid.

A nucleus is present in the superficial fibres near the edge of the lens, but the deeper fibres are more sparingly nucleated. The fibres cohere very closely by their flat surfaces, and still more intimately by their bevelled edges. These latter, in some vertebrata, are serrated, which renders their union still more secure. This serration is very coarse in fish and in some chelonians, much finer in snakes, so fine in frogs that the edges appear only as if slightly frayed, and absent from the human lens-fibre.

The other constituent of the lens is the interstitial tissue—a formless substance present in a very minute quantity in the axis of the lens and in those extensions of it called the central or axial planes. In young persons, the refractive index of this substance agrees with that of the fibrous tissue; hence their lenses are free from the internal reflections which the lenses of elderly persons exhibit, and which give these an opalescence which an incautious observer may readily mistake for a cataractous opacity.

The axis in the simplest form of lens, as that of some fish and of amphibia, is a streak or line of this interstitial substance traversing the centre of the lens. The lens-fibres are grouped around it in the manner of the meridian lines upon a globe, the inner fibres progressively shortening towards the centre of the lens. In other fish and in the porpoise, and the rabbit amongst mammals, the axial streak is flattened. It extends in two opposite directions and forms a central plane, the ends of which make a linear stigma on the front and back of the lens. The directions of these stigmata do not coincide; they intersect at a right angle, as they would if the plane of which they are the ends had been twisted through 90 deg. in passing through the lens. From the two edges of this, which may be distinguished as the primary plane, others—secondary planes—run out in a complicated manner towards the circumference of the lens. The primary central planes in most mammalia diverge at equal distances of 120 deg. from the axis, and their ends form, on the back and on the front of the lens, a trifid stigma. The rays of one stigma intersect the angles included between those of the other stigma as they would do if the tripartite axis had been twisted through 60 deg.

In these lenses, the arrangement of the fibres with respect to the central planes is much more complicated than in the simple amphibian lens. All its details are probably not yet known to us; but, so far as they have been ascertained, it appears that the fibres pass between the front and back of the lens, winding round its equatorial edge in such a manner that a fibre, starting from the interval between two of the front planes, falls behind on the edge of a posterior plane; while a

fibre, starting from the edge of one of the front planes, would fall behind in the angle made by two of the posterior planes. The intervening fibres between these extremes take intermediate positions on the planes.

The tripartite division of the axis, persistent in many mammals, is present also in the human foetal lens, which—as has been already mentioned—is nearly spherical. As the lens enlarges, the three primary planes detach secondary and tertiary ones; the multiplication continues during the whole period of growth, until in the human adult the minor planes form an excessively complex frame. With this excessive complexity of the planes, the fibres maintain a general direction between the front and the back of the lens; and since the surfaces of the fibres cohere more strongly than their edges, most lenses, when artificially hardened, can be split by a coarse dissection into concentric laminae.

In youth, the lens is soft; but with advancing years it acquires greater consistence, becoming in aged persons really hard. It is to this change, in consequence of which the lens becomes less plastic as we advance in life, that presbyopia is mainly due.

In birds and in lizards, the nucleus only is concentrically laminated; and the outer fibres pass vertically and obliquely between the capsule and nucleus.

Connections and Relations of the Lens.—The back of the lens lies in a hollow in the front of the vitreous humour, bounded by an extension of the hyaloid capsule of this humour, which is so distinct from the posterior lens-capsule, that I should hardly have mentioned their separateness had this not been recently denied. It bends inwards near the edge of the lens, and forms the posterior wall of the space known as Petit's canal. The lens may be removed in its entire capsule without destroying the integrity of this partition between the vitreous humour and the lens-bed. But its chief support is the suspensory ligament which slings the lens to the ciliary processes. This arises from the whole inner surface of the ciliary body in front of the ora retinæ, from columnar epithelial-like bodies resting in the pigmented epithelium; and it is attached in a plaited manner to the capsule at the edge of the lens, advancing slightly upon the front, and to a less extent on the back of the lens. It is made of fibres, which chemically resemble yellow elastic tissue. They are remarkable for their hard and sharp outlines and their clear fracture. They break up near the lens into brushes of very fine fibrillæ, the interspaces between which are occupied with delicate membraniform expansions. Kölliker regards the elongated bodies from which these fibres arise as special modifications of the connective tissue radial fibres of the retina which are continued in front of the ora, the nervous retinal elements ceasing at this boundary line. The place of the attachment of the suspensory ligament to the lens varies within rather large limits in different animals: in birds and reptiles, it is nearer the front of the lens than in man.

Let us now turn to the

Muscular Apparatus of Accommodation.—In the human eye, the ciliary muscle is the active factor of accommodation. When the cornea and sclerotic are removed, a greyish ring is seen behind the iris on the outer surface of the ciliary body. It was considered ligamentous, until Professors Brücke and Bowman nearly simultaneously discovered its muscularity.

In mammalia, the muscular tissue is unstriped. The deepest bundles of muscular fibre—those which are in close relation to the outer surfaces of the ciliary processes—are very obliquely directed; collectively, they form a ring resembling a sphincter, yet not completely separable from the other muscular bundles. Attention was first drawn to these circular fibres by the late H. Müller, who conceived that, acting through the intervening ciliary processes, they might compress the edge of the lens.

The outermost bundles of muscular fibre run in meridional lines. They stream backwards from the cornea and lose themselves on the outer surface of the ciliary body and choroid. These fibres are connected in front with the middle of the three divisions of the posterior elastic lamina of the cornea. (The inner division of this lamina spans the margin of the anterior chamber and forms the pillar of the iris, and the outer division passes backwards and outwards to the sclerotic behind the space known as the circulus venosus, or Schlemm's canal.)

The shortening of these meridional bundles of muscular fibre will tend to approximate their corneal and choroidal attachments; and if we regard the corneal one as the more fixed point—a view which best harmonises with the anatomical facts—the contraction of these bundles tends to draw the choroid forwards and tighten it upon its contents. According to this view, the ciliary muscle (as regards its radial bundles) is a tensor of the choroid, as Brücke named it.

Let us next see what light these anatomical data throw on the process of accommodation. You will recollect, that in accommodation for a nearer object, the lens as a whole does not shift its place; but its anterior surface becomes notably more convex, and the convexity of

its posterior surface is very slightly increased. With this alteration of its figure, the axis is lengthened and the transverse diameter shortened. The pupillary region of the iris approaches the cornea, and the circumference of the iris retreats from it. The lens with its capsule is elastic, but without contractile irritability; its rôle is passive. When the suspensory ligament is tight, it must exert traction on both surfaces of the lens (chiefly on the front, by reason of the greater stoutness of the fibres and of their attachment to the lens advancing rather further from the edge of the lens), tending to compress the lens in the direction of its axis and to flatten it—the shape of the lens in looking at a distant object, which is a passive act, not requiring accommodation.

When the radial or longitudinal bundles of the ciliary muscle contract, and the distance between their extreme points of attachment is lessened, the previously tense suspensory ligament is relaxed; and the lens, no longer compressed by it, becomes more convex by virtue of its own elasticity. If at the same time the circular bundles of the muscle were to shorten, this would tend to contract the circle of the ciliary processes, by which the suspensory ligament would be still more slackened. I doubt, however, whether they can act as a compressor of the edge of the lens.

The ciliary muscle derives its nerves from the lenticular ganglion. They pierce the sclerotic not far from the optic nerve; and, gaining the inner surface of this coat, they run forwards between it and the choroid till they reach the ciliary muscle, on the outer surface of which they break up and recombine in the well-known beautiful plexus, a large portion of which is, however, destined for the innervation of the iris. From this coarse plexus, bundles of nerve-fibres dip into the muscle, in which they form a finer net, from which single fibres of extreme tenuity are traceable for long distances amongst the muscular bundles; but I have not yet discovered the actual nature of their ultimate connection with the muscular fibre. In my last course of lectures, I adverted to the occurrence of ganglion-cells in this plexus. They first became known to me by the beautiful preparations of Schweigger, and are not the coarser gangliform swellings recognisable under slight enlargement described by Dr. R. Lee, jun. The arteries of the ciliary muscle are drawn from the circulus arteriosus major iridis, which distributes many recurrent twigs to it. These are not infrequently offsets of the arterioles which this arterial circle sends to the ciliary processes. The venous blood escapes in two directions—posteriorly, through veinlets which join those of the ciliary processes and lead to the venæ vorticosæ; and in front, through veinlets which empty their contents into the circulus venosus in Schlemm's canal.

ON THE TREATMENT OF ACUTE AND CHRONIC BRIGHT'S DISEASE.*

By GEORGE JOHNSON, M.D., F.R.C.P.,

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GENTLEMEN,—On the invitation of your President (Dr. Andrew Clark), I have undertaken to read a short paper "On the Principles which should regulate the Treatment of Acute and Chronic Bright's Disease." What is Bright's disease? I adopt the definition given in the *Nomenclature of Disease* published by the Royal College of Physicians: "Bright's disease is a generic term, including several forms of acute and chronic disease of the kidney, usually associated with albumen in the urine, and frequently with dropsy, and with various secondary diseases resulting from deterioration of the blood." The term Bright's disease is nearly, but not quite, synonymous with renal albuminuria.

The causes of renal albuminuria arrange themselves in two main divisions.

1. A mechanical impediment to the escape of the venous blood from the kidney, as from disease of the heart or lungs; the pressure of dropsical fluid in the abdomen; sometimes probably the pressure of the gravid uterus.

2. An abnormal condition of blood is by far the most frequent cause of albuminuria. Thus albuminuria occurs not infrequently as a result of scarlatina, diphtheria, erysipelas, typhus and enteric fever, pyæmia, cholera, measles, purpura, gout, etc. The albuminuria which sometimes occurs during the early stage of pregnancy is probably a consequence of blood-changes associated with that condition; while that which occasionally follows parturition is, in all likelihood, a result of absorption of septic materials from the uterus.

Thus albuminuria may result from a primary mechanical hindrance to the movement of blood, or from a primary change in the quality of the blood. On the present occasion I shall exclude from consideration that class of cases in which albuminuria is a result of a mechanical impediment to the circulation and consequent passive congestion of the kidney. My remarks will have reference only to the more numerous second class of cases—cases of albuminuria the result of abnormal states of blood. I shall endeavour to make my remarks as practical as possible, with only so much of reference to pathological theory as may serve to guide or to explain practice.

The extreme frequency of renal disease is a physiological result of the kidney forming one of the main channels by which effete and noxious materials are cast out of the circulation. During the process of excretion, the kidney-tissues—primarily the gland-cells, secondarily the blood-vessels—undergo structural change. A leading principle of treatment is to lessen as much as possible the excretory work of the kidney, more especially in cases of acute Bright's disease. The main points are—rest in bed in a room of moderate uniform temperature; a carefully regulated and a somewhat scanty diet; the adoption of means to promote a free action of the skin and bowels.

In all cases of acute Bright's disease, rest in bed is an essential part of the treatment. In a large proportion of cases, this with a scanty diet will suffice for the cure. The diet may consist of milk alone if it suits the patient's stomach, or milk with an egg or two in the course of the day, or with the addition of beef-tea or other animal broth. Under this regimen the urine soon becomes copious, while the albumen diminishes and gradually disappears.

The copious flow of urine which usually occurs during convalescence from acute Bright's disease is thus explained. During the acute and congestive stage of the renal disease, the constituents of the urine—both solids and liquids—have accumulated in the blood, and have thence been effused into the areolar tissue and into the serous cavities. Now, urea is a most powerful diuretic. When injected into the veins of a dog, it quickly excites a copious flow of urine; and no sooner is the inflammatory congestion of the kidney removed, and thus the freedom of the renal circulation restored, than the urea retained in the blood begins to exert its natural diuretic action upon the kidney. The copious flow of urine thus induced speedily removes the accumulated urinary solids and water from the blood, the areolar tissue, and the serous cavities, into which they had been effused, and thus the dropsy is cured.

This abundant flow of urine occurs without aid from diuretics or drugs of any kind. I have seen it occur while a bread-pill or coloured water was given as a placebo. Stimulating diuretics, such as squills, or cantharides, or turpentine, would be injurious, by increasing congestion of the kidney. The best diuretics in such cases are those means which tend to lessen renal congestion—dry cupping or hot fomentations over the loins, hot air or water baths, purgatives, and a scanty diet, with a free use of diluent drinks—one of the best and pleasantest drinks being the "imperial drink", made with cream-of-tartar and lemon.

When the renal congestion is extreme, as shown by the scanty secretion of highly albuminous urine, local bleeding by leeches or cupping on the loins is often extremely useful. If by the abstraction of a few ounces of blood from the loins we relieve the renal congestion, we shall check the rapid destruction of blood-constituents which results from uræmia; moderate local bleeding, therefore, tends to economise blood, and to prevent its waste.

It has been asserted that cupping or leeching the loins can help an inflamed kidney no more "than if the blood had been taken from the arm or from the nape of the neck". But this, surely, is a mistake. The lumbar arteries, which supply the integuments of the loins, arise from the abdominal aorta, close by the origin of the renal arteries; and when leeches or cupping-glasses draw blood through the skin of the back, it is certain that the diminished pressure within the lumbar arteries will divert a certain quantity of blood from the neighbouring renal arteries. The same principle explains the good effects of leeching in cases of pericarditis. The internal mammary artery sends deep branches to the pericardium, and superficial branches to the intercostal spaces and the skin. By the application of leeches over the heart, we abstract blood from the integumentary branches of the internal mammary artery, and thus divert a portion of blood from the deeper pericardial branches. The blood will as surely take the course indicated by diminished pressure within the vessels as the water in a pump will, up to a certain height, follow the rising piston. It may be thought that the quantity of blood thus diverted is very small: so, in the case of venesection being practised in the arm or neck, how scanty is the stream of blood which escapes from the opening in the vein compared with the torrents of blood rushing through the venæ cavæ into the right side of the heart; and yet in a case of obstructed circulation through the heart or lungs, how promptly and decidedly does this small diverted current

* Read at a meeting of the Beaumont Medical Society, May 5th, 1870.

lessen the distension of the whole venous system. Hot fomentations or poultices on the loins act by relaxing the superficial arteries. The skin, therefore, receives a larger supply of blood, and thus a portion of blood is diverted from the renal arteries. Then, too, there is some degree of depletion from the full cutaneous capillaries by the free local sweating which the warmth occasions.

Dry cupping acts in a somewhat similar way to hot fomentations. It draws an abundance of blood through the arteries into the subcutaneous capillaries, which, when the cups are removed, returns through the veins to the heart. In order that dry cupping may be most effectual, each cup should be removed as soon as the vessels beneath are well filled, and then it should be reapplied. The object is first to draw the blood through the arteries into the capillaries; then to allow it quickly to return by the veins, and not to keep it stagnating in the capillaries, which will happen if the glass be retained long on one spot. Another point is not to draw the blood into the skin with sufficient force to cause extravasation, the effect of which will be to impede the circulation through the skin, and so to divert more blood into the inflamed tissues beneath. The sole object of dry cupping, be it remembered, is not to irritate the skin, but to draw blood rapidly from the arteries, and as rapidly to transmit it through the capillaries to the veins, in its backward course to the heart.

As a rule, it is well to give no alcoholic stimulants; or, if need be, to give them very sparingly in cases of acute Bright's disease. The imbibition of alcohol imposes extra work upon the kidney, and so is opposed to the principle of lessening as much as possible the work of the inflamed gland. Excess of alcohol is a not infrequent cause of albuminuria; and a very moderate employment of alcohol may tend to perpetuate and aggravate disease.

Not long since, a man was admitted into King's College Hospital completely narcotised by a surfeit of wine, which was pumped from his stomach in large quantities. The urine drawn off from the bladder contained a large amount of albumen. In a few hours the man recovered consciousness, and the urine became normal. The temporary albuminuria was a result of renal congestion while the excess of alcohol was being excreted by the kidneys.

When acute Bright's disease is making satisfactory progress towards recovery, the dropsy usually disappears for a variable time before the urine ceases to be albuminous. It is very important to impress upon the patient that until the urine has regained its normal characters, he must be extremely careful to avoid cold, fatigue, and errors of diet.

The duration of albuminuria in cases that ultimately recover is very variable. I have seen many cases of recovery after the disease had continued for from three to twelve months; and I have seen some recover after the urine had been albuminous for one, two, three, and in one case four, years.

The more I have seen of the disease, the more hopeful I have become as to the ultimate result, when the history and the symptoms, and above all, the chemical and microscopical characters of the urine, do not indicate extensive and irremediable degeneration of the kidney. In all the cases of recovery from long-continued albuminuria, the preparations of iron have entered largely into the medicinal treatment of the disease, and have apparently contributed much to the favourable result. There are two preparations which I believe to be especially useful: these are the tincture of the perchloride and the syrup of the phosphate. I believe that they are best taken with the food. I have frequently combined with each dose of the perchloride of iron ten grains of hydrochlorate of ammonia; and I believe that this ammonio-chloride of iron is a useful combination.

Amongst other remedial agencies, when acute renal disease is prolonged and threatens to become chronic, change of air and scene is often highly beneficial; and I have seen some most remarkable recoveries effected under the influence of a long sea-voyage.

There are few diseases which, during their progress, cause more varied and severe suffering than confirmed chronic Bright's disease in its various forms. As the symptoms vary in the different forms of chronic renal disease, so a varied treatment is required in the different classes of cases. Without entering into minute pathological distinctions, for which we have now no time, I purpose to say a few words on the treatment of some of the more frequent and distressing symptoms.

In one class of cases—cases of large white kidney, with a scanty secretion of highly albuminous urine—dropsy is usually a prominent symptom. The tendency to dropsy is without doubt increased by the dry and inactive state of the skin; and this condition of skin seems to be mainly due to the hypertrophy of the muscular walls of the minute subcutaneous arteries. This excessive muscularity of the small arteries enables them to resist the relaxing effect of external warmth, so that a hot-air bath often fails to excite diaphoresis. Patients who do not perspire under the influence of a hot-air bath, usually complain of painful

throbbing in the head, difficulty of breathing, and other distressing sensations. So frequently is this the case, that in cases of chronic renal disease I am now in the habit of substituting for the hot-air bath a prolonged packing in a wet sheet, surrounded by blankets. Patients often remain packed for periods varying from one to three or four hours, not only without distress but with comfort and decided relief.

Diuretics are notoriously uncertain in their action. I have often obtained good results from the imperial drink, in doses of from one to three pints in the twenty-four hours. A very efficient diuretic is a strong infusion of fresh broom-tops, taken in sufficient quantity to act as a purgative. The free action of a hydrogogue purgative, elaterium, compound jalap-powder, or compound gamboge-pill, is very commonly followed by a copious flow of urine. The escape of water by the bowels lessens the distension of the systemic veins, the circulation becomes more free, and therefore the secretion of urine more copious.

When other means fail to remove anasarca, acupuncture of the legs, or an incision with a lancet, often affords prompt and decided, and sometimes permanent, relief. I have seen a considerable number of cases in which life has been prolonged, and some in which complete recovery resulted, from the operation, after other means had failed to afford relief. It is very interesting to note the phenomena which follow upon acupuncture or incision of the legs in cases of anasarca. There is, first, a copious drain of liquid through the skin; then there is a further exudation of liquid from the over-distended blood-vessels; this liquid also escapes through the punctures, and its escape is often associated with temporary symptoms of exhaustion, a rapid and feeble pulse, and pallor of the face. Lastly, there often occurs a more copious secretion of urine, in consequence of the greater freedom of the circulation through the kidneys.

Dropsical accumulation tends to cause a secondary impediment to the circulation by the pressure of the effused liquid from without upon the blood-vessels, especially the veins. Again, the capillary circulation becomes more and more impeded in proportion to the increasing watery distension of the veins. The drain of liquid from the areolar tissue through the punctured skin, allowing a further exudation from the distended capillaries, thus removes or lessens the obstruction which results from over-fulness of the veins. The general circulation, therefore, becomes more free, and the greater freedom of the circulation through the kidney is attended, as we have seen, by a more copious secretion of urine. But it may be objected that incisions and punctures in anasarca legs are apt to excite destructive inflammation. It is true that inflammation and sloughing may follow the operation; but this may also occur from over-distension of the skin or the pressure of the heavy dropsical legs upon the bed. The result of my experience is, that inflammation of anasarca legs has been as often subdued as provoked by acupuncture or incision; that inflammation is less likely to follow punctures in cases of renal than cardiac dropsy; and that the risk of inflammation after an incision about a third of an inch long in each leg, or after several acupuncture, is so nearly equal that I would in any case give the patient or the surgeon the choice of the operation. If I were the patient, I should choose the incision as being on the whole less painful and more rapidly and surely efficacious.

Dyspnoea is one of the most frequent and distressing symptoms associated with Bright's disease. It has various causes, and requires various remedies. When it results from oedema of the lungs, or dropsical hydrothorax, it is best treated by the remedies for dropsy. In some cases, anæmia appears to be the chief cause of dyspnoea. The red blood-corpuscles are the oxygen-carriers. When the blood—whether in cases of chlorosis or of Bright's disease—contains an excess of water with a corresponding deficiency of red corpuscles, the defective oxidation of the tissues—the demand for air—expresses itself in hurried and laborious breathing. The remedy for this form of dyspnoea is to be sought for in the elimination of water, a carefully regulated nutritious diet, and iron as a restorative tonic.

Paroxysmal dyspnoea in some cases appears to be of cardiac origin. The heart's action is rapid and feeble, or slow and feeble, the breathing distressed and hurried, with loud puerile respiration over the lungs. The dyspnoea in these cases seems to be due to the influence of deteriorated blood upon the pulmonary and cardiac nerves. It is not improbable that the cardiac weakness in some cases results from excessive contraction of the minute branches of the coronary arteries, and consequent anæmia of the muscular walls of the heart.

These distressing symptoms are often relieved for a time by ether or by brandy; and lately I have found that an occasional small dose (ten grains) of hydrate of chloral has done good. The cardiac and pulmonary symptoms to which I have referred are almost certainly made worse by opium in any form. There seems good reason to believe that in the hydrate of chloral we have a remedy, by the cautious use of which we may for a time mitigate some of the nervous symptoms which occur

in the advanced stages of incurable Bright's disease. I refer particularly to the cramps and muscular twitchings, which are frequent precursors of convulsions, and the distressing restlessness which, associated as it is in a greater or less degree with uræmia, is generally aggravated by opiates.

The sufferers from Bright's disease are always dyspeptics, and the gastric symptoms are often very obstinate and distressing. When in consequence of renal degeneration the blood is contaminated by retained urinary excreta, there is often a vicarious excretion of these impurities by the mucous membrane of the stomach and bowels. The gastric secretions are mingled with the ammoniacal products of decomposing urea; digestion is consequently impaired; there is flatulent distension of the stomach and bowels, nausea, vomiting, and diarrhœa. Relief is to be sought by a carefully regulated diet, and by giving with the food from ten to twenty drops of dilute hydrochloric acid with a vegetable bitter. A small dose of strychnia, or the tincture of nux vomica, with a mineral acid, is sometimes especially efficacious. Pepsine may sometimes be given with advantage.

In some cases of advanced renal degeneration, the vomiting is so incessant that the patient has to be sustained by nutritive enemata, while iced water only is taken by the stomach. In some instances that have come under my observation, the straining and exhausting efforts of vomiting have been checked only by frequent whiffs of chloroform-vapour.

In conclusion, I have only to add that I shall be happy, so far as I am able, to answer any questions upon the various points which I have passed in review. I shall also be glad to receive practical hints from those who by their experience are enabled to give them.

CASE OF HYSTERICAL VOMITING AND SLEEPLESSNESS.

By F. W. PARSONS, L.R.C.P.Lond., etc., Wimbledon.

Miss L. C., aged 22, single, regular, health always good, had had much trouble recently in waiting upon her mother in her last illness. She had been almost entirely deprived of her rest night and day for three months, during which time she had frequently vomited her food. She had not had pain in the chest. Her bowels have always been irregular. Up to the present time she had had no treatment other than an occasional aperient pill. The family are all healthy. She applied to me on April 12th, suffering from severe diarrhœa and sickness of three days' duration. The pulse was good; the tongue thinly coated with creamy fur. There was some pain in the epigastrium; no headache. The patient was a well nourished full-blooded-looking girl, but with a decidedly "hysterical aspect". She felt very weak and trembling. I ordered ten minims of dilute sulphuric acid and fifteen minims of liquor opii sedativus every four hours.

April 13th, 9 A.M. The diarrhœa ceased after the second dose, but the sickness and nausea remained incessant. The vomited matter consisted of stringy mucus floating in a glairy acid liquid. The skin was moist; the temperature 97.6 deg. The sounds of the heart and lungs were normal. There was a good deal of hyperæsthesia over the whole chest and bowels, but there was no particular tenderness over either the uterus or ovaries. The urine was profuse and very limpid. Everything, even weak brandy and water, was returned. I ordered effervescing citrate of potass, with thirty-minim doses of liquor morphinæ.—8 P.M. The only thing retained was a small quantity of thin milk and water arrowroot, and the medicine. I ordered the following.

R Tincturæ valerian. ammon. ℥xxx; spiritus æther. ℥xx; tincturæ bellad. ℥xv; acid. hydrocyan. dil. ℥iij; mist. camph. ʒi. To be taken every four hours.

April 14th, 9 A.M. She had no sleep. The medicine only was retained.—8 P.M. She had a very bad day. The following draught was ordered to be taken every two hours.

R Manganis oxyd. gr. x; acid. hydrocyan. diluti ℥iij; aquæ ʒi.

April 15th, 9 A.M. No sleep. Sickness incessant, and nausea intolerable.—8 P.M. She had returned the last two doses of the medicine. She was ordered to take the valerian again.

April 20th. She had had no sleep yet, although she had been carefully watched. Sickness occurred several times in an hour. The urine was very excessive, of specific gravity 1002. I ordered the following to be taken every four hours.

R Bismuth. albi gr. v; magnesie carbon. gr. xx; acid. carbolic. miss; aquæ ʒi.

April 21st. She was not quite so sick, but had had no sleep. At 10 P.M., I injected five-twelfths of a grain of acetate of morphia under the

skin. There being no result in two hours, I repeated it. This produced extreme contraction of the pupil and stupor, but no sleep until 9 A.M., when she fell asleep, and slept soundly till 7 A.M. the next morning. She then awoke much refreshed and not nearly so sick. The medicine was continued.

April 22nd, 9 P.M. I injected eight-twelfths of a grain of acetate of morphia, which, however, gave very little sleep.

April 23rd. The following was ordered to be taken every two hours.
R Potassii bromidi gr. x; acid. carbolic. gr. i; acid. hydrocyan. diluti ℥iij; aquæ ʒi.

8 P.M. She dozed about six hours, and was sick once only.

April 26th. There had been no sleep since the 23rd, though the bromide had been increased up to forty-grain doses; but the sickness had been less. I injected half a grain of acetate of morphia at night, and omitted all medicines.

April 27th. She slept well; had slight sickness. The injection was repeated at night.

April 28th. She slept four hours. I ordered a grain of sulphate of quinine every four hours, with four minims of dilute hydrocyanic acid; and repeated the injection at night.

April 29th. She slept four hours, but felt sick and depressed. The bowels had not been open for nearly a week, and there was tympanitis. The skin and conjunctivæ were slightly yellow. Calomel (gr. iv) was ordered to be taken every four hours, and at night the injection was repeated.

April 30th. She dozed a little, but was more sick. The bowels were not moved; so I gave an aperient saline draught, which brought away an immense quantity of dark-green foetid motion. The morphia injection was repeated at night.

May 1st. The patient had no sleep, and was very sick. She had an attack of "spasms" in the night. Pulse weaker. The following was ordered to be taken every three hours.

R Tincturæ cannab. Indicæ ℥xx; spirit. ammoniæ comp. ℥xx; acid. hydrocyan. diluti ℥iij; aquæ ʒi.

May 2nd. She had no sleep, and no sickness; looked composed, and said she felt better. A grain and a half of disulphate of quina was added to each dose. Seven-twelfths of a grain of morphia were injected in the evening.

May 3rd. The patient did not sleep till 7 A.M.; she then slept till 6.30 P.M., and awoke much refreshed, and took a little claret. There was no sickness.

May 4th. She slept comfortably from 3 to 10 A.M., having previously taken a little beef-tea and sago; but awoke much agitated by a distressing dream, in which she saw her own name on a tombstone, with the date of her death. Two-thirds of a grain of morphia were injected at night.

May 6th. She had two-thirds of a grain of morphia injected last night, which only gave a few hours' sleep. There had been no sickness. She was ordered to take no medicine, and to have twenty grains of chloral hydrate in syrup and water every hour till sleep was obtained. She took three doses, and then slept only four hours. When she awoke, she felt very low and "muddled". Pulse 80, very feeble; skin clammy; and tongue dry. She begged not to have any more chloral. In the evening she had several fainting fits. Half a grain of morphia was injected.

May 9th. The last two days she had been more sick, and had little or no sleep. She retained a little whiskey and water. She had a peculiar attack, characterised by a sort of spasmodic action of the muscles of the face and neck. I ordered liquor strychniæ in five-minim doses, and one-third of a grain of nitrate of silver in a pill, alternately, every second hour.

May 31st. She had gone on just the same for the last fortnight, and had several attacks every day and night up to the 15th. Since then, she had had none. The nitrate of silver was discontinued on the 16th. She had two-thirds of a grain of morphia injected every night, which gave only very little sleep. She had brought up nearly everything except her medicine. I tried the chloral hydrate in forty-grain doses, with exactly similar results to those of the previous trial.

June 1st. A beef-tea enema was given yesterday, and again to-day; but she was unable to retain them. There was much pain over the epigastrium. I applied a blister, which gave relief; and injected three-fourths of a grain of morphia; and also ordered citrate of ammonia in effervescence, with chloric ether. This afforded much relief to the sickness.

July 16th. From the last date to the 1st of this month, she had been able to retain two pints of beef-tea and four eggs made into two enemata daily, and nearly every night had three-fourths of a grain of morphia injected into the arm. She had not been allowed to take a single thing by the mouth, except the medicine, which she very rarely

returned. Upon the 1st, she began again gradually to take a little food by the mouth, and on the 10th left off the enemata. She has, since the 1st, taken a little bismuth mixture occasionally, and has not had any sickness, and only slight nausea. The last three times, she had a grain of morphia; and that was not always successful in obtaining a thorough night's rest. I have seen her to-day, and she is fast recovering her flesh. Her appetite is good, and there is very little discomfort after food. She wears a belladonna plaster over the epigastrium. As yet, she does not get very much sleep; but that is improving. She leaves this afternoon, for change of air.

REMARKS.—I fear I have occupied far too much space already; but I think the case in many respects well worthy of notice, as bearing upon the vexed question of "hysteria", so called. There certainly appeared nothing amiss with the sexual system; and I do not think there was real mischief in the stomach. So many of her symptoms were identical with what we call "hysteria", that I think her case must come under that head. The two most marked symptoms throughout were sleeplessness and troublesome vomiting. The former was most persistent, resisting every remedy tried; the hypodermic use of morphia alone appearing to have any effect, and that only when given in such very large doses. Upon two occasions, at the wish of a medical friend, I tried atropine hypodermically; but, although it produced the usual physiological results, it did not procure a wink of sleep. The hydrate of chloral I not only found useless, but it appeared to act injuriously each time it was tried. She was some few days before she got over its depressing effects. Bromide of potassium also, after the first day, did not even produce drowsiness.

With regard to the sickness, I feel quite convinced that it would not have been nearly so troublesome if the girl would have consented earlier to the employment of nutrient enemata; but neither threats nor persuasion were of avail, and it was not until she began to think that she was really sinking that she would give way. Even when they were used, I had much difficulty in having them used regularly and continued long enough. It seems strange that, although the vomiting was so constant, the medicine was very seldom returned.

Since writing the above, I have read Dr. Ogle's lecture in this week's JOURNAL upon a case in some respects similar to this. But here the girl had most distressing nausea; and, although I had her carefully watched, I was never able to discover the slightest approach to trickery or deception.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

HYDATID TUMOUR OF LIVER.

(Under the care of Dr. SOUTHEY.)

FOR the following notes we are indebted to Dr. C. J. Davis, House-Physician.

C. H., a well nourished young man, aged 24, was admitted into St. Luke's Ward on June 14th, with a tumour in the right hypochondrium, extending towards the umbilicus, downwards into the iliac fossa, and posteriorly about three inches from the lateral line. It was smooth to the touch on the surface, and slightly lobulated at its edges; it was decidedly elastic. Upon gentle percussion, fluctuation was easily elicited. Upon relaxation of the abdominal walls, it was evident that the tumour was in no wise adherent to them, as they were easily made to glide over it. The tumour was obedient to the movements of respiration, having no apparent space between it and the liver; it was uncovered by any floating viscus.

According to the intelligent patient's account, the history of the tumour dated from 1867. Beginning almost imperceptibly, it grew too gradually to create any alarm, and never produced any constitutional disturbance.

On the 29th, Mr. Savory, with a very fine trochar, evacuated fifty-three ounces of almost clear fluid; its specific gravity was 1005; it contained a large quantity of chlorides, and no albumen. Some excellent specimens of echinococci, with numerous detached hooklets, were obtained. With the exception of a slight febrile reaction, lasting about forty hours, the patient has done well since. He is now moving about, and looking forward to his discharge. It is very doubtful whether there are sufficient positive signs of the tumour refilling.

ST. MARY'S HOSPITAL.

CASES OF INTERMITTENT TETANY.

(Under the care of Dr. BROADBENT.)

CASE I.—Sarah A., aged 34, came to St. Mary's Hospital as out-patient May 21st, 1868. Two years previously, she had caught cold after confinement, and ever since had suffered from painful contractions in the hands and feet, during which the fingers were fixed in partial flexion, the thumb drawn over the palm, and the margins of the hand drawn in, while the feet were arched. The pain was compared to cramp. Usually, the attacks came on daily, varying in severity and duration. She was rarely free from them for a week. Her general appearance was that of debility. The bowels were regular. She was ordered to take ten grains of mercury and colocynth pill in the evening, and the hospital iron and quassia mixture three times a day.

On June 4th, she was no better, and compound gentian mixture, with twenty-five minims of the ammoniated tincture of valerian, was substituted for the iron mixture. On June 8th, there was no attack in the hands. She had had pain in the legs, and in the back as high as the neck. Similar pain was complained of on June 12th; and the bowels, previously relaxed, having become constipated, a soap and aloes pill was given daily. After this, no recurrence of the contractions and pain was complained of. The iron mixture was resumed on July 2nd; and on July 27th she attended for the last time, apparently well.

CASE II.—Rhoda B., aged 14, began to attend as out-patient on February 10th, 1870. She had convulsions when a child, but these ceased at the age of seven. For twelve months she had had attacks similar to the one from which she was suffering when she presented herself at the hospital, coming on at intervals usually of about three hours, and lasting several days. Her condition was as follows. The hands were flexed and rigid; the thumb was bent into the palm. forcible extension of the finger gave great pain. Both flexors and extensors of the forearm were hard and tense. The upper arm was soft and lax, except that the biceps was slightly contracted. The pain was very great, and was said to prevent sleep in a great measure; but usually the contraction yielded a little during the night, and then she became able to sleep. The face was flushed; the arms hot. Occasionally the feet were contracted; and at times the tongue was quite stiff, and the neck slightly so. She had also complained of pain in the back. The existing attack had already lasted three days. The bowels were well open; no worms were seen. Her appetite was variable. The catamenia were not established. The treatment adopted was two teaspoonfuls of cod-liver oil and one of steel wine three times a day; also a mixture containing eight minims of tincture of belladonna, nine minims of spirits of chloroform, in two drachms of water, every four hours. On February 21st, she had two slight attacks, but was feeling very much better. On March 7th, slight attacks still occurred, but she was much better. On the 28th, she had been free from the contractions; but, after leaving off the medicine for a time, had a return—not severe. This was her last visit.

CASE III.—Emma B., aged 19, became an out-patient on February 21st, 1870. She is deaf and dumb, and has a sister similarly afflicted. Deaf-mutism runs in the father's family. For some time she had had painful contractions of the hands and feet immediately on waking every morning, and similar attacks two or three times in the day. As in the cases previously described, the fingers were flexed, the thumb bent into the palm, and the inner side of the hand drawn in. The feet were arched. A shaking sensation and pricking were also complained of. During the attacks, severe pain was felt over the left eye, and she had sometimes bled at the nose. The catamenia were regular, and the bowels open. She had a bad cough. Tincture of belladonna was given in six-drop doses, with spirit of chloroform, on the 24th; and at first, compound squill mixture, with tincture of steel; later, cod-liver oil and steel wine. The belladonna at once gave relief. She attended fitfully up to May 30th, suffering scarcely at all while she took the belladonna, but relapsing when she discontinued it. At this date, she was better in all respects.

CASE IV.—Elizabeth H., aged 32, is now attending at the hospital. She suckled her last child to the age of sixteen months, the catamenia having been re-established for some months of this time. Three months ago, she began to have attacks in the hands and feet such as those already described; the hands being rigid, with the fingers curved, and the thumb drawn into the palm. The feet were arched. The contractions were attended with pain and tingling. The attacks had been worse at the catamenial periods. Speech, or rather articulation, was said to be slightly affected at times. She is taking liquor ferri perchloridi in infusion of quassia, but has not been under observation sufficiently long to permit of any statement being made as to the effects.

REMARKS OF DR. BROADBENT.—Attention has been called by the clinical remarks of Dr. Wilks, reported in the JOURNAL of June 11th, to the affection named by Trousseau "tetany". As Dr. Wilks observes, it is more common than might be supposed from the absence of all mention of it in English treatises on diseases of the nervous system, or in the medical journals; and cases of it come under observation among the out-patients at St. Mary's, as no doubt they do at other hospitals. According to Trousseau, the affection occurs more frequently in women while suckling than under any other condition; and at one time he called it "rheumatic contraction of nurses". Sometimes it attends disorders of the menstrual function, and children of any age may be affected by it. A case which, like that of Dr. Wilks, occurred in a child, was carefully described in the *Guy's Hospital Reports* for 1869 by Dr. Moxon; and one case, severe, but transient, has come under my observation in a child under two years of age. A frequent antecedent, according to Trousseau, is diarrhoea; and, though this was not complained of by any of my patients, the bowels were open in every case—relaxed in one. In all the cases, the general state of the patient was such as to suggest the administration of iron; and to this, with cod-liver oil and bitters, was probably due the removal of the condition of the system on which the affection depended. For the prevention of the muscular spasm and relief of pain, belladonna was mostly relied upon; and it was apparently efficacious, the attacks in two cases ceasing immediately when it was taken, and returning when it was discontinued, several times over. In one case, the ammoniated tincture of valerian seemed to put an end to the attacks.

UNIVERSITY COLLEGE HOSPITAL.

SKIN DEPARTMENT.

(Under the care of Dr. TILBURY FOX.)

Contagious Impetigo.—During the last two or three weeks, a good many cases of contagious impetigo have been under observation. In some clinical remarks on a batch of cases collected together for purposes of demonstration, Dr. Tilbury Fox stated that he had seen very few instances of the disease of late, but there seemed to be at the present time a sudden outbreak of the disease on a small scale; and he had noticed the quasi-epidemic character of the disease as one of its most prominent features. The affection he was disposed to regard, in its general outline, as presenting many of the features of the minor acute febrile diseases of the young, especially varicella. In severe cases, there was slight or even marked pyrexia antecedent to eruption; the eruption itself, when undisturbed by scratching, running a definite course—commencing as a vesicle, then enlarging into a bulla; the contents becoming opaque, drying into a light-coloured flat scab, which, on falling off, left behind a slight ulceration or merely a dry red spot. The definite course of the separate spots of eruption was masked by the successive cropping up of fresh places, in part induced by the inoculation from scratching, and also by the fact that the patient scratched open the pustules before the scabbing had taken place, and so prevented their drying and healing up. The general answer to the question "How did it begin?" was, "By a little watery head." Some parents state that they "thought it was a pock"; others, that "it looked like horn-pock"; but all declare that it commences by a single vesiculation, which enlarges, if left undisturbed, into a bulla, and is replaced by a scab. In this respect, it differs entirely from ordinary impetigo. The face is the part most usually attacked, but also the hands, head, and limbs. The pustules are isolated. It is often confounded with ecthyma; but the pustules are much more superficial; they are not painful, and have no induration about them. Contagious impetigo attacks the most healthy, and not specially those in whom impetigo is wont to occur. In those attacked, cuts and scratches are very prone to "fester". The treatment is very simple and efficacious; viz., to remove the crusts, and apply a weak ammonio-chloride of mercury ointment (five grains to an ounce of lard) to the discharging surface below it. Dr. Fox inoculated an American physician who was sceptical as to the contagiousness of the disease, and his arm was subsequently exhibited with a distinct spot—having all the characters of the contagious impetigo spot. It was acknowledged that not merely a pustule formed, but a distinct bulla of the size of a threepenny-piece, which subsequently scabbed over in the usual way. Dr. Fox stated that he had so frequently performed similar experiments during the last six years, that he felt fully satisfied as to the reproduction of the disease by inoculation.

A Third Attack of Herpes Zoster (?).—A man, J. H., aged 33, presented himself at the skin-clinique on June 20th, with an interrupted band of well marked herpes zoster crossing from front to back over the point of the shoulder on the right side. The interesting point about the

case was the fact, as asserted by the man, who was a very intelligent mechanic, that he had had the same disease twice before, in 1869 and 1868; and, further, that on each occasion it has appeared in the month of June. He also had a patch of herpes upon the penis every time the eruption made its appearance. There seems no reason whatever to doubt the accuracy of the man's assertion; and, if it be true, then we have here another instance, amongst the very few on record, showing that the general opinion that an attack of zoster occurs once only in a lifetime is incorrect. The present attack in J. H. commenced a fortnight since by the eruption of a zoster affecting the gluteal region of the left side—i. e., opposite to that now involved in the upper extremity. The marks of the fading eruption are plainly visible now.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

CASE OF NEURALGIA.

(Under the care of Dr. BRADBURY.)

Neuralgia of Inferior Dental Nerve, of two years' duration: Rapid Improvement under the use of Cod-Liver Oil and Hypodermic Injection of Morphia.—J. B., aged 63, a labourer, was admitted on May 5th, 1870. There was no history of neuralgia, epilepsy, mania, or other nervous affection, in the family. He had been a great deal exposed to the weather, but was always healthy, with the exception of flying rheumatic pains, until rather more than two years ago, when he began to have a violent shooting pain in the lower jaw on the left side. The pain was at first brought on only by washing his face, and lasted not more than five minutes. He had no bad teeth then, and had never had toothache previously. After about a month, he went to a surgeon, who, after treating him for several weeks in vain, recommended the removal of some teeth. Four were accordingly taken out, but were found quite sound, and the pain was no better afterwards. The attacks of pain gradually became more frequent, and were now brought on especially by eating. Last autumn, he attended as out-patient under Dr. Bradbury, and was treated with chloride of ammonium, arsenic, and carbonate of iron in large doses, but without much benefit. During the winter he had frequently taken laudanum to procure sleep, as otherwise he could get no rest. He had been a temperate man, and had always lived pretty well.

On admission, he was healthy-looking, and florid in complexion. The conjunctivæ had a slight tendency to congestion, and he had a well marked arcus senilis in each eye. His remaining teeth were quite sound, but much worn down. The pain now came on as often as ten times in the day, not lasting more than five or ten minutes, unless while he was eating, when the exciting cause was continued. The pain was brought on by slight causes, but not especially by a cold wind. It began suddenly, in the situation of the molar teeth of the left lower jaw; then shot up along the course of the inferior dental nerve, and spread over the cheek-bone and in front of the ear as high as the zygoma. A feeling of numbness in the side of the face was left after the pain went. No points of cutaneous tenderness could be made out; but there was some tenderness on deep pressure over the mental foramen. There was no tenderness of the upper cervical vertebræ or of the occiput.

He at first took hydrate of chloral in twenty-grain doses at night; but this neither relieved the pain nor induced sleep. As there was a history of rheumatic pains, he was next ordered iodide of potassium in five-grain doses three times a day; but no benefit accrued from this remedy. Cod-liver oil, in two-drachm doses twice daily, was now prescribed; and one-sixth of a grain of hydrochlorate of morphia was injected daily in front of the ear. In four days, the attacks came on less frequently, and there was less pain when eating. When this treatment had been persevered in for ten days, the attacks had quite ceased, except during eating, and even then they were much less severe.

Dr. Bradbury, in a clinical lecture which he delivered on this case, remarked that it was an instance of the "tic épileptiforme" of Trousseau; and that a radical cure must not be expected, as the pain would probably return with its wonted severity when the treatment was suspended. He also stated that the arcus senilis was probable evidence of atheromatous changes taking place in the tissues of the blood-vessels; and that neuralgias occurring for the first time during the "degenerative" period of existence were among the most intractable maladies the physician had to deal with. The *tender spots* ("points douloureux") mentioned by Valleix and Trousseau, although looked for with great care, could not be made out in this case.

REVIEWS AND NOTICES.

ERFAHRUNGEN UEBER SCHUSSWUNDEN IM JAHRE 1866, als Nachtrag zu den Maximen der Kriegsheilkunst. Von Dr. L. STROMEYER. Hannover: 1867.

DIE FREIWILLIGE KRANKENPFLEGE IM KRIEGE. Von Dr. W. BRINKMANN. Berlin: 1867.

UEBER DIE SCHUSSFRACTUREN DER GELENKE UND IHRE BEHANDLUNG. Von Dr. B. VON LANGENBECK. Berlin: 1868.

VERBANDPLATZ UND FELDLAZARETH. Von Dr. F. ESMARCH. Berlin: 1868.

DER ERSTE VERBAND AUF DEM SCHLACHTFELDE. Von Dr. F. ESMARCH. Berlin: 1868.

UEBER DEN KAMPF DER HUMANITÄT GEGEN DIE SCHRECKEN DES KRIEGES. Von Dr. F. ESMARCH. Kiel: 1869.

DAS PREUSSISCHE MILITÄR-SANITÄTSWESEN UND SEINE REFORM. Von Dr. F. LOEFFLER, Chief Surgeon of the first Prussian Army. Parts I, II. Berlin: 1868 and 1869.

DAS KRANKEN-ZERSTREUUNGSSYSTEM IM FELDE. Von Dr. E. ROSE. Berlin: 1868.

KRIEGSCHIRURGISCHE BEITRÄGE AUS DEM JAHRE 1866. Von Dr. H. MAAS. Breslau: 1870.

RUMOURS of war, speedily followed by the most portentous declaration of war of modern times as far as the probable sufferings of man are concerned, have induced us to review, for the benefit of our readers, several very important works which have accumulated upon our table. The subjects treated of in the works in question—viz., the preparations of a sanitary nature which it is desirable to make during peace to mitigate the sufferings of the sick and wounded, and the surgical treatment to be employed for the saving of life and limb after the outbreak of war—are in the works before us more or less mixed up together, and are so treated by their authors, because the practical application of the agencies can never be separated when, during war, it is necessary to employ them.

The whole of these writings possess an extreme interest at the present moment, when we consider the enormous scale on which the armed hosts now assembled are about to contend, and the influence which the writings of some of the ablest and most humane men of Germany cannot fail to have upon the fate of the sick and wounded.

How little Prussia was prepared, after nearly fifty years of peace, to alleviate by proper medical assistance the miseries of war, may be learned from an article by one of the members of our Association, Mr. L. S. Little, in the *London Hospital Reports* (1865), on the Surgery of the Schleswig-Holstein War. The recollection of the sufferings of the sick and wounded during the long wars waged by the first Napoleon, and the unfamiliarity with war of the European populations in general during the forty years succeeding to his fall, may in great measure account for the unpreparedness of the combatant kingdoms to provide as efficiently as subsequent events have shown to be possible. Hence much was to be desired in providing help to the sick and wounded in Schleswig, in the Crimea, and in Germany in 1866. The want became evident in 1854, during the siege of Sevastopol; and the public feeling in Europe was shocked to make the discovery, that a large amount of preventable suffering was occasioned, in war-time, to those who fought their country's battles. This discovery was doubtless due to a higher sense of humanity pervading the European populations at this period than half a century before; to a higher sense of prevailing comfort and civilisation; to a wide-spread publication to the world of the sufferings endured by the sick and wounded in the Crimea, through the instrumentality of the press of this country, re-echoed by that of other nations; and to the noble conduct of Miss Nightingale and the band of lady-helpmates who accompanied her to the seat of war in the East. Besides these causes, we may enumerate the advance of medical and sanitary science, which, by showing the great influence exercised in the production of disease and of the death of the wounded by neglect of the laws of health, enabled the humane to understand that the principal loss of life in war is due to preventable causes, apart from the blows of the combatants.

It is highly creditable to the population of Germany that, even in the Schleswig-Holstein campaign of 1864, extraordinary efforts were made by the Hamburgers, and indeed by the inhabitants of other parts of

Germany, to supply the wants of the wounded, as soon as it became apparent that the governmental arrangements both of the Prussians and Austrians for the recovery of the sick and wounded, considering the smallness of the scale of this war, were more lamentably deficient than were those of the English Government, so much decried after the opening stages of the siege of Sevastopol. In justice to England, it should not be forgotten that, after the battle of Inkermann, fought some months after the commencement of the campaign, every wounded soldier had his wounds properly dressed, was provided with a bed, and received a comfortable refreshment in food and drink, before 6 P.M. of the day of battle, which had commenced thirteen hours before. This prompt attention to the wounded was in great measure due to the limited space over which that sanguinary battle was fought, and to the absence of bushes and woods, amidst which the wounded might have remained concealed after dark, the battle having been fought on a short November day. The sickness of the British army during the subsequent winter mainly arose from the destruction of the army supply-fleet by the disastrous Black Sea storms of the period. It is well known also that, in the war of the French and Italians against the Austrians in 1859, the Italian cities vied with each other in alleviating the sufferings inflicted at Magenta and Solferino; but that, from want of previous organisation of the help afforded by the Italians, much avoidable misery still remained to the wounded. The efforts made by England in 1855 to help her sick and wounded soldiers, and the example of the Italians in 1859, were not lost upon our American brethren in their great civil war, the gigantic extent of which called forth correspondingly great exertions to meet the cruel wants of the times. In fact, America profited by the teaching of Europe, and improved upon it to the full extent characteristic of her intelligent and zealous population. Doubtless, no army was ever more cared for by their countrymen than was the Northern army, after the surprise and indignation at their first reverses was over.

It is some consolation to know that the recorded avoidable sufferings of the wounded at Solferino, despite the humanity manifested by the Italian cities, was the exciting cause of the first Sanitary Convention held in Europe for the consideration of the means of organising civil help to the wounded in future wars. This Convention, held at Ghent in 1863, was the first fruits of a work written by M. Dunant of Ghent, *Souvenir de Solferino*, in which the horrible neglect and sufferings of the wounded were forcibly brought to the notice of Europe, after the excitement of the war and the peace which followed it had passed by, and was succeeded by the Swiss International Convention of 1864. The recommendations of the Swiss Convention have been adopted as binding upon the European powers signing the convention. The *verbatim* copy of the terms will be found in Loeffler's work. It proclaims the neutrality of the sick and wounded of the contending armies—of the temporary and more permanent military hospitals—of the surgeons and personal attendants—of the ambulance-waggons, the medicinal and other appliances for the relief of the sick and wounded. Henceforth the bearers of the Red Cross upon a white ground will pursue their humane vocation in greater safety, free from other peril than disease and from wounds from stray shots; and, if they fall into the hands of the enemy, will no longer be regarded as prisoners of war.

It is curious that the first recorded humane undertaking of this nature sprang from the philosophy of Sans Souci in 1759, and was embodied in an agreement between the three powers then at war, Prussia, England, and France; and that these same three powers were the first to sign the Swiss Convention of 1864. Yet, in the long French war extending from the end of the last century until the second decade of the present one, the treaty signed in 1759, as to the neutrality of the sick and of the helpers and attendants of the wounded, was forgotten. Individual commanders repeatedly made special agreements with their opponents, as was the case between the French and English in the Peninsular war. An example of the kind was considered remarkable as late as 1848, when, in the Schleswig-Holstein war, after the battle of Idstadt, General Staff-Surgeon Stromeier, with fourteen surgeons, remained with the wounded in Schleswig, with the full approbation of General von Willisen, the German commander. This honourable proceeding, which secured assistance and safety to the many hundred wounded, was fully respected by the victorious Danish commander, Krogh, who afterwards liberated the surgeons.

The opening scenes in the hostilities engendered by the Prusso-Austrian war of 1866 were the conflicts between the Hanoverians and Prussians in Hanover, and in particular the battle of Langensals. Dr. STROMEYER, then Medical Director of the Hanoverian Army, was afforded the opportunity of testing the experience derived from the three previous wars in Schleswig. Stromeier's memoir recounts, with the help of carefully arranged tables, the fate of some fourteen hundred wounded who fell to his care and that of his assistant army surgeons. We have not space here to fully analyse these tables, or indicate what

proportion of recoveries attended each class of wounds or of operations performed. The young Longmores of our profession will go to the original work for information on these points. It will suffice to show, as a proof of progress made in military surgery as practised in Schleswig in the campaigns of 1848, 1849, and 1850, as compared with the conflict in Hanover in 1866, that the mortality amongst the wounded, excluding the slightly wounded, was 33 per cent. in the former experience, and 26 only in the latter experience. In fact, notwithstanding the use of heavier projectiles and the necessity of having had to transport the wounded a longer distance after Langensalsa than in Schleswig-Holstein, there were 7 per cent. more recoveries, and twice the number of limbs saved, after Langensalsa. It will be interesting to the general surgeon to know that recoveries took place in a larger proportion where the wounded were treated in wooden barracks designed for the purpose by Dr. Stromeyer, in the open, than where they were treated in the neighbouring town and villages in private houses. The military surgeon will consult Stromeyer's work with advantage for the drawings, and for information on the cost and mode of construction of temporary barracks, formed partly of rough timber, which is procurable every where, and partly of canvas; and of the more permanent hospital barracks, composed of smooth boarding and squared timber. An almost entire exemption from cholera, typhus, and hospital gangrene, occurred in these barracks, whilst in a neighbouring small town one hundred deaths from cholera took place; and it is well known that the mortality from cholera amongst the wounded of the Bohemian battle-field during the same campaign was considerable. Dr. Binckmann dwells upon the advantages of Stromeyer's barrack, from his experience after Sadowa.

The three works on our list from the Professor of Clinical Surgery of Kiel, Dr. ESMARCH, shew the energetic desire of our German friends to be prepared for the emergency of another great war, and enable the medical profession and the volunteer nurses and others to fight with success "the battle of humanity against the horrors of war." Dr. Esmarch's book on *Casualty-dressing-places (Verbandplatz) and Field-Hospitals* is one of the most important contributions on military surgery since the war of 1866, and well worthy of his great reputation. It abounds in practical details of the treatment of the wounded, the result of his experience in Schleswig-Holstein, and in 1866, improved by his extraordinary practical and scientific skill as a civil hospital surgeon. Nothing escapes his searching eye and prudent judgment—improved splints, bandages, stretchers, and two-wheel barrows for carriage of the wounded from the field of battle to the nearest wound-dressing place; ambulance waggons, and temporary military hospitals. The English Chinese Expedition, and especially the enormous opportunity afforded for improvement in everything relating to the treatment and care of the wounded afforded by the American Civil War, are laid under requisition for the latest improvements. He describes the special railway carriages for the transport of the wounded, in which over 70,000 were safely conveyed for hundreds of miles during the later part of the American War, receiving medical aid and other attentions during the journey.

Esmarch modestly remarks—"It must have occurred to every philanthropic mind to ask itself whether it is not also possible to provide something similar in Europe? Would it not be a noble undertaking for the Governments or the volunteer help and nursing institutions to prepare during peace similar carriages for the eventuality of a great European war." He points out the unfitness of ordinary third-class carriages and goods' trucks for such a purpose on account of their noise, shaking, and closeness, and the want of hospital arrangements in them. He gives drawings of every new or comparatively new article used in the latest wars, including the American railway hospital cars provided with every hospital requisite and accommodation for the surgeons. The American surgeons, Drs. Thurston, Perrin, and Barnum, state that they witnessed the sacrifice of hundreds of lives where the American Hospital Railway Carriage was not available. It appears that as early as August 1867, upon Dr. Esmarch's repeated instances, the Prussian Board of Trade and Public Works ordered sixty new railway carriages to be made, readily convertible into hospital carriages in the event of war, and have encouraged the private railways to make similar arrangements.

Esmarch's work, consisting indeed of "Lectures to Young Military Surgeons," takes a wider range than the subjects we have indicated; it enters upon the debated questions of primary and secondary amputations, and on "conservative surgery" as illustrated by resections of the larger joints, the introduction of which in Germany was due to Stromeyer and Langenbeck; in fact, the work is a valuable compendium of military surgery, largely illustrated by plates, drawings, and ground-plans of military field and more permanent hospitals. The author pays a handsome compliment to the study and practice of sanitary science in Eng-

land, as applied to the civil population as well as to the army and navy. The work is accompanied with ground-plans of Stromeyer's barrack hospital and of each of the now world-renowned large pavilion military hospitals distributed throughout the United States. It is the cosmopolitan view of all matters affecting military surgery taken by Esmarch, supplemented by his large personal experience of clinical surgery, which gives to this book a peculiar merit and advantage for the young military surgeons of the present time.

We must not omit a word of approbation of the second of Esmarch's works in our list, which contains admirable illustrations and descriptions of the numerous applications which can be made on the field of battle of a three-cornered cravat as a bandage for recently inflicted wounds before medical help is obtained. He urges the old-fashioned handkerchief as a temporary bandage for the largest number of injuries, just as an ordinary strip of linen or roller bandage with lint is ordered to be carried by each soldier in his knapsack. It is no part of Esmarch's idea to abandon roller and other bandages in the hands of the surgeon. These materials for wounds should be carried in the bread-bag rather than in the knapsack, as, before an engagement, the knapsack is often ordered to be laid aside. Many little details to help the unprofessional helper are given.

Many of Esmarch's published suggestions have been adopted by a Committee of Surgeons summoned to Berlin in 1868 to devise means of bringing the experience acquired in 1866 to bear upon the eventuality of another great war in Germany. Among the matters considered are not only the larger ones of railway carriages specially prepared for reception of the wounded, but such as the furnishing every soldier with a label to be secured inside his clothes, by means of which the names of those killed in battle may, before interment, be ascertained, and the anxieties of friends as to whether their relatives are contained in the number of killed or missing be satisfied. The suggestion of this simple plan is as creditable to Esmarch's heart as the carrying of it out is to the Prussian Government. It is an evidence of the increasing influence of the civil element in modern armaments and wars, and its adoption is not surprising in a country where every man is a soldier and liable to active foreign service.

LOEFFLER'S work is an elaborate medical history of the Bohemian campaign of 1866, the condition of the Prussian Army Medical Service, and of its reform after the war experience of 1866. It conclusively shews that the deficiencies discovered in 1866, which are so painfully illustrated by some extracts which we purpose making from Dr. Rose's work, had left much to be desired in the management of the Medical Department of the Army. Loeffler states that America has taught the value of subjecting everything connected with medical help for the sick and wounded to the sole control of the physician-surgeon, under the War Minister.

Loeffler dwells emphatically upon the urgency of a sound organisation of the medical department, and its entire independence of any control except that of the minister. He shews how completely diminished suffering and mortality depend less upon the materials of the apothecary and instrument-maker, and even upon bandaging and the performance of capital operations, than upon the fullest knowledge of hygiene and the power and the will effectively to carry out its laws. Although high up in the medical hierarchy of Prussia, he bears ample testimony to the value of volunteer assistance to the wounded. We had heard so much of the fatal outbreak of cholera after the crowning victory of Sadowa, that we are surprised to read in Loeffler's pages that the total mortality from sickness, including cholera, in the Bohemian campaign reached only 2½ per cent., in the previous campaign in Schleswig only 1.6 per cent. Of those attacked with cholera (we suppose this includes those attacked with so-called cholera), only 40 per cent. sank. Cholera was responsible for 90 per cent. of the total deaths from disease; whilst the recoveries from wounds of all kinds, slight and severe, were 90 per cent. The chain of permanent hospitals in Prussia, extending from Elbing in the east to Saarbrücken in the west, provided accommodation for 47,000 beds.

The provision of army-surgeons, supplemented by draughts of civil surgeons, who are bound to perform their military duty in the ranks of their own profession, appears, through the recent reforms of the service, to be ample. Each Prussian army corps, composed, we believe, of about 30,000 men, reckons 93 surgeons, 159 hospital helpers, hospital nurses, and other officials connected with the care of the sick and wounded, amounting in the whole to 1361 persons, with over 400 horses and corresponding proportion of carriages to carry medical supplies, comforts, and appliances. This is the State provision, independently of volunteer aid provided by standing committees in every principal town in Northern Germany.

[To be concluded.]

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Tuesday, August 2nd, 1870.

1. *Small-pox.*—2. *Society for the Medical Education of Women.*—3. *Foreign Medical Volunteers.*—4. *Medical Volunteers for the Navy.*
5. *Civil Ambulances and Hospitals for Sick and Wounded Soldiers.*
- 6. *The Staff of the Military Hospitals.*

SMALL-POX.—There is a slight increase in the mortality from small-pox. Similarly bad accounts reach me from several of the large provincial towns in the south and centre of France.

During the week ending Friday 29th July, the deaths from small-pox in Paris are officially reported to have been 227. The returns for the last four weeks stand thus:

Week end. July 8.	Week end. July 15.	Week end. July 22.	Week end. July 29.
267	225	215	227

SOCIETY FOR THE MEDICAL EDUCATION OF WOMEN.—The following programme has been circulated: it is entitled, "Programme Provisoire des Cours de la Première Année."

"The first year shall be chiefly devoted to the study of the sciences upon which medicine is based; viz., Natural History, Chemistry, and Physics (in their applications to the art of healing) and Anatomy.

"During the first six months, the pupils attend the classes established at the Sorbonne for the *instruction secondaire* of young women, viz.:—

"1. Elements of Physics. Professor: M. Jamin, Member of the Institute.

"2. Elements of Chemistry. Professor: M. Riche, Substitute-professor (professeur suppléant) at the Ecole Supérieure de Pharmacie.

"3. Elements of Botany. Professor: M. Van Tieghem, Lecturer at the Ecole Supérieure.

"4. Elements of Anatomy and Animal Physiology. Professor: M. Bert, Member of the Faculty of Sciences.

"5. Elements of Mathematics. Professor: M. Philippon, Secretary of the Faculty of Sciences.

"During the second six months, the pupils will attend the following classes.

"1. Pharmaceutical and Medical Chemistry—a special course. Professor: A pharmacist of the hospitals.

"2. Human Anatomy and Physiology: special lectures on their relations to Medicine, and bearing particularly upon the functions of digestion, respiration, circulation, and innervation. Professor: A surgeon of the hospitals.

"3. Elements of Pathology, particularly in relation to the Diseases of Children and Hygienics. Professors: Two physicians of the hospitals.

"After the completion of the second six months of study, the pupils will attend the hospitals appointed for their instruction. Supplementary lectures and demonstrations will be given by special tutors. During the first and following years of study, the pupils who contemplate practising in Mussulman countries, receive three lessons a week either in the Turkish or the Arabic language. At the end of the first year, there will be a pass-examination for entrance to the higher classes."

It will be observed from the above programme, that during the first six months the Society for the Medical Education of Women requires no special staff. The pupils are to attend the courses at the Sorbonne instituted by M. Duruy two or three years ago, and denounced at the time in rather preposterous pamphlets by Monseigneur Dupanloup, the (anti-infallibility) Bishop of Orleans. The Bishop went to the Roman extreme of the female education question—admitting, however, that young women ought to be better educated than they now are in France, but arguing that they ought to be reared "sur les genoux de l'église", and not by secular professors. The courses of instruction given to young women of the middle classes in Paris at the Sorbonne, and at the Mairies of many of the great towns in France, are exceedingly good. Our feminine *confrères* will have every opportunity of making a good start if they profit (as they may) by the Sorbonne lectures for ladies instituted by M. Duruy.

It will be observed, by the above programme, that no professors have as yet been appointed to the strictly professional classes. The status, but not the name, of the professor is given.

It will be likewise seen by the programme that, while the aim of the Society is to give the new order of female medical practitioners a good general and medical education, a distinct limit to their professional ambition is fixed. They are not placed on the road to the *summos*

medicinæ honores attained by Miss Garrett. They are clearly intended to be a humble, and, I presume, a cheap, class of doctors—good enough, it is supposed, to compete with the existing rank and file of the medical profession, but technically disqualified from jostling the *dii majores*—the Nélatons and others who have instituted the "Société Médicale pour l'Instruction des Femmes." This, according to some of the promoters, is a point on which a great deal hinges. With the facts before him, each reader can form his own conclusions.

FOREIGN MEDICAL VOLUNTEERS.—Since the date of my last letter, it has been stated that—at least for the present—the medical services of foreigners are not to be accepted. I understand that this is a point on which a very decided opinion has been expressed both by the military and medical chiefs of the army. Nevertheless, if the medical exigencies of the war increase (as is probable), this decision may be modified.

Subjoined is the published account of the composition of the first volunteer ambulance which has been formed. The list contains the name of Mr. Good, an American surgeon who had been for some time studying in the Parisian hospitals. It would therefore seem as if there were some mistake about the acceptance or rejection of foreign volunteers.

"Ambulance Volontaire.

"*Chirurgien en chef*: M. Liégeois, agrégé et chirurgien-en-chef de l'hôpital du Midi.

"*Chirurgiens*: MM. les docteurs Gillette, prosecteur à la Faculté de médecine; Good, ex-chirurgien de l'armée américaine; Martin, ancien interne des hôpitaux de Paris; Sanné, ancien interne des hôpitaux de Paris.

"*Aides-chirurgiens*: MM. Laugier, ancien interne des hôpitaux de Paris; Létendard, docteur en médecine; Nottin, docteur en médecine; Ranlow, docteur en médecine; Sadreux-Lachapelle, docteur en médecine; Chevalet, Fremy, Labadie-Lagrave, Lagrange, Lorez, internes des hôpitaux de Paris.

"*Sous-aides*: MM. Barborin, Bonnet, Boylan, Brière, Decaesteker, Forestier, Galisson, Guenard de Mussy, Lafitte, Menard, Raillard, Vizzu, étudiants en médecine."

The list of medical officers of a second volunteer ambulance has been published. It consists of the same number of surgeons of different degrees as the first. The surgeon-in-chief is M. Marc Sée.

MEDICAL VOLUNTEERS FOR THE ARMY AND NAVY.—The following notice has been posted at the Ecole de Médecine for the last four or five days.

"MM. les Docteurs en Médecine sont informés qu'ils pourront être commissionnés directement au ministère de la marine en qualité de médecins auxiliaires de seconde classe pendant la durée de la guerre.

"MM. les Etudiants ayant au moins 8 inscriptions sont admis à s'inscrire dans les bureaux du même ministère pour remplir un service actif dans les hôpitaux."

A student of eight inscriptions is a student who has completed two years of study.

More than nine hundred medical students who have completed three years of study have (as volunteers) been named assistant-surgeons in the army. Some hundreds who have completed only two years of study have been accepted by the navy. Students of one year's standing are also obtaining employment as dressers or sub-assistants. When the medical session opens, on the first of November, where, it is asked, will the students be? It is hardly expected that the war will then be concluded. On the 20th July, the medical session was closed before the usual time; and since then, the examinations (under some exceptional temporary facilities) have been going on briskly.

THE STAFF OF THE MILITARY HOSPITALS.—All the military medical officers in military hospitals of France have been called into service in the field since war was declared; and civil practitioners have been appointed to do their hospital duty.

CIVIL AMBULANCES AND HOSPITALS FOR SICK AND WOUNDED SOLDIERS.—In my last letter (paragraph six), I referred to the measures being now taken under the orders of the Minister of the Interior to establish numerous small hospitals on the eastern and northern frontiers for sick and wounded soldiers. This is certainly a movement in the right direction. I have not ascertained how this service is to be worked in harmony with the authorities of the *intendance militaire*. They seem to be under purely civic rule, their staff being often the country doctors of the districts in which they are situated. The Minister of the Interior has placed their organisation and inspection wholly in the hands of Dr. Oulmont, "médecin des hôpitaux" of Paris, and principal physician to the Eastern Railway. According to the official announcement of his appointment, he is "chargé de l'installation et de l'inspection du service des ambulances et des hôpitaux provisoires établis dans

les communes, en faveur des militaires malades au blessés." If the war assume the terrible development now threatened, we may have the question of *large or small hospitals* solved by a comparison of the results of treatment in the disseminated little hospitals and great military hospitals such as that which has been prepared at Nancy with its 2000 beds.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 17TH, 1870.

RICHARD QUAIN, M.D., President, in the Chair.

A REPORT was read by Mr. WOOD and Mr. W. ADAMS on Dr. Dickinson's specimens of Bone from an Insane Patient. They were not affected by mollities ossium, but ossification of the cartilage had taken place at an earlier age than usual.

A report, by Dr. A. W. EDIS and Dr. WILTSHIRE, on Dr. Fuller's Dermoid Cyst of the Ovary, was read by Dr. WILTSHIRE.

A report on Mr. Holmes's case of Tumour of the Jaw, was read by Mr. PICK. It was a lympho-sarcomatous tumour.

A report on Dr. Mackenzie's Tumour of the Larynx, was read by Mr. MARSH. It was a specimen of what he would call adenoid carcinoma.

A report, by Dr. MOXON and Mr. ARNOTT, on Dr. Whipham's case of Heart-Disease, was read.

A report, by Dr. CAYLEY and Mr. ARNOTT, on Mr. De Morgan's case of Fibroid Tumour of the Mamma, was read.

A report, by Dr. GREEN, on Dr. C. T. Williams's case of Chronic Phthisis, was read. There was an unusual amount of interocular induration.

Dr. DICKINSON showed, for Dr. Peacock, an Aneurism of the Ascending and Transverse Portions of the Aorta. There were laryngeal symptoms, with paralysis of the left laryngeal cord. The left recurrent nerve was involved in the sac. The right subclavian artery arose at the left end of the transverse portion of the artery, and passed behind the trachea and œsophagus to its normal distribution. The aortic valves were diseased, and there was a large bronchocele.

A specimen of Perforation of the Appendix Vermiformis was also exhibited for Dr. PEACOCK. It was taken from the body of a gentleman aged 29, who was taken ill, after the action of a purgative, with sickness and vomiting. After death, a large abscess was found in the ileo-cæcal region, with evidences of the disease being of some duration. The appendix was found perforated in three places.

Dr. JOHN MURRAY exhibited specimens of Apoplexy of the Supra-renal Bodies, taken from the body of a man aged 46, who died of pneumonia affecting the right lung. There was very marked paroxysmal breathing, which led to the belief that, although the dyspnoea was mostly accounted for by the state of the lung, its excessive and paroxysmal character might possibly be explained by the affection of the capsules.

Mr. EDWARD BELLAMY exhibited a Tumour removed by Mr. Canton from the tendon of the Transversalis Abdominis Muscle. Referred.

Dr. DICKINSON exhibited Lymphoid Growths from the Spleen, of the size of peas, taken from the body of a boy aged seven years, microscopically presenting the characters of a matrix, in the meshes of which were a number of corpuscles. There were bleeding from the gums, extreme anæmia, and enlarged inguinal glands. Dr. Dickinson, in answer to Mr. Hulke, said that he did not think these bodies had their origin in the Malpighian bodies.—Dr. MURCHISON brought forward a somewhat similar case—that of a female six years of age, in whom the cervical, mediastinal, inguinal, and axillary glands were enormously enlarged. The spleen was greatly increased in size, and throughout its substance were numerous opaque deposits, as also in the liver. All the glands of the abdomen were infiltrated with the same deposit, and there was a lobulated mass in the dura mater. The diaphragm was also affected. The child had been ill three years. The disease commenced in the cervical glands; and she had suffered from periodical feverish attacks ever since, during which the glands appeared to enlarge. She was extremely anæmic.—Dr. J. BURDON SANDERSON read an elaborate and carefully prepared report, with drawings, on the microscopical appearances. He considered it one of lympho-adenoma.—Dr. BASTIAN classified the case among cancerous growths. There was no increase in the number of white corpuscles.—Dr. POWELL remarked that Trouseau had described a similar case as *adénie*.

Dr. WHIPHAM exhibited a Syphilitic Liver and Larynx from a male who had contracted syphilis in 1860.

Dr. CAYLEY brought forward a case of Acute Renal Dropsy without

Albuminuria, with Interstitial Nephritis. The patient, a boy aged 9, was a patient in the Middlesex Hospital, under the care of Dr. Henry Thompson. His previous health had been good, and he had never had scarlatina. About fourteen days before his admission, he caught cold, and seemed generally unwell. A few days afterwards, his throat became sore, and this was shortly followed by a purulent discharge from both ears. No rash was observed; and, so far as could be ascertained, he had not been exposed to scarlatinal infection. His brothers and sisters also remained well. About a week after the accession of his symptoms, general dropsy supervened, beginning in the eyelids and face; this continued to increase, and during the two nights preceding his admission he was delirious. The condition of his urine was not noticed. He does not appear to have suffered from pain in the loins. On admission, he was well nourished, but had a pasty anæmic complexion. There was considerable general anasarca, and some degree of ascites. Pulse 120; respirations 24. The thoracic percussion and respiratory sounds were normal. A soft double murmur was audible over the præcordia, most distinct at the base of the heart. There was a purulent discharge from the ears; but the sore throat had almost subsided. No desquamation was present. The urine was not high coloured, of specific gravity 1018; it contained a deposit of lithates, dissolved by heat. On continuing to apply heat, a white cloud formed, redissolved by nitric acid. On adding nitric acid to the cold urine, a deposit was thrown down, redissolved by heat. On microscopical examination, lithates and numerous large crystals of lithic acid were found, but no blood or casts. The urine was passed in rather large quantities, the specific gravity varying from 1012 to 1018. It was never found to contain either albumen, casts, or blood, but continued to show a considerable deposit of lithic acid. The dropsy much diminished, without completely disappearing. The patient was delirious at night. The heart's action became very irregular and tumultuous; and the double basic bellows-murmur, though altering much in character, was persistent. Ultimately, lobular pneumonia and œdema of the lungs supervened; and he died, after having been in the hospital eleven days, between three and four weeks from the commencement of his illness. He did not become comatose, and had no convulsions. On *post mortem* examination, the lungs were found highly œdematous, with patches of lobular pneumonia dispersed through them. The heart showed recent myo- and endo-carditis; the muscular walls of the left ventricle being studded with buff-coloured patches, intermixed with points of extravasation. On microscopical examination of these patches, the muscular fibres were found thickly studded with oil-globules, and in some places appeared reduced to an oily and granular *débris*. The aortic valves were much swollen, softened, and studded with recent vegetations. The kidneys, especially the left one, were enlarged. The right one weighed 4½ oz.; the left, 5½ oz. Their capsules stripped off with abnormal facility; their surfaces were smooth, pale, but somewhat mottled. On section, the cortical parts were found increased in thickness; they were pale and somewhat opaque; the pyramids were congested. The kidneys, therefore, to the naked eye, presented much the characters of the large white kidney of the second stage of acute tubal nephritis. On microscopical examination, the condition was found to be very different. The morbid change consisted in the deposition of masses of nuclei, having the characters of lymph-corpuscles, between the uriniferous tubules and round the Malpighian capsules; they were especially abundant in the latter situation. The epithelium of the convoluted tubes appeared normal, or at the most was very slightly swollen and granular. The morbid condition was, therefore, essentially one of acute interstitial nephritis, the inflammatory exudation being in every respect identical with that met with in other interstitial inflammations—as, for example, cirrhosis of the liver. Cases of acute renal dropsy without albuminuria, both as the result of scarlatina and from exposure to cold, have been frequently recorded; but no very satisfactory explanation of their pathology appears to have been given. This case would tend to show that some of these perplexing cases, even when the result of scarlatina, as in all probability the present one was, may be due to interstitial nephritis. It is interesting also as an example of the acute stage of the contracted granular kidney, which is probably of rare occurrence. Certainly, in the great majority of cases of this form of Bright's disease, the nuclear deposit and its conversion into fibrous tissue go on with equal steps. The non-occurrence of albuminuria in the acute form and its late occurrence in the chronic form of the disease admit of a satisfactory explanation, on the supposition that the fluid which transudes from the Malpighian tufts, as they are not covered by any *secreting* cells, consists essentially of serum, and is therefore albuminous. In the healthy kidney, the albumen and non-urinary constituents are reabsorbed during the passage of the fluid down the convoluted tubes. When the tubal epithelium is diseased, this reabsorption is interfered with, and albumen consequently appears in the urine. But in interstitial nephritis, which results in the contracted granular kidney,

the renal epithelium does not become affected till the interstitial deposit, by its contraction, has begun to press upon it and constrict the convoluted tubes; and so albuminuria does not show itself till the disease has made considerable progress. The deposit also leads to thickening of the small arteries and capillaries; and this, while not interfering with the free transudation of water, tends to check the passage of the dissolved solids; and hence the urine in these cases is usually abundant and of low specific gravity. A similar condition of urine is found in cases where the vessels are thickened from other causes, as amyloid infiltration. The discovery of the termination of the convoluted tubes in Henle's loops speaks strongly in favour of this view, as this arrangement must necessarily greatly retard the flow of fluid down the convoluted tubes, and so favour reabsorption, while it would be unfavourable to secretion.—Dr. DICKINSON had seen a child which died convulsed after three weeks' œdema without albuminuria.—Dr. CAYLEY, in answer to Dr. Legg, observed that search was not made for any other protein bodies.

Dr. CRISP showed a specimen of Abscess of the Kidney, which had burst after six months' illness.

Dr. BRISTOWE exhibited a specimen of Peritoneal Cancer, taken from a man aged 26. The peritoneum, liver, and pleura, and a portion of the great omentum, were studded with cancerous masses, some of them minute. The cells were of the epithelial character.

Dr. BRISTOWE also showed a Brain removed from a patient aged 34, who had died of bronchitis, in which the anterior portion of the cerebrum was incomplete. The grey matter was entirely removed, and replaced by filamentous tissue, in which were deposited numerous blood-crystals.

Dr. POWELL exhibited a specimen of Ruptured Cerebral Aneurism, from a woman aged 21, who had suffered from headache and constant vomiting for eight months. The cerebral vessels were all diseased—following, he thought, an attack of periostitis.

Dr. GREENHOW exhibited a specimen of a rare disease—Pearl-button-makers' Lung—sent by Dr. Russell of Birmingham, almost identical in character to those shown by him as occurring in certain other operatives. It was the first case which had been shown at the Society.

Dr. GREENHOW also showed an extreme case of Chronic Phthisis.

Sir HENRY THOMPSON brought forward a rare form of Vascular Tumour of the Bladder, taken from the body of a male aged 54, who for two years had suffered from frequent and painful micturition, with hæmaturia. The tumour was of the shape and size of two small figs springing from a pedicle. It consisted chiefly of highly vascular fibrous tissue. If nævoid in character, it was the first of which he had heard.

Dr. LEARED showed a specimen of Cancer of the Kidney, from a man who four years previously had passed blood. The symptoms simulated those of calculus of the kidney.

Dr. MURCHISON showed a specimen of Aneurism of the Abdominal Aorta rupturing behind the pleura and peritoneum, and causing peritonitis. The history dated from an attack of pleuropneumonia eight months ago.

Dr. MURCHISON also brought forward a case of Relapsing Fever in which there was plugging of the vessels. The foot became gangrenous; and the splenic, renal, and cerebral vessels were plugged. There was no cardiac disease.

Dr. PAYNE exhibited two specimens—one of Tubercular Peritonitis, and a second in which the Peritoneum was considerably thickened. Referred.

Mr. J. D. HILL exhibited a remarkable Tumour of the Palate, which protruded from the mouth of a seven months' foetus. Referred.

The PRESIDENT exhibited a specimen of Malignant Disease of the Pylorus, causing stricture, removed from the body of a gentleman aged 53. The patient was the subject of obstinate constipation and vomiting, everything he took being returned within an hour or two. He was emaciated; but there was no pain, and no constitutional disturbance. The urine was scanty and high coloured. There was at no time blood in the vomited matter; nor was there either smell or other appearance of fæces. A small hard tumour, which gave the impression of being about the size of a flattened walnut, was felt between the umbilicus and ribs at the pylorus. After death, the walls of the stomach were seen to become thicker and firmer as they approached the pylorus. This altered condition had become such at the outlet from the stomach as to cause, he was told by Dr. Marsden, under whose care the patient had also been, complete obstruction to the passage of liquids. There was a small gland of almost stony hardness in close proximity to the diseased wall of the stomach. The President remarked that the constant vomiting of everything taken by the mouth, and the obstinate constipation, established the conclusion that there was complete obstruction of the bowels. The diminished secretion of urine rendered it probable that the obstruction was situated high up—an impression further

confirmed by the absence of fæcal vomiting. The discovery of a small tumour existing at or near the pylorus led to the formation of a diagnosis which was fully confirmed after death.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

JUNE 1ST, 1870.

J. HUGHES BENNETT, M.D., F.R.S.E., President, in the Chair.

AFTER the exhibition of some pathological specimens by Dr. WATSON, including the fragments of stone removed by lithotomy in two cases in which the calculi were found to be excessively soft,

Dr. CLAUD MUIRHEAD read a paper entitled Notes of Cases of Relapsing Fever. In it Dr. Muirhead endeavoured to show that contagion, rather than infection, is the means by which this disease is propagated; that the period of incubation extends from five to ten days; that the occupation of the persons seemed in no way to predispose individuals to be attacked by it; that, out of the forty cases which were admitted to the fever wards, 60 per cent. were under the age of twenty; that the number of males, as compared with females, was as four to one, and of this number about 77 per cent. were of Irish extraction. From careful and minute inquiries into the circumstances of the patients admitted into hospital with this disease, and from personal inspection and measurement of the cubic space of those houses where large numbers of them lived, combined with this important fact, that not one of these people was out of work when seized with this complaint, he felt himself warranted in concluding that *overcrowding* has quite as much to do with the generation of relapsing fever as *destitution*—infinitely more with its propagation; and, in those cases which have this year presented themselves at the Infirmary, much more to do with it as an exciting cause.

He then detailed the various symptoms presented. A decided rash was observed only in one case, resembling the eruption observed in measles, rather than that seen in typhus fever. But in many cases a very marked prominence and erection of the hair-follicles, especially over the abdomen, thorax, and thighs, was present, which continued until the sweating stage supervened. Sudamina were almost invariably met with in the second crisis, seldom or never with the first. The temperature was most carefully noted in every case, and charts were exhibited showing the rapid and sudden fluctuations observed at the critical periods. During the first paroxysm, it ranges from 102 deg., the lowest point observed, to 106.2 deg. Fahr., the highest point noted; the evening temperature usually exceeding that of the morning, and sinking at the crises quite suddenly to two or three degrees below the standard of health. The lowest point noticed was 92 deg. Fahr., which occurred at the crisis of the first relapse. In this case, the temperature fell no less than thirteen degrees in twenty-four hours.

The spleen was uniformly found to be enlarged; and in the only fatal case, which occurred in a man of 59, from sudden syncope, it was found stuffed with clots and coagula. The number of white blood-corpuscles was found to be largely in excess of what is observed in healthy blood; the serum appeared to be increased; the red corpuscles were altered in character, and adhered to each other in irregular masses; and little granules were observed floating in the serum. The spleen diminished very decidedly during the remission of the fever.

As to treatment, nothing was found to be of the slightest use in warding off the relapse. Quinine was tried both by Dr. Fraser and Dr. Muirhead, by the mouth and subcutaneously, in combination with iron and with nuxvomica. In one case, seventy grains were given in divided doses, during the three days before the *relapse*, with no effect. In another case, 110 grains were administered during the four days previous to the expected *relapse*, by which cinchonism in all its forms was fairly induced, yet still the inevitable relapse made its appearance. Dr. Muirhead referred to the cases at St. Bartholomew's Hospital, reported in this JOURNAL for February 12th, 1870, where the results of the quinine treatment were said to have been most satisfactory, and stated that the only way in which he could reconcile the discrepancy between the results afforded by the same treatment in London and Edinburgh, was that, in each of the three cases reported from St. Bartholomew's, the patients were then suffering from the relapse when admitted into hospital, having already passed through the first paroxysm before applying for relief. It would be extremely satisfactory to know whether, after the lapse of three months, there has been any opportunity of treating others in the same way, and still more interesting to hear the result thereof.

A discussion took place, in which some of the senior members of the Society referred to the epidemic of relapsing fever nearly thirty years ago.

Dr. MATTHEWS DUNCAN communicated a paper by Professor

Sanders and Dr. Pettigrew, on the Dissection of a Monstrous Fœtus with Distended Abdomen, with remarks by Dr. Duncan.

JULY 6TH, 1870.

J. HUGHES BENNETT, M.D., F.R.S.E., President, in the Chair.

Dr. BENNETT, and his assistant in the physiological laboratory, Dr. MCKENDRICK, showed an interesting experiment illustrating the power of Chloral in Neutralising the Poisonous Effects of Strychnia. After briefly detailing the few observations already published on this subject by Groves, Richardson, Verneuil, and Liebreich, Dr. Bennett stated that, so long ago as May 19th, Dr. McKendrick and he had shown that chloral had the power of neutralising the effect of an otherwise poisonous dose of strychnia; and that since that date the experiment had been frequently repeated by them on rats, rabbits, etc. Richardson had tried it, but unsuccessfully; while Liebreich had tried the opposite experiment, and found that strychnine was an antidote to chloral. Two rabbits were then taken, each weighing about three pounds and a half, and equal in strength. One hundredth of a grain of strychnia, which had been proved to be a poisonous dose to the rabbit, was then injected under the skin of both rabbits; but to the second rabbit was also given an injection under the skin of fifteen grains of chloral in solution. In ten minutes, the first rabbit began to have convulsive twitchings of the legs; in thirteen minutes, it became frisky and ran about the table; in sixteen, it took two or three severe tetanic spasms; in eighteen, it died. The second rabbit was lethargic in ten minutes—sound asleep in a few more. In sixty minutes, it woke up with a spasm or two; and by the end of the meeting—135 minutes—it seemed sleepy, but otherwise quite well.

Dr. WATSON showed a large number of morbid specimens. 1. The Kidneys, Ureters, and Bladder of a lad who had come to him to be cut for stone, but, after about three days, had died of urinary suppression. The bladder was found empty, except for a small stone. Both ureters were found enormously dilated, so as to resemble coils of large intestine; and full of urine. The kidneys were infiltrated with urine through their substance, which was sodden and broken up. Another patient in the same ward, also with stone, was alarmed, and went home. He died in ten days, under similar conditions. Had these cases been cut, their deaths might have been attributed wrongly to the operation. 2. A Calculus from a man aged 72, and *débris* of two calculi removed by lithotripsy. 3. A number of Tumours, three of the jaw-bone; Epithelial Cancers; Excised Joints; etc.

Dr. JOSEPH BELL showed a specimen of Transverse Fracture of the Patella soundly and completely united by bone. It had occurred in a patient aged 81, and had been treated simply by two collars of padded cotton and lateral bandages. The patient had died in his eighty-fourth year, and the union was found complete and osseous.

Mr. SPENCE read a paper entitled "Remarks on the Results of the Greater Amputations". It was founded on the results of his own practice only, and included 403 cases. The paper was illustrated by very extensive tables, showing the causes which rendered the amputations necessary, and the results of each. The tables are far too long to be reproduced here. The first one gives the general results as follows.

	TOTAL.	RECOVERED.	DIED.
Hip	9	3	6
Thigh	155	100	55
Knee	1	0	1
Leg	53	37	16
Ankle	82	76	6
Total lower extremity	300	216	84
Shoulder	23	17	6
Arm	33	21	12
Forearm	43	35	8
Wrist	4	4	0
Total upper	103	77	26
Grand total	403	293	110

After some general remarks on the dangers of amputation, Mr. Spence pointed out how in many cases the *circumstances* of the case, rather than the operation itself, are the causes of death. The most familiar example of what he meant was to be found in strangulated hernia, in which the operation itself was nothing, but the delay of the operation often made it fatal. Hence the importance, in all statistics of amputations, in mentioning the disease or injury for which the operation was performed. He then analysed the causes of death in primary amputations, under different heads: 1. Additional injuries; 2. Shock; 3. Loss of blood; 4. Gangrene of stump; 5. Pyæmia. He then illustrated the

difference in result of operation for accident and operation for disease, by the results of his own amputations of the leg. Of thirty-one cases for accident, sixteen recovered, fifteen died; of twenty-two cases for disease, twenty-one recovered, one died. Of seventy-nine amputations of the thigh for disease, sixty-seven recovered, and only twelve died. And his impression was, that the most of those that died were cases of amputation on account of gelatinous disease of the knee-joint. He observed that amputations for necrosis were much more fatal than those for joint-disease, and advised delay in cases of acute necrosis. On the mode of operating, Mr. Spence observed that, while for disease of joints he advised the operation by a long anterior flap, with a little muscle to cover the end of the bone, with a short posterior one, he advised, in cases of accident or malignant disease, the use of two equal flaps, or of the modified circular, as in such cases your object was to save as much of the length of the limb as possible, and also remove as much muscle as possible.—Dr. GILLESPIE remarked on the importance and interest of the paper, on the necessity of great care in the hygiene of wards, and on the diminution in the number of cases of pyæmia.—Dr. JOSEPH BELL spoke of the importance of after-treatment, and illustrated the way in which primary amputation statistics were rendered invalid by fourteen cases of primary amputation of the thigh which he had performed for railway accident. Of these, two lost both limbs; one had his spine, and another his skull, fractured, etc.; five recovered. Of the others, two had delirium tremens, the result of previous intemperate habits, conjoined with the shock of the accident; the rest died of pyæmia.—Dr. P. H. WATSON remarked on the encouraging nature of Mr. Spence's statistics, which were the best possible answer to certain vague generalities lately given to the public under the name of statistics, collected from every possible source, true or untrue, some of which had already proved to be the latter.—The PRESIDENT remarked on the difficulty of properly arranging facts, so as to make the results really useful.

The meeting closed with an unanimous vote of thanks to the President for his conduct in the chair during the past session.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AN ENEMA APPARATUS.

SIR,—I have lately employed with advantage a new form of enema apparatus, which, while it has no pretension to novelty, yet possesses the three desiderata of cheapness, simplicity, and efficiency, and moreover scarcely ever requires repair. It consists of a tin vessel japanned, and, if necessary, lined with enamel, large enough to contain about a quart. It is either placed upon a wardrobe or attached by a small flap to a strong nail near the ceiling of the room. A long piece of flexible tube is fastened by a bent screw to the lower part (the wear of the tube which occurs from constant bending in the syphon instrument being thus avoided), and a stopcock inserted a few inches from the end of the tube regulates the size and force of the stream. A vaginal tube is fitted on when required, and by the use of other end-pieces of proper sizes, an eye or ear douche, a nose douche (on the principle of Dr. Thudichum's excellent but expensive instrument), or a powerful laryngeal douche may be formed. As the tin vessel holds a definite quantity of fluid, medicated solutions of any given strength may be employed, and of course any desirable amount of power may be obtained by simply lengthening the tube. If a continuous stream be desired, this may be obtained (as suggested to me by Dr. Bramwell) by attaching a small water-pipe over the tin vessel and allowing the water to run into it when in use. The instrument has been made for me by Mr. Gray, Pelham Street, Nottingham, at a cost of from 8s. to 10s.; and Mr. Gray will send one to the Annual Museum at Newcastle.

I am, etc., WM. TINDAL ROBERTSON, M.D.
Nottingham, Aug. 1st, 1870.

THE APOTHECARIES' HALL OF IRELAND.—At a meeting of the General Council of the Apothecaries' Company, held on August 1st, the following office-bearers for the ensuing year were duly elected:—*Governor*: A. Harvey, Esq. *Deputy-Governor*: R. Montgomery, Esq. *Court of Directors and Examiners*: T. Collins, J. Dirham, C. Holmes, C. H. Leet, C. F. Moore, H. P. Nolan, J. O'Flaherty, E. J. O'Neill, G. B. Owens, J. Ryan, J. Shaw, J. Shea, and G. Wyse, Esqrs. *Examiners in Arts*: G. Atkinson, M.B., and John W. Moore, M.B. *Representative in the General Medical Council*: C. H. Leet, M.D.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 6TH, 1870.

TIME AND SPACE AT THE COLLEGE OF SURGEONS.

THE Council and other authorities of our great College have a certain stereotyped reply by which they meet most proposals for its more extended usefulness. If it be urged that the Museum, splendid as it is, needs extensive development in several directions, the answer is, "We have no space; we are crowded already"; and if a reformer suggest that examinations ought to be held more frequently, and ought to be conducted in far more detail, he will infallibly be met with, "But how are we to find the time? with the crowds of students who present themselves it is, we assure you, even now, most difficult to get through the work." Thus time and space between them stop the way, and frustrate all hopes of growth at any more rapid rate than the jog-trot pace of the past. The plague of such replies is, that they appear conclusive, and yet are, like many others which at first sight claim to be final, but little above the merest puerility. Time and space are properly man's servants; and when a thing has been decided to be desirable on other grounds, it will very usually be found a wise policy to disregard considerations which only concern them. Especially in the present instance are excuses of the kind referred to out of place. The College of Surgeons has a history and a reputation. It is the central Institution of a prosperous profession in a wealthy country. It has before this received money-help from the national coffers, as well as bequests from private individuals. There is every reason to believe that, if its present executive were boldly to make their wants known; to show, as they easily could, that those wants are real ones, and that their supply would be a national gain, the means would promptly be forthcoming. Wealth can effect much in reference both to time and space.

Foremost amongst the objects for which increased space is required in the College Museum, we must place the great desideratum of a collection of surgical instruments and appliances. We do not mean a merely historical one, but rather one adapted for every-day purposes. It should be one of a nature to attract to its inspection every provincial surgeon who visits London, in the hope each time of being able to take home knowledge likely to be of use to his patients. It should comprise every novelty in the way of instruments, whether for operation or for research; every new form of splint or external appliance intended for the treatment of disease; every contrivance or utensil designed for the comfort and safety of the sick. Or, if it were found necessary to draw a limit as to expense, the rule might be laid down that it should contain all the objects enumerated which were considered by their designers as of sufficient value to be worth presentation. If such a collection were well arranged, and the inventors' and donors' names always duly annexed, a large majority of such articles would find their way there without cost to the College. Now and then it might be that the model of an embryo invention never destined to be perfected by its author would

secure a place, and prove of the greatest use at some future time as a suggestion to another worker in the same line. The value of such a collection would be by no means restricted to surgeons who should come in order to select at leisure what they needed in practice; it would aid invention, and prevent loss of time and labour on the part of the ingenious. It would also keep our instrument-makers up to the day, and prevent their supplying us with old and clumsy contrivances which have been long superseded by better. It would also prevent many unintentional plagiarisms, and would secure for good things more speedy and wider recognition than they would otherwise receive. We appeal to our provincial associates whether it would not be great convenience to them to be able to inspect all varieties of the clinical thermometer, unbothered by the praises of their would-be vendors; to see the most convenient form which the long splint has assumed; and to contrast the advantages of the gypsum-bandage with those of bandages made with starch or with silica. We appeal also to the newly elected President of our College, whether the operation of excision of the knee-joint might not have been more rapidly helped on to its present perfection if there had been a place where the best appliances for the after-treatment in all their details of application could have been inspected. Is it too much to believe that some limbs would have been saved which have been lost, and that the recovery of many patients would have been expedited and made far more comfortable during its progress, had precise knowledge on this matter been more easy of attainment?

There is a valuable, though not complete, collection of such appliances as are needed in military surgery at Netley; but any one who might wish to inspect a good museum of those designed for civil practice would, we believe, have to make a journey to Aberdeen, and avail himself of the zeal of a private individual. On the Continent, there are several such collections, which are highly valued; and especially we may mention that the little capital of Norway has an excellent one. It is not creditable to London that it has not yet attended to a matter so manifestly desirable, and with the College of Surgeons the main responsibility must rest.

More room is also urgently required at the College for the proper display of drawings, casts, etc., in additional illustration of the specimens. Many preparations are in themselves of but little value beyond supplying the means by which any mistake in their original description may at any future time be corrected. They do not in their bottles tell their own tales. They require explanation and further illustration by drawings, photographs, and casts. These should be placed in juxtaposition with the specimens to which they relate, and they should be made easy of reference. The College already, we believe, possesses a considerable collection of such; and it would receive many more if it were known that they would be valued and made available. Duplicates from other places ought also to be obtained. The art of photography has opened quite a new field for our curators; and there is not a museum in the three kingdoms, probably not in Europe, which would not gladly allow the College of Surgeons to make copies of its best things.

It is high time that the College should undertake the pursuit of surgical pathology in a more systematic manner. We will not ask for more zeal than it has devoted to comparative anatomy, but we should really like as much. What seems to us to be wanted is, that gaps should be filled and lists of desiderata prepared; and we should no longer be content to receive a heterogeneous collection of curiosities forwarded by individuals who have selected them usually rather from belief in their extreme rarity than from knowledge of their pathological value. The College has no *post mortem* theatre on which to rely for supplies; and a very prevalent impression is abroad in the profession that nothing short of what is almost unique will be received. If it were once known that the College was collecting series of specimens illustrating this or that subject, that it wished for preparations bearing upon it, and would make good use of them, plenty would be sent. Although our Museum is beyond all comparison with the Musée Dupuytren at Paris as a whole, it is in many matters respecting surgical pathology far

behind it. An effort should be made—and an energetic one—to secure for it its natural pre-eminence over all smaller collections in Great Britain. This must be done not so much as a matter of competition as by seeking to enlist the co-operation of those who work for them. The College has, we are sure, but to avail itself of its grand advantages as to publicity to do this with the utmost success. It has but to make it widely known that whatever is sent will be utilised, will be examined carefully, and displayed to the best advantage. To do this, however, much additional space is required, for the shelves are already full.

We come next to the excuses made as to “want of time”. Who can doubt that the examinations at the College have greatly improved of late years? Formerly, half-an-hour’s talk with an elderly baronet-surgeon, under the very perceptible influence of his dinner, and the disgusted student was dismissed with his diploma. Next, things were better organised, and the candidate spent four periods of fifteen minutes each at four separate tables in conversation with the surgical authorities of the day, who, by the exchange of hieroglyphics, managed to communicate to each other their estimate of his abilities. Slowly other reforms were introduced; written questions were given out and written answers required; and at length the examination was divided into two parts, with a year or more between them. Lastly, attempts have been made to introduce the clinical element; and candidates are now required to show on the living subject how they would compress an artery, apply a tourniquet, or bandage a limb. We by no means underrate these reforms; and it is a legitimate source of satisfaction to know that the Council now manifests no unwillingness to admit visitors to see how things are managed. But still we must allege that the examinations have by no means taken their proper place in medical education. Formerly, they were disgraceful; now, thanks to the growth of public opinion, thanks to the medical press, to the much vituperated Medical Council, and to the activity of those who have taken part in the College elections, things are much improved, but they are by no means perfect. We want an examination which shall aid the teacher by supplying to his class ever pressing motives for industry; we want examinations which shall defeat the ingenious devices of grinders, and which shall enable us to dispense with the farce of signing certificates. What would be thought of a butcher who, not able to depend upon his own estimate of weight and quality, should require of the farmer who wished to sell his ox a certificate as to the quantity of food it had consumed and an exact statement of the time it had spent in his several meadows? We have ventured on a homely simile, but it nowise oversteps the truth as a parallel with the present demands of our examining bodies. Let them examine their candidates at least once a year throughout their period of study; let them examine in detail and with care; let them interrogate widely over the range of the sciences which are fundamental to that of medicine, but yet with due discrimination of the relative importance of different kinds of knowledge and skill; and then we may hope, year by year, to see our profession taking a higher and higher stand. The need for the present onerous and absurd restrictions as to where a man shall learn, and how he shall use his time, would vanish; and those who might wish it would be able to avail themselves of the great advantages of change of school and of teachers. To do this, to do it well, to do it so thoroughly that the stupid should be sent back to other pursuits, the intelligent but idle forced to work, and the industrious helped to higher success, is quite practicable. To accomplish it, however, will require much modification of present arrangements.

For examinations of the kind required we do not want men of the rank which qualifies for election to the Council. We shall require young men who can spare whole days or weeks at a time, men with minds not yet overburdened with the responsibilities of practice, but with energy, and plenty of leisure to devote it to this one object. To require men like Mr. Paget, Sir William Fergusson, or Mr. Busk, to devote themselves to examining young students in anatomy and systematic surgery, is like asking a Chief Justice to preside at petty sessions. For the final examination in bedside surgery, it will be well

to employ high authorities who will give dignity to the thing, and will also make it really more efficient; but at all the lower steps such splendour is misplaced. The vocation of the Council is to select the examiners, and to supervise their work, but not to attempt to do it all themselves. For the greater part of it, far more time is essential than they can possibly have at their disposal.

MR. H. POWER and Mr. B. J. Vernon have been elected ophthalmic surgeons to St. Bartholomew’s Hospital.

PROFESSOR BILLROTH of Vienna has gone to the seat of war, along with his assistant, Dr. Czerny.

DR. W. ORANGE has been appointed Medical Superintendent of the Broadmoor Criminal Lunatic Asylum, in the room of the late Dr. Meyer.

THE London Infirmary for Diseases of the Legs, Red Lion Square, has been the recipient of one of the munificent anonymous donations of £1000. The donor subscribes himself under the initials M. R.

DR. EUSTACE SMITH has been created Chevalier of the Order of Leopold, and appointed Physician-in-Ordinary to the King of the Belgians. This appointment does not require Dr. Smith to relinquish practice in London.

HOSPITAL ORGANISATION.

THE Committee again met at the Hospital for Women, Soho Square, on Thursday evening of last week. The subject of payment by hospital patients was considered, but it was thought expedient, from the smallness of the meeting, to defer the further consideration of so important a subject until another time. The meeting was adjourned until October.

MORTALITY FROM SMALL-POX IN SWANSEA.

MR. EBENEZER DAVIES, the Medical Officer of Health for Swansea, states, in his report for the quarter ending June 30th, that the mortality during that period was 328, being 76 above the actual average of the previous seven years, or 46 above the estimated average. Scarletina caused 46 deaths; but the epidemic, after having destroyed 362 lives during the last fifteen months, appears to be decreasing. Small-pox, on the other hand, is extending and becoming more fatal: during the quarter, it caused 43 deaths. Among these, Mr. Davies says, he ascertained that in 9 cases the persons had been vaccinated, and in 29 they were unvaccinated. Considering that the amount of unvaccinated persons in the population is small—Mr. Davies estimates it at one-tenth—the deaths from small-pox among the unvaccinated must be, in Swansea at least, in the proportion of about 32 to 1 occurring among vaccinated persons. Mr. Davies very properly points out to the Board of Health of his district the mischief that is done, in the face of such facts, by the opponents of vaccination.

BLOOD-PICTURES.

DR. DAY, of Geelong, Australia, the improver of the guaiacum-tests for blood and other animal fluids, confirms the discovery of Neumann, that the picture or network formed by human blood can be distinguished under the microscope from that which is formed by the blood of other animals. He says he has repeated the experiment, which is “wonderfully simple,” almost every day for the last two months, with invariable success. A small drop, not a mere speck, of the blood is to be placed on a microscope slide, and carefully watched, at a temperature of 10° or 12° Reaumur (= 54.2° to 59° Fahr.), until the picture or network formed by its coagulation is developed. Human blood speedily breaks up into a “small pattern” network: the blood of other animals (calves, pigs, etc.) takes a longer time, and makes a larger pattern; but the blood of every animal seems to form a characteristic “picture.” Dr. Day has examined the blood of calves, pigs, sheep, rabbits, ducks, hens, several kinds of fishes, etc., as well as that of man, and has found the results to be trustworthy and constant.

AN AUSTRIAN RAILWAY DOCTOR.

THE surgeons of the northern line of railway in Austria have presented their chief officer, Dr. Keller of Vienna, with a handsome silver cup and signed address, on the completion by him of ten years of duty.

ST. THOMAS'S HOSPITAL.

DR. CLAPTON has been elected full physician to St. Thomas's Hospital, in consequence of the resignation of Dr. Gooklen. In addition to a successor of Dr. Clapton, the Governors have determined to appoint a second assistant-physician. The election is to take place early in September.

DISEASED MEAT.

AT West Hartlepool, a man named Stephenson was recently fined £5 for having in his possession the carcase of a cow unfit for human food. The meat is described as having been dark-coloured, yellow, and dirty-looking: decomposition begun about the udder within twenty-four hours of death. We are informed that a great deal of inferior meat has been sold at Hartlepool this summer, and the prevalence of diarrhoea has been attributed in some degree to this cause, though with what amount of evidence we do not know.

AID TO THE SICK AND WOUNDED IN WAR.

THE Austrian Society (Help-Union) for affording aid to the wounded in war held a meeting on the 21st July, when it was unanimously decided that both the belligerent powers should share equally in the benefits to be afforded by the Society; and a public notice in this sense was accordingly issued. Telegrams were immediately despatched to the presidents of the "Help-Unions" in Germany and France, inquiring to what destinations supplies should be addressed. Twenty hundred-weight of charpie, and ten thousand bandages, have been sent in equal shares to the belligerent armies; and supplies of money and other necessities for the sustenance and care of the sick and wounded are soon to follow.

RELAPSING FEVER.

WE have received an excellent report drawn up by Dr. T. C. Shaw, the Resident Medical Officer, on the cases admitted during the late epidemic into the Temporary Fever Hospital at Hampstead. We cull the following interesting and valuable facts from the report:—

The first patient was received on January 31st. From this date until May 15th—that being the day appointed as the limit of time for admitting fresh cases—152 males and 66 females, 218 in all, were taken in, being an average of between 2 and 3 daily. The admissions were most numerous in February, and there was a considerable decrease in the succeeding months. A large proportion of the patients, varying from 26 to 54 per cent., had not relapsing fever at all; a table is given shewing the percentage of diseases other than relapsing fever; and also one giving the particular diseases that were confounded. It appears, says Dr. Shaw, from the tables given, that as the epidemic declined in virulence, so the difficulty of discriminating the diseases became greater, shewn more particularly on the male side. In every instance, as soon as it was seen that the disease was not relapsing fever, the patient was, if possible, sent back to the workhouse; but many were in so very feeble a state that they had to be retained. The deaths numbered 14; viz., 11 men and 3 women. They are classified thus: Aortic aneurism, 1; relapsing fever, 3; toxæmia, 6; broncho-pneumonia, 1; phthisis, 1; muco-enteritis, 1; acute gastritis, 1. Of these one died within seven hours after admission, one died within twelve hours, another within twenty-four hours, two others within forty-eight hours, and the remainder at different and longer intervals. In every instance there was old-standing disease. The class of patients, as a rule, were of the very lowest and poorest description—tramps and men in very precarious employments; although a few persons, who have had plenty to eat and who lived in tolerably good localities, were also admitted. Dr. Shaw points out a very curious fact in relation to this disease, that, with scarcely any exception, they were very dark complexioned. Not only were those with dark hair, muddy skin, and 'bilious temperament' those most attacked, but in them the disease assumed its most severe aspect, the pains were greatest, the crisis most determined, and the relapse most regular in its time of occurrence. This peculiarity on many occasions materially assisted him in determining the true nature of a

doubtful case. In both sexes the persons most liable to be attacked were those from 15 to 40 years of age. The length of time that individual cases were under treatment varied from a few days to two months: as a rule, taking the instance of a person about 25 years old, with a moderate seizure, from three to four weeks. As the epidemic fever was on the decline, the admission of patients was stopped on May 15th, with a view to the closing of the Hospital, and the last patient was discharged cured on June 21st. Dr. Shaw states that "Thus far the Hospital has answered its purposes well, and every requisite has been there. During the winter it was always possible to keep the wards at a temperature of sixty degrees, if required, and there would be no difficulty in keeping them cool in summer if the windows were provided with blinds. The fields around have formed capital airing-space for the patients, and have tended much to promote the recovery of the convalescents. The only real inconvenience in the building has been the sleeping accommodation for the night nurses. It would be advisable in any future building of similar structure to place the sleeping-block for the night nurses as far away from the main corridor as possible, for the incessant walking up and down during the daytime effectually prevents sleep." It is satisfactory to point out that there has been no case of relapsing fever amongst the nurses and sisters, or any of the laundry women employed in washing the clothing. This immunity has doubtless been secured by the large cubic space of the wards, liberal diet, and free use of disinfectants. The nursing has been very thoroughly and ably performed by the East Grinstead Sisters.

MEDICINE IN INDIA.

ON another page we give a brief abstract of an interesting paper on the past and present state of Medicine in India, read on Wednesday evening by Baboo Gopaul Chunder Roy at a special meeting of the Hunterian Society. The paper will appear in the JOURNAL at an early period, when our associates will have an opportunity of studying for themselves the interesting and important topics enumerated in it. The condition of the native graduates of the Indian Universities, as described by the author of the paper and by Baboo Keshub Chunder Sen, is one which, *primâ facie*, requires investigation and improvement. Among the visitors present was the Rev. Mr. Moffat, the well-known African missionary, who gave a brief notice of some of the medical practices of the tribes among whom he has been a resident for forty years.

FUNERAL OF VON GRAEFE.

THE funeral of the late Professor Albrecht von Graefe took place in Berlin on Saturday, July 23rd. The friends and colleagues of the deceased had collected in great numbers at his late residence in Victoria Street, all the most distinguished members of the University and of the medical profession being in attendance. There were also present the members of the Senate of the University—Jüngken, Mitscherlich, Virchow, Dubois-Reymond, etc.; the Surgeon-General and staff-surgeons of the Frederick William Institution; a deputation of the magistrates and of the Municipal Council in their robes; a great number of junior medical men and students of medicine; and the University Choral Society, with its banner. The public too, of all grades, attended in great numbers; so that the street could not contain the numerous carriages, the line of which extended far into the Thiergarten. Among these were the state carriages of the King, the Queen, and Princess Charles. Dr. Lisco, pastor of the new church, delivered a touching discourse in the large *salle* of the house, in the centre of which, beautifully decorated with wreaths of camelias, stood the coffin which contained the mortal remains of the departed. He described the high scientific position of the deceased, his eminent services for the human race, and, above all, his wonderfully amiable qualities, his extreme charitableness of character, and how he was always ready, with equal care and self-sacrifice, to lend assistance at every hour to poor and rich, nobleman and commoner, high and low. "He who lay with closed eyes," he said, "had gazed with saving skill into those of his fellow-men until the last sparks of life were being extinguished, supplying new light and thus new life to others but shortly before he himself departed. The love of a world accompanies him to the grave! This love is the most noble thing which a man can obtain; it will live in the hearts of the people eter-

nally; and science will constantly cherish his memory." The funeral *cortège* then proceeded to the old Jerusalem Cemetery. The burial ceremony was short. The evening was falling as the coffin was lowered into the vault.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE annual meeting of the Association of Medical Officers of Health was held on July 14th, when the following officers were elected for the ensuing year:—*President*: R. Druitt, M.D. *Vice-Presidents*: C. J. B. Aldis, M.D.; G. Buchanan, M.D.; W. T. G. Woodford, M.D. *Treasurer*: C. J. B. Aldis, M.D. *Honorary Secretaries*: J. Northcote Vinen, M.D.; Thomas Stevenson, M.D. *General Purposes Committee*: E. Ballard, M.D.; H. Letheby, M.B.; W. Hardwicke, M.D.; W. T. Iliff, M.D.; H. G. Sutton, M.B.; J. J. Rygate, M.B.; J. Liddle, Esq.; C. F. J. Lord, Esq.

PRESENTATION TO DR. WILLIAM COOKE.

AT the close of the meeting of the Hunterian Society on Wednesday evening, a very interesting ceremony took place. The President, Mr. Jonathan Hutchinson, presented to the late Treasurer, Dr. W. Cooke, an address signed by the officers and Council of the Society, expressive of their sincere appreciation of his labours as an officer of the Society for more than half a century. The address alluded, *inter alia*, to the service which Dr. Cooke had rendered to the study of pathology by his translation, in 1822, of Morgagni's work on the nature and seat of diseases. In thanking the Society, Dr. Cooke said that his membership had been of very great benefit to him. He had now reached a time of life—being about on the next day to complete his eighty-sixth birthday—when he could hope to do but little more work. Notwithstanding his great age, Dr. Cooke, we are glad to say, appeared in the enjoyment of excellent health and vigour.

A MEDICAL STATESMAN.

IT is not often that we refer to international politics. The revelations of duplicity and intriguing which have just spread abroad an universal feeling of insecurity and mistrust induce us, however, to recal to memory the career as a statesman of a member of our own profession. Virchow is perhaps the most illustrious of living physicians; he has, too, the honour of having been for many years the foremost opponent of the ambitious and unprincipled schemes of Count Bismarck. At one time matters had gone so far, that rumour averred that the Count had sent him a challenge to fight a duel. For years Virchow, in his capacity as representative, was the eloquent and fearless opponent of all arbitrary exercise of power and unflinching advocate of popular institutions. The success of Bismarck's great but unprincipled schemes, in reference, first to Schleswig, and secondly to Austria, threw the constitutional party in Prussia into the background. Those who, with eyes opened by recent events, see in honest parliamentary government the only real security against the base plots of military autocrats, will now know how to appreciate the course taken by our illustrious *confrère*, and will equally admire in Virchow the genius of the pathologist and the sagacity of the patriot. It is not often permitted to the same man to display such splendid excellence in such different careers.

THE EDINBURGH UNIVERSITY CLUB.

THE natural tendency of societies pretending to social qualities, at this time of the year, is to combine the greatest amount of pleasure with the minimum of business; and the Edinburgh University Club is no exception. Each member of the Club who could wended his way to attend the summer quarterly meeting of this admirable Society at the Mitre Hotel, Hampton Court. The minimum of business having been conducted, the members sat down to dinner; Dr. Halley, Treasurer, in the unavoidable absence of Dr. Sieveking from indisposition, presiding; and Mr. Richard Davy, the Acting Secretary, taking the Vice-President's chair. After dinner, the usual loyal toasts received their wonted reception. Other toasts followed: "The New Graduates of the University,"

"capped" that day; and "Dr. Halley," both of which were warmly received; "The Medical Press," responded to by Dr. J. P. Steele and Dr. John Murray; "Dr. Meredith," about to return to India; "The Strangers," responded to by Mr. Cook. Altogether, the evening passed off most pleasantly.

THE HEALTH OF THE WIMBLEDON CAMP OF 1870.

WE have received from Surgeon-Major Wyatt, Medical Officer in Charge of the Association Hospital, a detailed medical report of the cases treated during the meeting. Dr. Shepherd, Surgeon Victoria Rifles, who yearly attends on duty at the camp of that corps, and who, in addition to looking after his own men, affords relief to all volunteers who may seek his medical assistance, has also furnished us with a list of the cases attended to by him. The total average number of men in camp, including soldiers, police, and camp-followers, was 2,155. The cases treated at the Association Hospital, and by the Association medical officers in camp, were the following: Ophthalmia, 2; diarrhoea, 30; fever, 2; vertigo, 5; rheumatism, 3; erysipelas, 1; boils, 1; hæmoptysis, 2; dislocation, 1; dyspepsia, 27; footsore, 4; toothache, 1; dysuria, 1; sunstroke, 2; burns, 2; concussion, 6; ulcer, 1; contusions, 15; sprains, 2; colic, 18; gunshot wounds, 3; injuries to eye, 3; total treated in camp, 107; in hospital, 25; total, 132. The cases treated by Dr. Shepherd were: diarrhoea, 4; lumbago, 1; rheumatism, 2; dyspepsia, 13; incised wounds of hand and fingers, 5; contusion of knee, 1; abscess, 1; bilious vomiting, 3; vertigo from exposure to the sun's rays, 2; fainting from exhaustion, 2; total, 44. Considering the large number of men in camp and the intense heat during a great part of the meeting, the sickness in camp has been this year very small. Diarrhoea has been but slightly prevalent—no doubt in consequence of the additional precautions observed by the increasing number of experienced campaigners and the improved water-supply. Throughout the meeting there were occasional evidences of Moule's earth-system breaking down; but these were, we believe, due in great measure to the defective earth supplied for use.

EPSOM COLLEGE.

DR. THORNTON, Head Master of Epsom College, having resigned, after a long and faithful term of office, several old boys have desired to present him, on the occasion of his leaving, with a testimonial, as an expression of the high esteem in which he is held by all past Epsom pupils, and by all who have known him in the position which he has held from the opening of the school. We are requested to intimate that, should any old boys wish to further the object in view, any of the undermentioned will be happy to receive subscriptions. It is particularly wished that an early answer may be given, in order that an idea may be formed of the amount likely to be subscribed, and subsequently a date fixed for a large general meeting, at which the form of the testimonial may be decided upon: W. W. Wagstaffe, 122, Kennington Road, S.E.; H. Morris, 13, Keppel Street, Russell Square, W.C.; J. F. Goodhart, 24, Montpelier Crescent, Brighton; F. Taylor, 59, Stanhope Street, Strand; J. F. Wright, 53, Seymour Street, Portman Square, W.

SCOTLAND.

THE NORTH OF SCOTLAND MEDICAL ASSOCIATION.

THIS Association held its annual meeting in the Medical Hall, King Street, Aberdeen. There was a very good attendance; Dr. Keith, President, in the Chair. The members first proceeded to visit the new Anatomical Museum which has recently been added to the anatomical rooms at Marischal College through the efforts of Professor Struthers. The President afterwards delivered an admirable address, in which the occurrences of the past year, in so far as they specially interested the Association, were reviewed. Dr. Davidson Wartle was unanimously elected President for the following year.

GLASGOW UNIVERSITY.

THE sum of £13,230 has been voted, in Committee of Supply, towards completing the Glasgow University buildings. Her Majesty the Queen has intimated her intention of contributing the very handsome sum of £500 towards the completion of the buildings.

OLD GLASGOW UNIVERSITY FAREWELL DINNER.

ON Thursday evening last week, the professors and others connected with the University dined together in the Fore Hall, to commemorate the occasion of their taking leave of the old building. A number of distinguished visitors were present as guests.

PRESENTATION TO PROFESSOR ALLMAN.

AT the close of the last lecture of the session, a week ago, Professor Allman was presented with a handsome timepiece by Mr. W. F. Pegus, in the name of the students of the class, to testify their sincere regard for Professor Allman as a gentleman, and their high admiration for his talents and ability as Professor of Natural History in the far-famed University of Edinburgh.

UNIVERSITY OF EDINBURGH: THE GRADUATION CEREMONIAL.

THE usual "capping" ceremonial took place in the Assembly Hall, Castle Hill, on Monday morning; the Right Hon. the Lord Justice-General, Chancellor of the University, presiding. There was a large attendance of ladies and gentlemen. Professor Balfour, Dean of the Faculty of Medicine, presented the gentlemen worthy of receiving degrees in Medicine and Surgery, after which Professor Laycock delivered the graduation address.

THE BREWSTER MEMORIAL STATUE IN THE UNIVERSITY OF EDINBURGH.

THIS statue, the result of a movement amongst some friends of the late Principal and of the University, was inaugurated, in the presence of a large assemblage, on Monday, after the graduation ceremonial. It is an excellent full-figure statue from the chisel of Mr. Brodie, and has been placed under the central arch on the west side of the quadrangle.

THE ABERDEEN ROYAL INFIRMARY.

WE have received numerous letters bearing on our report on the Aberdeen Royal Infirmary, and all more or less corroborative of our strictures on its condition and management. Great press of matter prevents our reproducing more than one or two; but those published indicate, so far as they go, that our remarks have been in the right direction. The strongest proof of the justice of our remarks lies, however, in the fact that, although we afforded an opportunity to all the Aberdeen papers of drawing attention to our report in whichever way they pleased, they have thought fit carefully to exclude from their pages any direct allusion whatever to our criticisms on the Infirmary. We cannot but feel that they have acted wrongly to the public and the medical school in this. The physical ventilation of the Infirmary is bad, a fact acknowledged by Dr. Keith in his Presidential address to the North of Scotland Medical Association; and it is surely also inexpedient and short-sighted to adopt a policy of refusing the benefit of moral ventilation to an institution of so public and important a character as the Aberdeen Royal Infirmary.

IRELAND.

THE CASE OF DECAPITATION IN HANGING.

A SHOCKING scene occurred at the execution of Andrew Carr in the Richmond Bridewell, Dublin, on Thursday week. In order to avoid the prolonged agonies of death by strangulation, and to ensure instantaneous loss of life, the drop was increased from eight to fourteen feet. The result was that, on the bolt being drawn, the sudden jerk caused the rope to cut as completely through the criminal's neck as if he had

been guillotined, and the head and trunk fell separately to the flags of the prison court-yard. Dr. H. Minchin, who conducted a *post mortem* examination on the body, stated that the cause of death was a transverse fracture through the second cervical vertebra, and a displacement of the second from the third. He said that the length of the fall was determined by the formula 2,240 lbs. divided by the weight of the offender, in this case 159 lbs. The accident seemed to him to depend on a previous gradual and unnoticed tightening of the noose, and a consequent increase in the force of the fall, part of which force was, under ordinary circumstances, expended in tightening the noose.

CITY OF DUBLIN ELECTION.

SIR DOMINIC J. CORRIGAN, Bart., M.D., has issued an address to the electors of this constituency. The general political views of the learned baronet are well known. He announces himself as the advocate of "Freedom of Education", holding that there should be one great National University for Ireland, whose functions should be solely those of *examining*; and that the State should afford equal aid to all denominations for educational purposes. Sir Dominic expresses himself in favour of the ballot, and of the release of the Fenian prisoners. He believes that the time for self-government in Ireland has not yet come; and he states that for this reason he has not taken any part in the movement of "Federalism" which has recently arisen. The address contains no allusion whatever to subjects of more immediate medical interest.

CORRESPONDENCE.

INTERNATIONAL SOCIETY FOR THE RELIEF OF THE WOUNDED IN BATTLE.

SIR,—Your Paris correspondent was perfectly correct when he stated in his last week's letter that, from among the English and American surgeons who had offered their services to the Committee of the Société Internationale, I had already received an appointment. The facts of the case are, that I had received an *official notice* of my appointment to an assistant-surgeoncy in the second ambulance; but, four days later, I received another letter in which I was informed that the Committee had not the power to receive the services of foreign surgeons not regularly domiciled in France.

It seems strange that the Committee, which had been sitting for about three weeks, did not find out from the Minister of War, a little earlier, what their powers were on such an important point as that of the admission of strange surgeons into their ambulances. If they had done this, I, and doubtless many others, would have been spared much needless loss of time and annoyance. From what I learned before leaving Paris, it appears that there is no lack of surgeons to the French troops, many having been lately admitted into the army by a series of elementary examinations held at the Val de Grâce, the military hospital in Paris; besides which, many surgeons and dressers, who, being in the Garde Mobile, would have been forced to go to the war as ordinary soldiers, have been allowed to join the medical staff. Altogether, I am now of opinion that those who have entered as volunteers in the ambulance, with the idea of having grand opportunities of exercising their skill in the performance of surgical operations, will be disappointed; I believe that they will simply find themselves acting as assistants and dressers to the regular French military staff, which has been thoroughly organised and increased by the experienced surgeon-in-chief of the army of the Rhine, Baron Larrey.

One will be anxious to hear how the American branch of the Society, which is making active preparations in Paris, will be received and disposed of during the war.

I am, etc.,

EDMUND B. OWEN.

Cleveland Square, W., August 2nd.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
ANNUAL MEETING.

THE Thirty-eighth Annual Meeting of the British Medical Association will be held in Newcastle-upon-Tyne, on Tuesday, Wednesday, Thursday, and Friday, the 9th, 10th, 11th, and 12th of August next.

President—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

President-elect—EDWARD CHARLTON, M.D., Senior Physician to the Newcastle-upon-Tyne Infirmary.

An *Address in Medicine* will be delivered by FRANCIS SIBSON, M.D., F.R.S., F.R.C.P., Physician to St. Mary's Hospital.

An *Address in Surgery* will be delivered by G. Y. HEATH, M.D., M.R.C.S., Senior Surgeon to the Newcastle-upon-Tyne Infirmary.

The business of the meeting will be conducted under six Sections:

Section A. MEDICINE.—*President*: Dr. Embleton. *Vice-Presidents*: Dr. Simpson and Dr. Lyons. *Secretaries*: Dr. H. Barnes, Carlisle, and Dr. Morell Mackenzie, 13, Weymouth Street, London.

Section B. SURGERY.—*President*: Professor Lister. *Vice-Presidents*: Charles Trotter, Esq., and Timothy Holmes, Esq. *Secretaries*: Dr. Arnison, Newcastle-upon-Tyne, and W. H. Favell, Esq., Sheffield.

Section C. PHYSIOLOGY.—*President*: Dr. A. Clark. *Vice-Presidents*: Dr. Sanderson and Dr. Hayden. *Secretaries*: T. C. Nesham, M.D., Newcastle-upon-Tyne, and J. G. McKendrick, M.D., 29, Castle Terrace, Edinburgh.

Section D. MIDWIFERY.—*President*: Dr. Robert Barnes. *Vice-Presidents*: Dr. Gibson and Dr. Graily Hewitt. *Secretaries*: Luke Armstrong, Esq., Newcastle-upon-Tyne, and J. H. Aveling, M.D., Rochester.

Section E. PUBLIC MEDICINE.—*President*: Dr. Rumsey. *Vice-Presidents*: Dr. Druitt and Dr. Morgan. *Secretaries*: Anthony Bell, Esq., Newcastle-upon-Tyne, and Dr. A. Ransome, Bowden, Cheshire.

Section F. PSYCHOLOGY.—*President*: Professor Laycock, M.D. *Vice-Presidents*: Dr. Sankey and Dr. Maudsley. *Secretaries*: Grainger Stewart, M.D., Borough Asylum, Newcastle-upon-Tyne, and T. Harrington Tuke, M.D., 37, Albemarle Street, London.

TUESDAY, August 9th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Council Chamber, New Town Hall.

3 P.M.—MEETING OF COUNCIL—Council Chamber, New Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—The retiring President, Dr. CHADWICK, will resign his office.—The new President, Dr. CHARLTON, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Any motions of which notice may have been given.

WEDNESDAY, August 10th.

8.30 A.M.—SHERIFF OF NEWCASTLE'S BREAKFAST to the Association in the New Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Council Chamber.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Literary and Philosophical Society.—Appointment of Place of Meeting for 1871 and President-elect.

12 NOON.—Address in Medicine by Dr. SIBSON, F.R.S.

2 P.M.—MEETINGS OF SECTIONS.—Adjourn at 5.

9 P.M.—PRESIDENT'S SOIRÉE—New Town Hall.

THURSDAY, August 11th.

10 A.M.—THIRD GENERAL MEETING—Lecture Room of Literary and Philosophical Society.—Reception of Reports of Committees.

11 A.M.—Address in Surgery by Dr. HEATH.

12 NOON.—SECTIONAL MEETINGS.

6 P.M.—PUBLIC DINNER of the Association—New Town Hall.

FRIDAY, August 12th.

9 A.M.—SECTIONAL MEETINGS.—Adjourn at 12.

12 NOON.—CONCLUDING GENERAL MEETING.

2 P.M.—SPECIAL CONVOCATION OF THE UNIVERSITY OF DURHAM for granting Honorary Degrees.

4 P.M.—SPECIAL SERVICE in Durham Cathedral.

Reception Room.—A room will be opened in the New Town Hall as a reception room on Tuesday, August 9th, at 10 A.M., and on the fol-

lowing days at 8 A.M., for the issue of tickets to members; for the supplying lists and prices of lodgings, and other information.

Members and others requiring information with regard to the meeting are requested to make application in this room.

Gentlemen are requested to proceed to this room immediately on their arrival, to enter their names and addresses, and to obtain the tickets necessary for admission to all the proceedings.

Letters, parcels, etc., may be left in this room in the care of the clerks. Arrangements will be made for the receipt and postage of letters in this room.

Gentlemen intending to visit Newcastle during the Meeting, are requested to send their names, without delay, to Dr. Arnison, 45, Northumberland Street, Newcastle upon Tyne.

The *Local Secretaries* are: G. H. Philipson, M.A., M.D., 1, Saville Row; W. C. Arnison, M.D., 45, Northumberland Street; Luke Armstrong, Esq., Clayton Street West; T. C. Nesham, M.D., 43, Northumberland Street; R. J. Banning, M.D., 136, High Street, Gateshead.

Hotels.—The principal hotels are: the Station Hotel; the Queen's Head, Pilgrim Street; the Turk's Head, Grey Street; the Turf Hotel, Collingwood Street; the Central Exchange, Grey Street; the Royal Exchange, Grey Street; the Neville Hotel, Neville Street; the Adelphi (Temperance), Clayton Street; the Norfolk Hotel (Temperance), Grey Street. Any information respecting hotels or lodgings will be willingly furnished by Dr. Nesham, 43, Northumberland Street, Newcastle-upon-Tyne.

Post-office and Telegraph-office.—Royal Arcade, Pilgrim Street.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary at their *earliest* convenience. All papers must be in the hands of the General Secretary, or one of the Secretaries of the Section to which the paper belongs, on or before Monday, August 1st.

Authors are requested to prepare beforehand short abstracts of their papers for publication. The papers (and abstracts) read in the different Sections are to be handed to the Secretaries of the Sections for publication in the JOURNAL of the Association.

No paper shall occupy more than *twenty* minutes in delivery. All subsequent speakers not to exceed *ten* minutes.

Annual Museum and Annual Library.—It is intended to exhibit objects of interest belonging to the following classes. 1. New Instruments and Appliances in Medicine, Surgery and Midwifery. 2. New Drugs and Preparations. 3. New Books, English and Foreign. 4. Pathological, Physiological, Anatomical, and Microscopical Specimens. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions, relating to Public Health, etc. 7. New Preparations of Food, etc. Rooms will be provided at the Newcastle Infirmary, for the Museum, which will be opened on Tuesday morning, August 9th, and closed on Friday evening, August 12th. All the objects intended for exhibition must be addressed, "Care of Dr. Page, Infirmary, Newcastle-upon-Tyne," be delivered on or before Monday, August 1st, and be removed on or before Monday, August 15th. Every object must be accompanied by a written or printed description, together with a short reference, for insertion in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects will be provided, but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the exhibitors. Intending exhibitors are requested to apply to Dr. Banning, Gateshead-upon-Tyne, for any information that they may require, and to inform him, as early as convenient, what they intend to exhibit, and how much space they are likely to require. Exhibitors who may prefer personally delivering their Specimens, are earnestly requested to forward a short description, on or before Monday, August 1st, in order that the Catalogue may be complete.

Notice.—Any gentleman who is conversant with the subject of Medical Poor Relief, and the Irish Dispensary System as applicable to large towns, is requested to favour the Public Medicine Section with any remarks thereon, in connection with the organisation of a Medico-Sanitary Staff. The question may be discussed on Friday, August 12th, at 9 A.M.

Excursion to Sunderland.—The medical profession of Sunderland are prepared to receive a party of the members, at luncheon, at the Queen's Hotel, Fawcett Street, Sunderland, on Thursday, August 11. The party will go down Monkwearmouth Coal Pit, or visit Messrs. Hartley and Co.'s Glass Works, Sunderland Docks, and Sunderland Infirmary. Names will be received at the reception room.

Excursion to Warkworth and Alnwick Castles.—By the kind permission of His Grace the Duke of Northumberland, any number of the members will be allowed to visit Warkworth Castle and Hermitage, Aln-

wick Castle, Museum, Gardens, and Park. Names will be received at the reception room.

Notices of Motion.—The following notices have been given.

The Rev. Dr. BELL: That a Committee be appointed for the purpose of inquiring into the present constitution and operation of the Committee of Council; and whether it might not be better to have only one well constituted Council, consisting of a limited number—say fifty—to be elected by the general body of members through the medium of voting-papers: and that the Committee report to an ordinary general meeting, or to a special general meeting convened according to law.

Dr. STYRAP: That, considering the nature of the duties of the office of General Secretary, the great assistance rendered by the Honorary Local Secretaries, and the financial position of the Association, the increase of his original salary of £100 to £250 in 1866; £313 in 1867; £370 in 1868; and £364.9 in 1869, has been excessive.

That, in the opinion of this meeting, a stipend of £250 (inclusive) would be ample.

Dr. ELLIOT: That a volume of *Transactions* be annually published by this Association, to contain such essays or communications as are either too lengthy for admission into the JOURNAL, or may be deemed worthy of a more permanent record than a hebdomadal serial can secure.

The Rev. Dr. BELL will ask why a report was not made on his Oxford Committee to the General Meeting last year by the Committee of Council, and if it will be made this year.

The Rev. Dr. BELL will ask that the Secretary or Editor be allowed to produce and read a letter "On some Points of the Management of the Association," sent by Dr. Bell to be published in the JOURNAL, but which the Editor declined to publish.

Dr. A. LEARED will move that it is expedient that all leading articles published in the JOURNAL of the Association should have the signature of the respective authors.

Papers.—The following papers have been promised.

D. Embleton, M.D. On the Shoulder-tip Pain in Liver-Diseases.

J. Henry Bennet, M.D. On the Climate of Algeria. On the Influence of Inflammation in the production of Uterine Displacement.

E. J. Tilt, M.D. On Uterine Pathology at the Change of Life and after the Menopause.

J. Althaus, M.D. On the Treatment of Rheumatic Gout by Galvanisation of the Cervical Sympathetic.

W. Adams, F.R.C.S. On the Subcutaneous Division of the Neck of the Thigh-bone, as compared with other operations for rectifying extreme distortions at the hip-joint with bony ankylosis. Illustrated by a successful case of the subcutaneous division.

A. E. Sansom, M.D. The Sulpho-carbolates; and the Antiseptic Method in Medicine.

G. Y. Heath, M.D. On the Rapid Pressure Treatment of Aneurism.

W. H. C. Tessier, M.D. Remarks upon an Epidemic of Intermit- tent Fever in the Mauritius, during 1866-7-8.

J. C. Murray, M.D. On Snuff-taking; its utility in preventing Bronchitis and Consumption.

G. H. Philipson, M.A., M.D. On the Health and Meteorology of Newcastle and Gateshead during 1868 and 1869. Notes of a Case of Biliary Fistula.

J. Hutchinson, F.R.C.S. On Xanthelasma Palpebrarum as a Symptom of Diathesis. On Syphilitic Rupia.

W. Spencer Watson, F.R.C.S. On the use of the Seton in the treatment of Vascular Ulcers of the Cornea; with illustrative cases and drawings. Cases of Traumatic Ophthalmitis.

Anthony Bell, M.R.C.S. Notes of a case of Epilepsy of Sixteen Years' Duration, from Parietal Depression of Cranium: Trephining: Recovery.

W. F. Teevan, F.R.C.S. On Spermatorrhœa. Twenty cases of Stone in the Bladder.

J. W. Eastwood, M.D. On Intemperance in its Medical and Social Aspects.

Robt. Elliot, M.D. Lobelia Inflata; its Action as a Poison: evidence and autopsies at eighteen inquests.

R. H. Meade, F.R.C.S. On a case of Ovariectomy, in which the tumour was removed by enucleation, without the necessity of the application of either clamp or ligature to the pedicle.

B. Foster, M.D. The Murmur of Mitral Stenosis.

D. De B. Hovell, F.R.C.S. On the Treatment of Paralysis.

John Couper, F.R.C.S. The Diagnosis of Astigmatism by the Ophthalmoscope.

W. Fairlie Clarke, M.A., F.R.C.S. On some rare forms of Opacity of the Cornea.

J. H. Aveling, M.D. On the Advantages to be Derived from Curving the Handles of Midwifery Forceps.

J. M. Fothergill, M.D. On the Preservative Agency of Lowered Vitality.

F. Waterhouse, M.R.C.S. On a New Form of Elevator for Depressed Cranium in Childhood.

Thomas Skinner, M.D. On a new Pessary for Prolapsus Uteri, Rectocele, and Vesicocele.

George Oliver, M.B. The Therapeutics of the Sea-side.

Walter Whitehead, F.R.C.S. Ed. On Mucus Disease.

M. W. Taylor, M.D. On the Transmission of the Virus of Fevers by Fluids.

T. Clifford Allbutt, M.A., M.D. On Functional Hemiplegia in Child-bearing Women.

Wm. Roberts, M.D. The case of a man who had a Vesicular Eruption on the Abdomen, which discharged at times great quantities of a Chylous Fluid.

Henry Lee, F.R.C.S. On Transplantation of Skin in the Centre of an Old Ulcer: with Observations and Drawings.

Graily Hewitt, M.D. 1. On a New Instrument for Securing the Pedicle in Ovariectomy. 2. On Strangulation of the Uterus.

B. W. Richardson, M.D., F.R.S. On Anæsthetics.

Thomas Laycock, M.D. 1. On the Practical and Scientific Investigation of the Relations of Body and Mind. 2. An Inquiry into the Relations of the Thyroid Body to Cerebral Nutrition and Development: with Illustrations of Cretinism. 3. Case of Epileptic Chorea of Right Arm.

R. H. B. Wickham, L.R.C.P. Ed. Case of Rhythmical Chorea of Right Arm and Palsy of Leg.

Arthur Ransome, M.D. On the Registration of Disease and Meteorology in Manchester and Salford during the Ten Years 1861-1870.

D. Campbell Black, M.D. On Certain Circumstances which Contribute to Impede the Progress of Scientific Medicine and Surgery.

T. S. Clouston, M.D. The Use of the Thermometer in the Diagnosis and Treatment of Insanity.

H. Grainger Stewart, M.D. On Syphilitic Insanity.

Furneaux Jordan, F.R.C.S. On the Treatment of Enlarged Cervical Glands.

J. Hughes Bennett, M.D. On the Antagonism between Chloral and Strychnine: with Experiments.

J. A. Bolton, M.D. The Naked Man and his Photograph, *in re* the Turkish Bath.

The Rev. D. Bell, M.D. Remarks on the Beneficial Effects of Combining Tonics with Aperients in Chronic Constipation.

D. C. McVail, L.R.C.P. Ed. Some Principles in Respiratory Mechanics.

Hugh Miller, M.D. The Diet of Parturient Women.

John Russell, Esq. Case of Femoral Aneurism treated by Rapid Pressure.

Leonard Armstrong, M.R.C.S. A Chapter of Difficulties in applying Sanitary Laws.

C. J. Gibb, M.D. On a Successful Case of Ligature of the Superficial Femoral Artery in Popliteal Aneurism on Lister's plan.

Protheroe Smith, M.D. 1. On Recent Improvements in the Pelvic Band. 2. Diagnosis and Treatment of Tumours and Effusions by the Exhausting Needle and Trocar.

H. A. Reeves, M.R.C.S. 1. On the Treatment of Urethral Stricture by the Laminaria Dilator. 2. The Value of Electricity in Nervous Deafness and some cases of Tinnitus.

Robert Barnes, M.D. 1. On Retrouterine Hæmatocele, with an illustration. 2. A New Operation of Embryotomy by the Wire-écraseur.

James Boyd, L.R.C.P. Ed. 1. A Case of Puerperal Convulsions successfully treated by Chloroform, etc. 2. A Case of Empyema treated by Tapping and the Drainage-tube.

C. B. Taylor, M.D. On the Forcible Introspection of Women by Governments.

Charles Gibson, M.D. 1. Uterine Leucorrhœa. 2. Polypus Uteri.

C. R. Drysdale, M.D. Syphilis in Physicians' Practice.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary.*

13, Newhall Street, Birmingham, August 4th, 1870.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

THE thirty-fourth annual meeting of this Branch was held in the Town Hall, Preston, on Wednesday, June 29th. There was a very numerous attendance.

Dr. HALL of Lancaster, the retiring President, commenced the proceedings by introducing to the meeting the President-elect. He then

resigned the chair, which was taken by Dr. SPENCER of Preston, who delivered an able and interesting address, bearing largely on the sanitary condition and prospects of the town.

Report of Council.—Dr. HENRY SIMPSON read the following report.

"In presenting their annual report, your Council beg to express their satisfaction that, after an interval of thirteen years, the annual meeting of the Branch is again held in the town of Preston.

"Since your visit to Lancaster last year, the principal event affecting the profession at large has been the introduction of the Medical Acts Amendment Bill as a Government measure into the House of Lords. Your Council held a very numerous attended meeting on the 13th of May last, to consider this Bill, at which the following resolutions were passed unanimously.

"1. 'That the General Medical Council shall, after the passing of this Act, always contain four representatives elected by the registered members of the medical profession residing in England and Wales, two representatives elected by the registered members of the profession residing in Scotland, and two representatives elected by the registered members of the profession residing in Ireland.

"2. 'That this meeting approves of the appointment of a single General Examining Board, composed of examiners chosen from England, Scotland, and Ireland. That this meeting further suggests that this Board have power to appoint from among its members Sectional Boards to conduct the examinations in the three kingdoms.

"3. 'That this meeting is of opinion that the powers given to the Privy Council by the amended Medical Act are excessive, and ought to be limited to the placing a veto on the proceedings of the General Medical Council.

"4. 'That the first resolution be embodied in a memorial to be forwarded to the Lord-President of Council and to the Houses of Parliament, signed by the President and Honorary Secretary of the Branch; and that the two other resolutions be forwarded to the President of the Association, to be laid before the general meeting on Wednesday next.'

"In accordance with the last resolution, your President memorialised the Lord-President of Council, and petitions have been presented to both Houses of Parliament. At the general meeting of the Association held in London on the 18th of May, resolutions were passed quite in accord with those of your Council just read; and a deputation waited on the Lord-President of Council the following day, when the points named were pressed on his lordship's attention.

"The Association is pledged to the principle of the first resolution, which is of primary importance to the well-being of the profession. In reference to the second resolution, your Council are strongly of opinion that one Examining Board for the three kingdoms is necessary to secure uniformity in the standard of admission to the medical profession. And your Council believe that the resolution in favour of confining the powers of the Privy Council to a veto is in accordance with the relation that ought, in justice both to the profession and the public, to subsist between the General Medical Council and the Executive.

"As regards the Branch, changes have taken place since your last annual meeting, from death, removal, and resignation; but your Council are glad to be able to state that, from fresh accessions of strength, it now numbers nearly three hundred members. But your Council wish to draw special attention to the remark that it is most desirable that those gentlemen in the two counties who have joined the Association should also join the Lancashire and Cheshire Branch. It is needless to dwell on the advantages resulting from such an union. The suggestive hints and ideas necessarily passing from one to another, when a number of gentlemen engaged in similar pursuits meet together, bear their fruit, matured by quiet thought, after the excitement of the gathering has passed away, in the mission of healing which is the work of your daily life. But, beyond all this, your meetings afford opportunities for the formation of new friendships, the renewal of old ones, and the cultivation of social amenities between those whose present interests may often seem to clash, which are the best guarantee that can be had for the maintenance of ethical propriety and mutual esteem and good-will.

"In accordance with the usual rule, the five gentlemen whose names are inarked in the circular with an asterisk now retire from the Council, but are eligible for re-election.

"The financial statement is in the hands of the meeting.

"Your Council have pleasure in stating that they have received an invitation to hold the next annual meeting in Liverpool, and that a resolution to that effect will be proposed to the meeting.

"Your Council regret to learn that they are about to lose the services of Dr. Simpson as Honorary Secretary, as he finds it necessary, in consequence of increasing engagements, to retire from the office. A resolution to that effect will be submitted to you. Your Council also regret that they are about to lose the services of Mr. Manifold as Honorary Local Secretary for Liverpool."

Mr. BROADHURST (Lancaster) then moved, "That the report of the Council be adopted." This was seconded by Mr. ALLEN (Preston), and carried unanimously.

Vote of Thanks.—Mr. GARSTANG (Clitheroe) moved, "That a vote of thanks be given to the late President, Vice-Presidents, Honorary Secretaries, and other members of the Council." This was seconded by Dr. GARSTANG (Blackburn), and carried unanimously.

Next Meeting: Officers.—It was proposed by Dr. A. T. H. WATERS (Liverpool), seconded by Dr. GILBERTSON (Preston), and carried unanimously, "That the next meeting be held in Liverpool; and that Dr. Desmond be appointed President-elect, and Mr. W. H. Manifold and Dr. Henry Simpson, Vice-Presidents-elect."

Secretaries.—Dr. H. SIMPSON proposed the reappointment of Dr. Brown (Preston) and Mr. Johnson (Lancaster) as Honorary Local Secretaries. It was thought necessary that there should be a Local Secretary for Manchester; and, as he came unprepared with a name, and saw no one present whom he could ask to take the office, he would, for want of better, offer his own services. If they would accept his apology for thus proposing himself, he would move that Dr. Brown and Mr. Johnson be reappointed. This was seconded by Mr. MATHER, and carried.

Dr. A. T. H. WATERS proposed, "That the best thanks of this meeting be given to Dr. Henry Simpson for his past services; and that Mr. Reginald Harrison of Liverpool be appointed Honorary Secretary of the Branch." This was seconded by Mr. A. B. STEELE, and carried.

Council.—Five gentlemen, whose names are distinguished by asterisks in the following list, were then elected by ballot to fill up the vacancies in the Council of the Branch, which is now composed of the following twenty members:—E. Bowen, M.D.; *J. Cameron, M.D.; S. Crompton, M.D.; G. Daglish, Esq.; E. D. De Vitre, M.D.; *T. Davies-Colley, M.D.; L. E. Desmond, M.D.; *John Harrison, Esq.; R. Harrison, Esq.; T. Howitt, Esq.; C. Johnson, Esq.; *J. P. Langshaw, Esq.; *W. McEwen, M.D.; G. Mallett, Esq.; W. McCheane, Esq.; J. McNaught, M.D.; J. E. Morgan, M.D.; D. W. Parsons, Esq.; A. Ransome, M.D.; J. Thorburn, M.D.

Representatives in the General Council.—Dr. BEALES (Macclesfield) moved, and Mr. WATSON (Lancaster) seconded, the following resolution, which was carried: "That the following gentlemen be elected representatives of the Branch in the General Council: T. Davies-Colley, M.D.; L. E. Desmond, M.D.; W. Hall, L.R.C.P.Ed.; W. Howitt, Esq.; T. Mellor, Esq.; D. W. Parsons, L.R.C.P.; W. Roberts, M.D.; H. Simpson, M.D.; L. Spencer, M.D.; G. Southam, Esq.; A. B. Steele, Esq.; J. Vose, M.D.; E. Waters, M.D.; A. T. H. Waters, M.D.; M. A. E. Wilkinson, M.D.; R. Harrison, Esq., Honorary Secretary, *ex officio*."

Several gentlemen were then elected members of the Association and of the Branch.

The Medical Bill.—Mr. SOUTHAM (Manchester) proposed, and Mr. A. B. STEELE (Liverpool) seconded, the following resolution, which was passed unanimously: "That this meeting regrets to find that the Government still refuses to admit, in the amended Bill now before Parliament, any provision for the representation of the profession on the Medical Council; and begs to reiterate its determination to oppose any measure which does not fully provide for the direct representation of the profession on the Council."

Papers.—The following papers were read:—Mr. A. B. Steele: A Case of Vesico-vaginal Fistula.—Dr. A. T. H. Waters: Notes on the Use of Hydrate of Chloral in Diseases of the Chest.—Dr. Ransome: A Case of Pelvic Abscess, illustrating the Course and Effects of Reflex Nerve Irritation.—Mr. R. Harrison: Remarks on Stricture of the Urethra, illustrated by some interesting specimens.—Dr. M. Hill exhibited an ingenious contrivance for protecting the Vagina in the use of Valvular Specula.—Mr. A. B. Steele made some interesting remarks on efficient modes of Vaccination, and on different modes of preserving Vaccine Lymph.—Several of the papers were followed by animated discussion.

Votes of Thanks were passed to the contributors of papers and communications; to the Mayor and Corporation, for the use of the Town Hall; and to the President.

The proceedings were brought to a close about four o'clock, when the members proceeded in omnibuses to visit the new Infirmary and the Fulwood Workhouse, accompanied by C. R. Jacson, Esq., the Chairman of the Board of Management and Board of Guardians.

The Dinner was held at five o'clock, in the officers' messroom, Starkie Street. There was a very large attendance, the gentlemen present at the meeting almost without exception remaining to the subsequent entertainment. The chair was occupied by Dr. Spencer, who was supported on the right by the Rev. Canon Parr, C. R. Jacson, Esq.,

and Mr. Garstang (Clitheroe); on the left, by Dr. Hall (Lancaster), Dr. Desmond (Liverpool), and Dr. A. T. H. Waters (Liverpool). After the usual loyal and patriotic toasts, the Rev. Canon Parr proposed "The British Medical Association"; Dr. Hall of Lancaster responded. Dr. Arlidge (Newcastle-under-Lyme) proposed "Prosperity to the Lancashire and Cheshire Branch", which was enthusiastically received. The toast was acknowledged by Dr. Gilbertson (Preston). Other toasts followed; and the company broke up at nine o'clock, after one of the most successful and interesting meetings ever held by this Branch.

SOUTH WESTERN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at Torquay on Wednesday, July 20th. About thirty-two members were present. Before the meeting, the members partook of lunch at the residence of the President-elect.

In the absence of the retiring President (Dr. BARHAM), Mr. DE LA GARDE was called to the Chair; and, after a few remarks, resigned it to the new President, WILLIAM POLLARD, Esq.

President's Address.—After thanking the members of the Branch for the honour done him in electing him President, Mr. Pollard made some observations on the utilisation and ultimate distribution of sewage. The questions raised with regard to this were, he said—Can sewage-water be so purified as to permit its discharge into a sea or into a river without polluting it? Can the manure which the sewage-water of a town contains be extracted and reduced to a dry marketable form for agricultural purposes? The earth-closet system he regarded as right in theory, but quite impracticable. As to sewage irrigation, he quoted the opinion of Dr. Letheby, that at the time of heavy rain, or where the soil is not sufficiently pervious, the sewage does not go into the soil, but over it, and practically runs into the next water-course; also, that animals fed on land manured by sewage irrigation, are liable to parasitic disease, which they communicate to man. He then referred to the "A.B.C. process" for the formation of native guano, and described the *modus operandi* of it as carried on at Leamington and Hastings. This, he believed, was a step in the right direction.

Votes of Thanks.—Dr. RADCLYFFE HALL said that those who, like himself, had the pleasure of knowing Dr. Barham, need not be told that his classical and other attainments as a private gentleman were only equalled by his great worth as a member of the medical profession, and that he was altogether a physician of whom they might feel proud. [*Hear, hear.*] He had much pleasure in proposing that the best thanks of the meeting be given to the retiring President for his services during the past year.

Mr. W. P. SWAIN seconded the motion. Dr. Barham had worked much to the advantage of the Association during the year he had occupied the Presidential Chair of this Branch: he believed he had been the means of very largely increasing, by his persuasive powers, the number of members who belonged to it. He (Mr. Swain) had also looked to him for very great assistance in the coming year, which would be a very trying year, when the general body of the British Medical Association intended visiting the west of England; and he seriously hoped that all the members of the Western Branch would vie with Dr. Barham in entertaining the entire Association in the ensuing year.

The motion was carried.

Mr. S. EDYE read a letter from Dr. Barham, containing a variety of suggestions, one of which was the desirability of laying before the members of the Association particulars respecting the climate of Devon.

Mr. DE LA GARDE proposed "That the best thanks of the meeting be given to the President for his address." There was no question whatever before the public upon which they might more properly require the opinion of medical men than that relating to the sanitary condition of our towns; he meant more particularly the removal and appropriation of sewage. The subject was one not only of great difficulty, but of considerable complexity. He had great confidence in the infirmity of human nature; but he had still greater confidence in the power and vigour of growing science. When they were told that chemistry in the present day had failed to supply a remedy, that it had not and could not succeed, he could not but look back a few years and notice what had been achieved. If there had been a falling off, it was to be attributed to that which was worse than ignorance—it was idleness—an indisposition to try. It was idleness that stood in the way and prevented men putting a shoulder to the wheel to move on with the advance of the times. From our present knowledge of chemistry, it was certainly not too much to expect that methods would before long be devised for dealing with the sewage of towns, which would result in benefits not merely in a sanitary point of view, but also in an economic point of view. He thought that the Chairman had shown his good sense and

good feeling in placing before the meeting a subject of so much importance.

Dr. NANKIVELL seconded the motion. From his own observation and experience of the various systems of utilisation of sewage now before the public, he had come to the conclusion that one method may be suitable for one particular place, and be impracticable of application in another.

The resolution was unanimously adopted.

Subscription to the Branch.—The HONORARY SECRETARY read a letter from the General Secretary, stating that each Branch should defray its own expenses. The expense of this Branch, he said, was about £5 a year, which would be met by each member paying a shilling in addition to his annual subscription; and if there were any surplus, it could be applied to the Benevolent Fund.

Dr. HALL moved, and Dr. EVANSON seconded, that each member pay a subscription of 22s. instead of 21s.

Dr. SPENCER THOMSON moved an amendment, which was seconded by Mr. T. OWEN, that the addition be 2s. 6d.

The amendment was lost, and the original motion carried.

The Medical Acts Amendment Bill.—Another letter was read from the General Secretary, desiring that the Branch should petition regarding the Medical Act Amendment Bill.

Mr. SWAIN strongly supported this, recommending that each district should send up a petition; the number of signatures in a case of this kind was not of so much importance as the number of petitions.

At the request of Dr. EVANSON, the Honorary Secretary read the petition, which, at the close of the meeting, was signed generally by the members.

Next Annual Meeting: President-elect.—On the motion of Mr. KERSWILL, seconded by Mr. JAMES POLLARD, it was resolved that the next annual meeting of the South Western Branch of the British Medical Association be held in Exeter.

Mr. SWAIN said he knew no gentleman who was more worthy than Mr. De la Garde to fill the office of President for the year 1871, and he had great pleasure in making the nomination.

Dr. RADCLYFFE HALL seconded the motion, which was carried.

Meteorological Records.—Dr. INGLEBY MACKENZIE called the attention of the meeting to the important meteorological records being again regularly published in the JOURNAL of the Association. He stated that in 1866 members were invited to contribute meteorological reports from their various districts, and he was one of twenty who endeavoured to add his mite; subsequently, however, such communications were rejected without the slightest reason. He believed that there was now a desire that those returns should be continued, and he should be glad to hear an expression of opinion from this meeting in favour of it.

On the motion of Mr. PRIDHAM, seconded by Mr. DE LA GARDE, it was resolved to bring the subject before the General Council.

Representatives in the General Council.—The following were elected: C. Bulteel, Esq.; W. Kerswill, Esq.; T. Littleton, M.B.; J. H. S. May, Esq.; W. J. Square, Esq.

Communications.—Mr. W. P. SWAIN exhibited and explained various Surgical Instruments. Amongst others, he showed Mr. Thomas Smith's Gag and Instruments for Cleft Palate; Mr. Henry Smith's case, containing Clamp and Cautery for the removal of Hæmorrhoids, manufactured by Matthews; and a new Sound and Lithotrite used by Sir W. Fergusson, and also manufactured by Matthews. Mr. Swain also exhibited a very large Calculus removed from the bladder of a man after death; and also a most unique specimen, consisting of a scapula and humerus, showing the effects of Excision of the Head of the Humerus seven years after the operation, which was performed by the late Dr. Beith at the Royal Naval Hospital, Stonehouse. Mr. Swain then demonstrated, with the aid of a large water-colour drawing, Mr. Pollock's method of Transplanting Skin.

Mr. MOORE of Devonport made some remarks upon the Contagious Diseases Act, in reference to a pamphlet by Mr. Bulteel. He stated that in consequence of visitors entering the Royal Albert Hospital, and acquiring all kinds of information, it was proposed to banish all strangers from the Hospital. This he deemed unfortunate, for he held that it would be for the benefit of the public they should see and hear the good that had been done.—Dr. BLAKE inquired whether it could be stated at what rate per cent. disease had diminished since the operation of the Act.—Mr. SWAIN said that, after an experience of several years, he found that syphilis in the naval hospitals had diminished from twenty-five to eighteen per cent. He regretted the conduct of those members of the medical profession who were induced to back up, by their professional opinion, those ladies and gentlemen who, from a mistaken conception of the Act, were trying all they could to render it nugatory.—Dr. BLAKE, from his former experience as a naval surgeon, fully believed that such an Act of Parliament was essentially necessary.

Dr. STRANGWAY HOUNSELL reported a singular case of Neurosis, which he illustrated by photographs.

Dinner.—In the evening, a large party sat down to dinner at the Torbay Hotel, under the Presidency of Mr. W. Pollard, who was supported by Mr. E. Vivian, Mr. Pengelly, F.R.S., and Dr. Evanson.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, August 2nd.

MEDICAL OFFICERS SUPERANNUATION BILL.—The Commons' amendments to the Lords' amendments on this Bill were considered and agreed to.

HOUSE OF COMMONS.—Friday, July 29th.

THE CONTAGIOUS DISEASES ACT.—In committee of supply, on the vote of £73,150 for medicine and medical stores in the naval service, Mr. R. Gurney moved the reduction of the vote by £3,700, which was the amount on the paper for carrying out the Contagious Diseases Act. Whatever might be his opinion as to the propriety of those acts, so long as they were in force he thought they should be carried out. But there was an increase in the amount taken for this purpose. Now it was arranged that there should be an inquiry into the efficiency of these Acts; and he (Mr. R. Gurney) felt that from the moment it was admitted that such an inquiry was necessary, the Government ought to have held their hands, and should not have done anything to extend the operation of these Acts. This had not been the policy pursued, for with respect to Southampton he was able to say that, since inquiry was decided on, the Acts had been brought into operation, and a piece of ground had been purchased in order to build a hospital. This should not have been done when once it was admitted that inquiry was necessary.—Mr. Childers said every arrangement for the extension of the Acts to Southampton was made before the late debate, for the Government felt they had no alternative but to carry out the provisions of the Acts for which arrangements had been made. No money had been taken in the estimates for building this hospital.—Mr. Henley said he understood that no steps would be taken to extend the operation of these Acts to places where they were not now in force. The Government had promised a commission, and it was of the first importance that the public should believe in the honesty of the inquiry. But they could not believe this if, while the commission was inquiring and making its report, the Government showed a foregone conclusion by carrying out the operation of the Acts.—Mr. Childers said the Act of 1869 imposed on them the duty of extending the Acts to certain places. All steps necessary for the purpose had been taken before the recent debate, and the Acts had been in operation in Southampton before the recent debate, and also in two or three other places. He proposed to leave matters exactly as they were.—The motion for reduction was withdrawn, and the full vote was agreed to.

Monday, August 1st.

DISPENSARY SYSTEM.—Sir M. H. Beach asked the President of the Poor-law Board whether he would issue any general instructions or regulations to dispensary committees or boards of guardians on the following points, with a view to secure a uniform and efficient dispensary system throughout the metropolis. 1. As to the classes entitled to gratuitous medical relief. 2. As to the area and pauper population to be attached to each dispensary. 3. As to the requisite accommodation and furniture at each dispensary, and the number, duties, and remuneration of the medical and other officers. And whether care would be taken to secure a registration of the various diseases and the treatment adopted.—Mr. Goschen said that no regulations would be issued as to the classes entitled to gratuitous medical relief. They would be the same classes who were now entitled to out-door relief. Nor would any general regulations be issued as to the area and pauper population to be attached to each dispensary, because these would be fixed separately, and had in fact been already fixed according to the circumstances of each particular union. With regard to the third question, the Poor-law Board insisted upon proper waiting and consulting rooms, and these had been generally agreed to by the guardians. Care would be taken to secure a registration of the various diseases and the treatment adopted.

MEDICAL NEWS.

MEDICINE IN INDIA.

A SPECIAL MEETING of the Hunterian Medical Society was held on Wednesday evening in the Theatre of the London Institution, to hear an address from Baboo Gopaul Chunder Roy on the state of medicine in India prior to the British rule. Several visitors were also present, among whom were the Reverend R. Moffat, many years missionary in Africa, and Baboo Keshub Chunder Sen, the Hindoo reformer.

The President of the Society, Mr. Jonathan Hutchinson, took the chair a little after eight o'clock, and, in a few preliminary remarks on the interest and importance of the subject, introduced the lecturer. Baboo Chunder Roy, in commencing, stated that he had come to England as a candidate for an appointment in the India medical service, but had found, on his arrival, that no examination was to take place. He then referred to the high state of civilisation which existed in eastern countries in very early ages. There was good reason for believing that astronomy had its origin in India, and in that country medicine attained, at an early period, a high degree of development. An advance, however, was arrested by the Mohammedan conquests; and therefore Hindoo science, remaining as it did at the point where it was centuries ago, presented a strange contrast with modern science. The physicians of India had sprung from two of the castes—the Brahmins, who were the most highly educated and from whom the priests were chosen, and the Boyshos or traders, who were not allowed to learn Sanskrit or to reach the higher education of the Brahmins. Medicine and surgery were distinct; the latter being entrusted to barbers, whose operative skill was very limited. Medicine was from very ancient times divided into anatomy, materia medica, and the treatment of diseases. The study of anatomy was very imperfect, in consequence of the prejudices against handling dead bodies. What knowledge of anatomy the Hindoo possessed, was gained from the dissection of goats; and an acquaintance with the human skeleton was obtained by allowing bodies to remain in water till the bones and ligaments alone were left. The umbilicus was supposed to be the centre of the vascular system. The blood was regarded as a mixture of humours. The materia medica attracted attention at an early period; and the articles were described with a view to their dietetic as well as to their therapeutic properties. Mercury, arsenic, iron, and several other mineral remedies were known in Hindoo medicine many centuries ago. Gold dust entered very extensively into the formulæ; perhaps not so much for the sake of increasing the therapeutic value of the medicines as their cost. Sesquioxide of iron was the chief basis of tonic remedies. Arsenic had been long used in the treatment of intermittent fever. There were a large number of remedies belonging to the vegetable kingdom in use in India from remote ages, some of which, as bael, chirayta, etc., had been renewed into the *British Pharmacopœia*. Baboo Chunder Roy recommended a careful investigation of Indian medicinal plants; believing it probable that among them would be found some valuable remedies for the prevalent diseases of the country. In the works on practice of medicine, the description of symptoms was very exact, but the treatment was empirical. In fevers, low diet was enjoined; the patient was kept for forty-eight hours without medicine; then bitters and purgatives were administered; and then, if the fever persisted, arsenic in divided doses. This treatment rarely failed to arrest the disease in ten days; but it left the patient's constitution in an impaired state. Surgery was in old times entrusted to barbers, whose practice was limited mostly to the treatment of ulcers, abscesses, etc. But for ages there had been persons who performed the operation for depression of cataract, cupping (by means of cow's horns), bleeding (in the calves of the legs), etc. Hygiene had long held a place in the Hindoo system, being mixed up with religious rites. Washing in the Ganges was thus made a religious ceremony. The flesh of the ox was forbidden, on account of the use of the animal in agriculture, and of the cow in yielding milk; and that of the pig on account of the filthy habits of the animal. Dry earth had been long used for removing offensive smells. Change of climate, in the form of pilgrimages to distant lands, had long been a remedy in chronic diseases. With all this, there was ignorance of some of the fundamental principles of hygiene. Poison and pure air were in the same category; and a Hindoo sick room was rigidly closed at all points. Turning, next, to the British rule, the lecturer referred to the influence of a surgeon, Mr. Broughton, in establishing the East India Company in India in the last century. The idea of founding an English medical university in Calcutta arose in 1836. At first there was great difficulty, on account of the religious prejudices, in obtaining students; and goats and dry bones were for some time the only objects

on which anatomy could be studied. The necessity for dissection was at last strongly felt; and it was a memorable event when Baboo Modosudun Gupto first broke through the prejudices of his race, and dissected a human body. From this time, medicine advanced; a hospital was founded; and degrees were given by the University. Baboo Chunder Roy complained that the degrees in Medicine of the Indian Universities were not recognised in England. They were obtained only after stringent examination; and in not one instance where the native holders of them had come to England to undergo the competitive examinations for the Indian Medical Service, had there been a failure. It had been said that the preliminary training was deficient; but it should be remembered that Sanskrit stood in India in the place of Latin, and that English itself was a foreign tongue to the Hindoos. He complained of the low estimate in which the native graduates of the Indian Colleges were held, and trusted that means would be taken to remove the stigma of inferiority which was attached to them.—Dr. COOKE moved a vote of thanks to the author of the paper.—The Rev. R. MOFFAT, in compliance with the invitation of the President, gave a brief sketch of medicine among the Bechuans. Their treatment consisted mostly of charms. Medicines were given, but, it appeared to him, mostly without any fixed rule. The slaughtering of animals was a common part of Bechuana practice—the doctors having regard for their own stomachs. They had certain preparations of powdered herbs, roots, etc., which were supposed to protect from serpent-bites, to cure headache, etc. The umbilical cord was not divided after childbirth, but was left to dry till the placenta was expelled. He (Mr. Moffat) had often been called to remove placenta, after ineffectual attempts to promote their expulsion by rubbing various remedies over the patient's neck and stomach. Fever was treated by packing the patient in hot grass.—Baboo KESHUB CHUNDER SEN referred to the position of the Indian graduates as sub-assistant-surgeons. The importance of English education to the Hindoos could not be overrated; it lay at the root of all needed reforms. But he regretted the policy which some followed, of entirely ignoring the literature and science of India. The sub-assistant-surgeons were in a state which demanded redress; they were the worst paid officials, without hope of improvement, notwithstanding their severe training of five years of medical study and the amount of labour which they had to undergo.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 26th.

Amadeo, Antonio José, M.D. Philadelphia, Porto Rico (Philadelphia)
Carter, Alfred Henry, L.S.A., Pewsey, Wilts (University College)
Chute, Henry Macready, Bristol (Bristol School)
Deshon, Frederick P., L.S.A., Coulston, Wilts (Middlesex and London)
Dixon, John, Newcastle-upon-Tyne (Newcastle-upon-Tyne School)
Ghose, Kristo Dhan, L.M. and S., Calcutta (Bristol School)
Glanville, Doyle, Gloucester Road, N.W. (University College)
Holmes, Charles, L.R.C.P. Lond., Ardwick (Manchester School)
Jackson, Henry E., Highbury (Guy's)
Jervis, Charles, St. John's Wood Park (St. Mary's)
Lambart, William H., Liverpool (Birmingham School)
Liston, James Robert, Peckham (St. Mary's)
O'Leary, Morgan Philip, Ballintarnin, co. Kerry (Dublin School)
Palmer, William James, L.S.A., Great Yarmouth (University College)
Payne, Martin H., L.R.C.P. Edin. and L.S.A. Bridgwater (University College)
Robinson, John Desborough, Syston, Leicestershire (Charing Cross)
Stickland, Samuel, New Charlton, Kent (Guy's)
Webster, Henry William, Tamworth (Manchester School)
Wood, Edwin B., Birmingham (Birmingham School)
Young, Adam, Boston (St. Bartholomew's)

The following candidates, who passed in Surgery at previous meetings of the Court of Examiners, having since obtained medical qualifications, were also admitted members of the College.

Dove, William W., L.R.C.P. Edin., Ledbury Road, W.
Eagle, Henry F. C., L.S.A., London Hospital
Evans, Samuel, L.S.A., Llandovery, South Wales
Hogg, Arthur J., L.R.C.P. Edin., Ealing
Leigh, Richmond, L.S.A., Liverpool
Nicholls, Howard H. J., L.S.A., Kennington
Parmer, Henry, L.S.A., Dorchester
Renwick, William, L.R.C.P. Edin., Tyr Phil, South Wales
Way, Edward W., L.R.C.P. Lond., Adelaide, South Australia

Admitted members on July 27th.

Allen, Matthew S., L.S.A., Dudley (Birmingham School)
Baker, Alfred, Southport (Liverpool School)
Biddle, Cornelius, Merthyr Tydvil (Charing Cross)
Bishop, John, L.R.C.P. Edin., Sheffield (Edinburgh Infirmary)
Dudley, William H., Stafford (Glasgow School)
Edmonds, Frederick H., Croydon (University College)
Groom, Charles F., Horton, Bucks (University College)
Hickman, Richard, Newbury, Berks
Holland, Neville, L.S.A., St. Ives, Hunts (St. Bartholomew's)
Ingoldby, Joseph T., Finsbury Square (Guy's)

Lediard, Henry A., M.B. Edin., Cheltenham (Edinburgh Infirmary)
Lee, Edward S., L.S.A., Savile Row (St. George's)
Millson, George, L.R.C.P. Lond., Donington, near Spalding (St. Mary's)
Norman, Alfred B., Ilkeston (St. George's)
Norman, George, Ladbroke Grove, W. (St. George's)
O'Connor, Charles, Cavan (University College)
Perkins, Charles E. S., L.S.A., Exeter (Guy's)
Swan, Richard J., Dublin (Dublin School)
Taylor, George S., Heworth, Yorkshire (Leeds School)
Tennant, Edward G., Stanford Road, W. (St. Mary's)
Tuck, Frank Sextus, L.S.A., Lee, Kent
Walker, Thomas A., Dudley (Birmingham School)

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, July 28th, 1870.

Chalmers, Robert, Glasgow
Madeley, Edward, Kensington
Smith, Edwin, Birmingham
Southey, Henry Edward, Canterbury

The following gentlemen also on the same day passed their first professional examination.

Brindley, Philip, University College
Deakin, C. W. S., University College
Edmundson, T. R., Guy's Hospital
Fosbroke, G. H., Westminster Hospital
Harris, J. D., St. Bartholomew's Hosp.
Maybury, W. A., St. Thomas's Hospital
Paterson, R. H., Guy's Hospital
Watson, J. W., University College
Wheeler, D. M. B., Guy's Hospital

As Assistants in compounding and dispensing medicines.

Griffin, Thomas, Bromley, Kent
Jones, John, Walworth Road
Williams, John Howard, St. George's Place, S. W.

MEDICAL VACANCIES.

THE following vacancies are announced:—

BELFAST UNION—Apothecary to the Barrack Street Station of the Belfast Dispensary District: applications, 8th.
BIRMINGHAM—Resident Medical Officer at the Workhouse: applications, 18th: election, 24th.
BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon: applications, 10th; duties, second week in September.
CAHERCIVEEN UNION, co. Kerry—Medical Officer for the Valencia Dispensary District: 17th.
GREAT NORTHERN HOSPITAL—Surgeon: applications, 10th.
JERSEY GENERAL DISPENSARY—Resident Visiting and Dispensing Officer: duties, October 1st.
KENSINGTON DISPENSARY—Junior Resident Medical Officer and Dispenser: applications, 13th.
LETTERKENNY UNION, co. Donegal—Medical Officer to the Workhouse.
MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: 25th.
NEWPORT UNION, Monmouthshire—Five Medical Officers for Districts of Bedwas, Risca, Marshfield, Caerleon (including Schools), and Magor: applications, 12th; election, 20th.
NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh—Assistant Medical Officer: applications, 9th.
NORTH WITCHFORD UNION—Medical Officer for District No. 4.
QUEEN'S COLLEGE, Birmingham—Medical Tutor and Demonstrator of Anatomy: applications, 27th.
RATHDOWN UNION, co. Dublin—Medical Officer for the Glencullen Branch of the Dundrum and Glencullen Dispensary District: 8th.
ST. GEORGE (Hanover Square) DISPENSARY, Mount Street—Physician-Accoucheur; Surgeon: applications, 6th; Managing Committee, 9th.
ST. THOMAS'S HOSPITAL—Two Assistant Physicians: applications, 16th; appointment, Sept. 8th.
SCARBOROUGH UNION, Yorkshire—Medical Officer for the Scalby District.
STRONSAY, Orkney—Parochial Medical Officer and Public Vaccinator: applications, 24th.
WESTMINSTER HOSPITAL—Resident House-Surgeon: applications, 6th; election, 16th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BROWNE, Edgar A., Esq., appointed Demonstrator of Anatomy at the Liverpool Royal Infirmary School of Medicine.
***ORANGE**, W., M.D., M.R.C.P., appointed Medical Superintendent of the Broadmoor Criminal Lunatic Asylum, *vice* J. Meyer, M.D., deceased.

BIRTHS.

BEADLES.—On August 1st, at Forest Hill, Kent, the wife of *Arthur Beadles, Esq., Surgeon, of a son.
DAY.—On July 13th, the wife of *W. Henry Day, L.R.C.P. Ed., Wakefield, of a daughter.
HEY.—On August 1st, the wife of *Samuel Hey, Esq., Senior Surgeon to the Leeds General Infirmary, of a son.
WAHLTUCH.—On August 1st, at Manchester, the wife of *Adolphe Wahlutuch, M.D., of a son.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, July 4th; The New York Medical Gazette, July 16th; The Parochial Critic, August 3rd; The New York Medical Record, July 21st; The Boston Medical and Surgical Journal, July 21st; The Madras Mail, May 23rd; The Gardeners' Chronicle, July 30th; The Poor-Law Chronicle, July 26th; The Shield, August 1st; The Edinburgh Evening Courant, July 29th; The Scotsman, July 28th; The Aberdeen Free Press, August 2nd; The Oxford Times, July 30th; The Glasgow Weekly Herald, July 30th; etc.

PRESIDENT'S ADDRESS,

DELIVERED AT THE

THIRTY-EIGHTH ANNUAL MEETING OF THE
BRITISH MEDICAL ASSOCIATION,*Held in NEWCASTLE, August 9th, 10th, 11th, and 12th, 1870.*

BY EDWARD CHARLTON, M.D.,

Physician to the Infirmary, Newcastle-upon-Tyne.

To the Members of the British Medical Association, now for the first time assembled in our ancient city, we, on behalf of the medical profession in the Northern Counties, offer a hearty welcome. Twenty-five years ago, we had the honour of delivering the Annual Address before the then "Provincial Medical Association" assembled at Sheffield. It was on that occasion we gave a verbal invitation to meet at Newcastle; and now after the lapse of a quarter of a century we see our hopes realised, and that to a degree far beyond what we then anticipated. The British Medical Association, which now represents the former Society, has increased marvellously in numbers and influence; and yet throughout that long course of years it has never swerved from its original design—it has steadily kept in view the amelioration of the profession, both by fostering the advancement of scientific medicine, and by improving the status of the provincial practitioner.

Great scientific gatherings are, indeed, not unknown in Newcastle. Our town has twice seen the Meeting of the British Association for the Advancement of Science; but for the medical practitioners of Newcastle and the neighbouring counties, no event of deeper interest has ever occurred than that of the meeting we now inaugurate. Before we allude to the immediate objects of the Association, we may be allowed to say a few words upon this our place of *rendezvous*, especially as so many of our members now visit Newcastle for the first time. It must be owned that this north of England metropolis, the capital at least of the coal trade, is hardly an attractive place to the stranger, unless he comes here for special objects of science or of business. Yet, within the memory of people still living, Newcastle was a pleasant residence, where many of the better county families passed the winter season. Such charms had it for the stranger, that good old John Wesley tells us he knew no town more agreeable wherein he would like to end his days. At that time, towards the end of the last century, Newcastle extended little beyond the ancient and strong walls with which it was surrounded; and in 1801 it contained, we believe, only 28,000 inhabitants. The banks of the Tyne, now resounding with the industry of thousands of workmen, were then a pleasant stroll for the worthy burgesses. In its early days, Newcastle, from its position, was necessarily one of the great strongholds of the North; it was a fortified town in the strictest sense; and for centuries after border warfare had ceased, it remained subject to all the inconveniences of such fortresses. Hence arose the narrow streets and overhanging dwelling-houses of the Tudor and Elizabethan periods, that may yet be seen in the neighbourhood of the river, and within the precincts of the ancient walls. Still, in the centre of all this crowding, there was a fine open space of five acres, the very lungs of the old town, and which remained untouched till about thirty-five years ago, when it was purchased by an enterprising speculator, who covered with huge buildings the whole of the vacant space, which is now occupied by Grey Street, Grainger Street, and the markets. About the same time, trade increased rapidly upon the Tyne, manufactories sprang up on each side of the stream, new branches of industry were developed, and the old parts of the town in the neighbourhood of the river became fearfully overcrowded. Unfortunately, while house-accommodation was thus deficient, the water-supply did not keep pace with the increase of population. That increase has, indeed, not been quite so rapid as in some other manufacturing towns; but in the ten years from 1851 to 1861, Newcastle had increased (with Gateshead) by 30,000 inhabitants, and the approaching census will possibly show a still greater augmentation. It may now be said, with almost perfect truth, that Newcastle and Shields form but one continued town, for within the last twenty years almost every rood of the banks of the Tyne from Newcastle bridge to the sea has been occupied by manufactories. The pleasant sail down to Shields, of which our ancestors wrote and our local poets sang, has been converted into a rapid passage by steam-boats through smoking factories, while the ear is stunned by the noise of the forges and the clang of the shipwrights' hammers in the iron ship-yards. Till within a very recent

period, however, the river above Newcastle was of very little use for manufacturing purposes, as no ships could pass the barrier of the old Tyne bridge; but that obstacle is now being removed, and we may anticipate that the town will soon spread in a westerly direction along the banks of the Tyne, as far as the tidal flow extends. From its position on the shore of a tidal stream, and from the steep incline on each side, affording good facilities for drainage, from its now fair supply of water and from its proximity to the sea-coast, Newcastle *ought* to be a healthy town, and to present a low rate of mortality. Unfortunately, of late years, the death rate has been comparatively high; nay, about five years ago, it rose so much that it seemed to confirm the idea long before put forth by the Cholera Commission of 1854, that the great mortality was occasioned by the neglect of sanitary regulations. It must be confessed that Newcastle suffered terribly in the cholera epidemic of 1853; but it was not the poorest and most wretched looking parts of the town that were then most severely visited. By many it was maintained that the then deficient supply of water, or the contamination of that necessary fluid by overflowings and filtrations from cesspools into badly protected wells, favoured the spread of the disease. In reality, however, cesspools are not an "institution" in Newcastle, they hardly can be said to exist; and for the last twenty years and more, water for household consumption has been supplied from large reservoirs twelve miles from the town, and free from all danger of contamination. For ourselves, after most careful examination, we have been unable to discover the connection, in this instance, between cholera and the water-supply, though we fully recognise the probability, nay, almost the certainty, of water being the great medium by which the choleraic and other poisons are introduced into the system. It must not be forgotten that the period of cholera visitation in August and September 1853 was one of extraordinary atmospheric stillness; that for ten days and nights during the height of the epidemic, there was a dark cloudy atmosphere, with hardly the slightest movement of the air, with a much higher temperature than generally prevails at that season of the year. Again, a few years ago, the death-rate of Newcastle rose to almost the highest place in the weekly lists, in consequence of a severe invasion of typhus fever, while at the same time there was a considerable increase of the zymotic diseases of children. This coincided, too, with an extraordinary state of commercial prosperity, and an immense increase of the manufactories on the Tyne, while there was no sufficient accommodation for the crowds of workmen attracted to the new centres of labour. The smaller tenemented houses became then fearfully overcrowded, and no doubt favoured greatly the development of the true old typhus fever that then prevailed. With the generally high rate of wages, the abundance and cheapness of provisions, and of firing, the disadvantage of overcrowding temporarily might be partially counteracted, were it not for the unfortunate and well known fact that high wages are apt to induce a corresponding amount of debauchery and drunkenness among our labouring population. It is not of the pitmen we here speak, but of the workmen employed in our great manufactories. The pitmen form a class apart; and though many of them make it almost a rule to get drunk on the fortnightly pay day, they are, on the whole, a quiet race, and their occupation is by no means an unhealthy one. There are few of the dwellings of the labouring classes in any part of the world that are better furnished and better kept than the pitmen's houses; their food is abundant and excellent in quality, and their underground labour time is comparatively short, and is now almost always prosecuted in well-ventilated pits. We have here few or no diseases peculiar to pitmen. Many of you might expect to find here cases of anthracosis or collier's lung in plenty; but so rare is that malady here, that we have to obtain our specimens of it from Belgium, or from Scotland. Emphysema of the lungs does occasionally occur in our mines: the pitman's asthma is well known; but it is certainly a much less frequent disorder than formerly. The pitman's life is therefore not an unhealthy one; but the same cannot be said of many of the other industries followed in this neighbourhood. We have large lead-works on the Tyne, both of white and red lead, and our hospital is rarely without several cases of lead-disease from the white lead factories. We often have this malady in its most aggravated forms, and it is observed that the women suffer much more than the men, as it is the former who are chiefly employed in handling and stacking the carbonate of lead. It has been maintained that the greater intemperance of the male workmen acts as a prophylactic against the lead-poison; but we are inclined to refer their greater immunity rather to the nature of their work.

The iron and iron-ship-building works on the Tyne may be said to have only existed for the last thirty years; and in these great establishments the health of the workmen ought, from the nature of their occupation, to be reasonably good. The unfortunate improvidence and drunken habits of many of these highly paid operatives, tends, however,

to produce much disease; disorders of the heart and kidneys are frequent, while phthisis among these men is comparatively rare. We are not advocates of total abstinence from alcohol; we recognise fermented liquors as a gift of Providence; but under the present drinking usages of this country, they have become an absolute curse to the labouring population. At every turn, the thirsty working man is confronted by a beer or spirit shop, where warmth, and light, and ornament, combine to tempt him to seek that comfort of which his own drunken habits have deprived his home. The greater temperance of the higher classes has not yet reached the working man, who too often values the quality of his drink according to the rapidity with which it intoxicates. This is a mighty and a growing evil; and sooner or later it will become one of the great questions of the day. In this, as in other matters of sanitary police, foreign countries have led the way. In Norway and in Sweden, where drunkenness formerly prevailed to a fearful extent, the sale of spirits has been limited to one or two houses in each parish, and none can be sold on Sundays. Sooner or later this great question may be most appropriately taken up by the British Medical Association, and no one can doubt upon which side the great majority of our profession will be ranged. It will be urged, perhaps, that other sources of amusement and recreation should be provided if the one great pleasure of drinking and tavern-haunting be withdrawn from the working man. We are only now awakening to the necessity of providing gardens and parks for our working population; and Newcastle is but just arising from its slumbers on this important question. We possess here a magnificent expanse of twelve hundred acres to the north of the town, a treeless unsheltered waste, which could be, and perhaps now will be, converted into one of the finest public parks in England.

We have alluded to the facilities possessed by Newcastle for drainage into the Tyne; and we confess we spoke thus with some hesitation, conscious that when in after days these words of ours may fall under the eyes of our more enlightened successors, they might wonder that such an idea could be entertained in an assembly of grave medical practitioners. We recognise daily the important part that water plays in conveying the germs of disease, and yet we speak of draining our town into a tidal river. The Tyne is, indeed, at present a greatly polluted stream at Newcastle; but we foresee the day when its waters will become pellucid as of yore—the day when the most fruitful in evil of all modern so-called improvements, the foetid water-closet, will have been replaced by the dry earth or dry ash system; when the liquid sewage, too, will be utilised, and little but pure water shall rejoin the parent stream.

Of scientific institutions, Newcastle has a fair amount. The library of the Literary and Philosophical Society contains nearly forty thousand volumes; and adjoining to it is the Museum of the Natural History Society, which communicates with the Museum of the College of Medicine. The remaining part of this scientific triangle will shortly be completed by the apartments of the Mining Institute and the Wood Memorial Hall.

Our Infirmary is an ancient building with modern additions, which themselves may now be looked upon as somewhat antiquated. Constructed originally more than a hundred years ago, a considerable addition was made to the building at the beginning of the present century. These additions were certainly not greatly to the credit of the architect, for the corridor was, as in a very recently erected hospital in the south, carried along the south side of the building, while the wards were made to look out towards the gloomy north. Again, in 1852, three large double wards, containing one hundred and fifty beds, were added at the west end. This new portion was, no doubt, a vast improvement on the older work, but it is open to the objection that it has not been constructed on the favourite pavilion system of the day, as the double wards on each flat are placed side by side, with openings in the partition wall for ventilation. A new operating theatre and reception-room, with a small pavilion ward of five or six beds, is now immediately to be commenced at the east end of the present Hospital.

Although the Hospital stands in an open space, and even in our own time was quite out in the country, it is now greatly surrounded, though at some distance, by the great extension of the town to the westward. It is objected, too, that the open area itself is occupied by the sheep and cattle markets, and that no small annoyance must be occasioned to the patients by the noise and effluvia when the sheep and cattle are crowded into this space on Tuesdays. The time is not far distant, though it may not be in the present century, when this Infirmary will be removed to some more favoured locality.

Let us now turn to the immediate business of the Association; and it must be confessed that there is work enough for us to do. We firmly believe that no more fortunate change was ever made than when the "Provincial" was altered into the "British Medical Association". It was

then that for the first time our interests became thoroughly identified with those of the profession in the great capital city of this country. We have since then worked in full harmony with our London brethren, no longer receiving them as visitors, but welcoming them as *bonâ fide* members of the Association. It seems to us that most of the great modern reforms in our profession have been subsequent to this change of name, to this amalgamation of provincial and metropolitan interests. Although the deficiencies of the profession and its lamentable condition had long before been discussed in our journals, and depicted often, in language sharp and cutting as that of Junius in the last century; still it is only within the last two decades that the whole profession, tired of calling upon Jupiter, has unanimously put shoulder to the wheel, and moved with one accord to remedy our wrongs. United by its able JOURNAL, united still more by the cordiality engendered by their annual meetings, the British Medical Association has pushed forward in the path of medical reform, year by year overthrowing obstacles that at first sight seemed insurmountable, and bearing ever in view the improvement of medical education and the general regulation of the profession. And now that final struggle for a good standard of medical education is fairly before us. Hitherto one great and paramount obstacle to progress was the multiplicity of sources whence licenses to practise medicine could be derived. No uniform standard of examination could be kept up; the well meant endeavours of the Medical Council by sending out visitors of examinations gave no guarantee for permanent improvement; and universities and corporations were ever competing for licentiates, ever exposed to the deadly temptation to lower their standard of examination to attract more graduates. Against this crying evil there was but one remedy, a single portal, by which all should enter the profession; a single but searching examination for the license to practise. Much as we longed for this great change, it seemed as yet far removed from our grasp; when, in February of this year, the gratifying announcement was made that the very object which we sought was to be a Government question, and that a Bill, brought forward by Earl De Grey as a member of the Government, embodied in its provision the great condition of a single portal whereby all must enter the medical profession. It was a novel thing, indeed, but a most acceptable fact, that a measure of such vast importance should be proposed by the Government even before it was openly moved for in Parliament by the profession. It was a happy augury of success—a sign that the Government of this country was at last becoming fully alive to the necessity of medical reform, of which the formation of the Medical Council in 1858 was the first instalment.

There was reason, however, to fear, from the sweeping nature of the Government Bill, and the magnitude of the changes which it proposed to effect, that great opposition would be made to its progress by those most interested in retaining matters in their former unsatisfactory condition. On the whole, however, the Government measure was at first warmly welcomed by the medical practitioners of this country. Soon afterwards, rumours arose that certain amendments were to be introduced by the framer of the Bill, alterations which might be fairly regarded as promoted by those bodies whose position, and, perhaps, whose very existence was more or less threatened by the provisions of the original Bill. The universities and corporations were to retain the power of granting medical degrees to others than to those who had passed through the single portal insisted upon in the original measure. It was alleged that these were to be only honorary degrees, and that they would not confer any licence to practise; nay, that the entering into practice was to be forbidden under heavy penalties to such graduates, unless they likewise passed the one necessary examination. The enforcement of penalties for illegal practice has always been a matter of extreme difficulty, even in cases where the individual had no qualification whatsoever, but the difficulty would be increased tenfold when the offender appears before the public armed with a university degree. This modification of the eighteenth clause of the original Bill we can only regard as likely to produce the most disastrous effects. The single gate with triple doors, through which all were bound by the eighteenth clause of the original Bill to pass, becomes no longer an efficacious barrier—it is only another addition to the nineteen universities and corporations empowered to grant licences and degrees. On the other hand, if sufficient guarantees could be obtained that those to whom such honorary degrees might be accorded would not, and could not, practise without having undergone the examination for the licence, it does not seem to us so very unreasonable that the universities and corporations should be enabled to grant such honorary degrees. But without such guarantee this concession will be unquestionably dangerous, and must be energetically resisted.

The direct representation of the profession in the Medical Council is the other point strongly insisted upon by this Association. The great change effected by the single licence system if adopted, seems to

us unquestionably to introduce this second measure. While the universities and corporations were the sole sources of our medical qualifications, it was perhaps not unnatural that their representatives alone, or in great part, should constitute the Medical Council; but now, when a new licensing body is to be formed, independent altogether of all pre-existing ones, the only one, too, through which professional practice can legally be commenced, it seems to follow as a matter of course that the practitioners admitted under this new provision are entitled to full and direct representation in the Council. As to the means by which this great change is to be accomplished, we shall not attempt here to describe them. We leave the accomplishing of these measures to abler and more practised hands; suffice it to say that we deprecate any increase in the already unwieldy and most costly dimensions of the Medical Council. We believe that without much difficulty certain representatives may be eliminated, some others may be amalgamated, so as to admit of four members elected by the profession from England, two from Scotland, and two from Ireland; all direct representatives of the great mass of medical practitioners. Unless this be conceded, we feel sure that the medical profession will remain dissatisfied with what is otherwise a most useful measure.

By the postponement of the Bill we have now time allowed to us to recruit our strength and consolidate our forces for the ensuing campaign. The struggle may be a sharp one, as it ever is when vested interests are attacked; but the British Medical Association will be supported by the great mass of practitioners throughout the country. It is now impossible to recede; the necessity of a single examination has been acknowledged by all parties. No fresh Medical Bill will be accepted which does not contain this provision, unfettered, too, by the so-called amendments that were proposed when the last Bill was in the House of Lords. And once that such a measure is carried, the direct representation of the profession in the Medical Council should follow as a legitimate consequence. These two cardinal points should, indeed, be embodied in one and the same Bill. Our next Parliamentary session will be one of all-absorbing interest to the medical practitioner; for when the Government has, on the petitions sent in and the influence legitimately employed, declined to proceed with the recent measure, it has for the first time acknowledged the existence of an interest and of a power external to the Medical Council. That interest, that power, it will be the province of the British Medical Association to improve and consolidate. While we fully recognise the merits of the Medical Council, we are not blind to its faulty construction, which will become still more glaring when the position of the universities and corporations, as now the sole licensing bodies, shall have been totally altered by the proposed measures. And when our task of medical reform, as far as regards medical education, is completed, shall we be at leisure to rest upon our oars, and shall we then survey complacently a perfect system? Have we no other objects connected with the profession on which to expend our energies? Are there no changes in our laws still to be effected, not merely as directly regards the medical profession, but in reference to the improvement of the public health? Some of our most time-honoured institutions are pre-eminently defective. With all our liberality of thought, and our tendency to progress, it must be confessed that in England we are in many respects wonderfully conservative. We hold pertinaciously to an institution simply because it is an ancient form of procedure peculiar to our own country. We often cannot bring ourselves to acknowledge that what was advantageous in older and in ruder times, is ill suited to our present state of society. Our national pride is great regarding the office of the Coroner, an office now almost entirely monopolised by our brethren of the legal profession. In older times, the coroner held office more directly from the Crown; he was a magistrate, and often the sole administrator, with the sheriff, of the law in his wild and extensive district. There were then no resident magistrates, paid or unpaid, and the coroner was a necessity. The powers of such a functionary were then, indeed, remarkable; and in the wild border districts here, almost unlimited. In many cases, he possessed the power of life and death; thus in a yet unpublished record of 1279, we find that William de Bellingham, coroner for Alexander the third of Scotland, in Tynedale, which was then not under English rule, commanded that a thief taken red-handed in the town of Bellingham should be decapitated on the spot. And when he who was ordered to execute the felon hesitated, he threatened him with instant death likewise, till he fulfilled his orders. Now, in other countries, the investigation of the cause of death, which is certainly a medical question in great part, is delegated to properly and specially educated medical men, who are bound to report scientifically in every instance of sudden demise. It is true that medical coroners have been occasionally appointed throughout England; but in our opinion, with a well-organised magistracy, paid or unpaid, the office of coroner might altogether be dispensed with, and be replaced by specially instructed medical inspectors in each district.

Such inspectors might also act as the head registrars of deaths; and the unseemly differences about jurisdiction between the magistrates' and coroners' courts would become a thing of the past. We need not again refer to sanitary questions, to the prevention of zymotic diseases, to the cleansing of our cities, and to the purification of our rivers. These subjects are truly within the province of one section of our Association, and it was an auspicious day when the section of public health was formed amongst us. There is not a single sanitary measure on which medical men are not called upon to give an opinion; and we trust the day will come, even in our own time, when hygiene will be made a special object of study, and when a long and severe course of training will be required from those intending to qualify as officers of public health. In medical politics, as in medical science, we must ever be students, we must ever be progressive. Fresh questions of debate and for investigation will constantly arise; and we foresee, even from our present stand-point, ample occupation for generations yet to come at the future meetings of the British Medical Association. We have before us the prevention of disease by sanitary laws; we have the subject of hospital improvement, so admirably inaugurated by Captain Douglas Galton at the Leeds meeting; we have the coming struggle regarding the repeal or the extension of the Contagious Diseases Act, where a band of so-called strong-minded women and weak-minded men are striving to reverse the verdicts of the wisest and the best among the medical profession.

There will be, then, no lack of objects for the energies of the rising generation; and when, in later years, they peruse the records of what was done at the Newcastle meeting, we trust they will return a verdict that we did our best, according to the light we were permitted to enjoy.

OBSTETRIC MEMORANDA.

HYDRATE OF CHLORAL IN PUERPERAL CONVULSIONS.

By R. DACRE FOX, Esq.,
Resident Medical Officer, Manchester New Workhouse.

MAY 20th, 1870, at 2 A.M., I was called by the midwife to see E. S., aged 15½ years, who had been in labour about eight hours, and had progressed satisfactorily till a few minutes before I was called, when, the head having begun to press well on the perinæum, the girl went off into puerperal convulsions. When I saw her, the fits were not very powerful, but frequent; she was quite sensible during the intervals. I ordered her at once some calomel, a strong mustard plaster to her neck, and a turpentine enema. At 8 A.M., the fits were almost continuous; she was unconscious and very much exhausted. I then delivered her with the forceps of a dead and partly decomposed child. The fits from then till 12 P.M. increased in severity and frequency; her pupils were dilated and scarcely acted at all; she had a feeble pulse of 100. I gave her half a drachm of hydrate of chloral immediately, and ordered the dose to be repeated in two hours if the fits continued. At 2 P.M., the nurse informed me that she had had only one fit since my last visit; her breathing was quiet; the pupils were normal and acting; reflex action had returned; she had a pulse of 108, still feeble. There being a very offensive discharge, I ordered carbolic acid injection. At 11 P.M., she was in a fitful sleep, tossing about the bed a good deal and with occasional twitching. I ordered her a second half-drachm of hydrate of chloral. She had a quiet sleep for six hours after taking the draught, but then became restless. On May 21st, she was conscious, and had no particular pain. Pulse 120. I ordered her ten grains of hydrate of chloral every four hours, in a mixture with small doses of digitalis, hyoscyamus, and bicarbonate of potash. On May 22nd, she complained of great pain in her head; had a hot, dry skin, and loaded tongue; she was quite sensible, but nervous and excited. I ordered her half-an-ounce of castor-oil at once, and saline mixture every four hours. On May 24th, the pulse was 120 (she seemed a little excited by my visit). She had slept well. There was slight pain in her head; the bowels were regular; the lochia natural; the tongue cleaning; the skin moist. She was taking milk and beef-tea. I ordered her two eggs daily. From this time she went on improving, the pulse lowering its frequency; and in June she was convalescent.

ADDRESS IN MEDICINE,

BY

FRANCIS SIBSON, M.D., F.R.C.P., F.R.S.,

Senior Physician to St. Mary's Hospital, London, etc.

MR. PRESIDENT AND GENTLEMEN,—Our age is marked by experiment and exact inquiry, directness of aim, and the skilled power to do the work required of us with completeness and economy. The labour of the past surpassed, but not superseded; and while nothing that has been done is lost; invention awakes invention, discovery discovery. Each advance is a fresh starting point for the future labourer. It is, indeed, everywhere taken for granted that good as this or that work may be, better work, more simple and more to the purpose, remains before us.

The ship, the bridge, the rail, the telegraph, and the gun, of the present day, as compared with the past, are types and marks of the skill, precision, and advancing energy of the time.

Medicine, too, partakes of this movement that is going on all around us. The knowledge of disease is becoming, at the same time, more accurate and more large. Each year gives us a better knowledge of what remedies can do, and what they cannot do. If the spirit of scepticism has shaken the belief of a few in the medicinal means at our command, that spirit has aroused inquiry, converted belief, which is shifting, into knowledge which is secure.

Those great old forms of medicine, the tincture of the muriate of iron, the sulphate of quinine, the iodide of potassium, opium, the infusion of digitalis, an occasion shot, but not a battery or running fire, of calomel, that have served our fathers, will serve us better. We know what they can do, when they are wanted and when they are not wanted; and with gathered power we apply them at the proper moment.

When science reaches forth its arms and adds to those recently discovered remedies of the day just gone by, chloroform, bromide of potassium, the newly discovered agent of this very day, chloral acid; so our knowledge of disease ripens, and our aims in its treatment become more precise and vigorous; and men, all men, ask themselves at each step they take, why they do this or that; reason takes the place of routine, and rational medicine becomes the common property of the profession.

Side by side with the use of medicine, and not second to it, is the so-called hygienic treatment of disease—the study and regulation of the vital forces. The influence that the physician exercises over the mind, and through the mind over the body; the soothing or stimulation of the nervous power; the calming of exaltation, or the stirring up of apathy; the quieting of the over-busy brain, or the spurring of the flaccid will; the repose of over-used powers, or the awaking of suspended vital functions; the subduing of the over-sensitive skin, or the stimulating of it when wan, muddy, and lifeless; the limiting of supplies to the over-fed frame, or the repair of the wasted body by the proper kinds of food and stimulants; the bringing into play, and so again into existence, muscle that had become wasted and paralysed by disease; these are among the aims that the physician seeks to accomplish; and these are among the means which he seeks to employ; irrespectively of, but by no means necessarily without the use of medicine. These are among the agencies that you hold in your power, in the treatment of disease, and that you, each of you, exercise daily in coping with the various forms of malady, of ailment, and constitution.

There is a method of treatment, that of rest and ease, belonging to this great class, that I have been employing with deep interest in the treatment of acute rheumatism and acute gout, for some years. I think it not impossible that, as this subject interests me so nearly in its practice, it may interest you in its telling. I shall, therefore, at once proceed to narrate to you my experience in this method of treatment.

REST AND EASE.

During the last four years I have submitted all my patients in St. Mary's Hospital, affected with acute rheumatism and acute gout, to a rigid system of absolute rest, protection from external injury, gentle pressure, equal warmth, and the removal of pain, chiefly by treatment from without. Those two diseases, so often apparently identical, differ essentially, as you know, in this—that, while rheumatism attacks those whose blood and tissues are previously healthy, and is produced by overwork and exposure, gout seizes upon persons whose blood and tissues are already affected, uric acid being found in excess. In acute

gout, therefore, I gave iodide of potassium, and sometimes colchicum, in the hope of getting rid of the special poison. But in acute rheumatism I gave no internal medicine during the active stages of the disease, unless it was called for by some special reason. I gave my patients no coloured or flavoured liquid to make them think that they were taking medicine when they were not doing so. I do not think it quite right; and I do not find it needful to employ such a planned system of fiction. If we do so, we complicate the observations, and we deprive ourselves of the help that the patient will give us when he understands the aim of the method of treatment.

Whatever may be the line of treatment adopted for disease, the influence of that treatment on the disease itself is less than the physician is apt to think. The great majority of diseases tend to get well. They have, so to speak, a lifetime of their own, with its periods of growth, maturity, and decline. They are the passing tenants of the body, which they occupy, often with great injury, for a limited time. Treatment cannot change their nature—cannot expel them at once—cannot quench them—cannot materially shorten or prolong their existence. But treatment can lessen the sufferings of the body occupied by disease, shield it from outer injury, repair its waste, and support and reinforce its powers; while it can ward off those causes that tend to increase or reawaken the disease, and lessen the intensity of its action, inflammatory or otherwise, especially upon the local structures. To watch, then, the treatment of a disease, is to watch, not, so to speak, the remedy and its immediate effects, but the disease itself, and its behaviour during a certain method of treatment.

The thoughtful physician, while taking note of this or that change in the malady, knows that such change is due mainly to the natural growth of the disease, and does not attribute it to the means which he has employed, unless he have good ground for doing so. Having, however, a complete knowledge of the natural changes through which the disease passes, from its beginning to its end, he is able, with something like precision, to say that this plan of treatment has prevented the undue development of the disease, and has lessened its evil effects on the body. In studying, then, the progress of these diseases, acute rheumatism and acute gout, under this method of treatment—by rest and ease—we are studying the disease itself, and the swaying influences upon it that this method may induce.

In the examination of these cases, I shall avoid all comparison of them with the groups of cases of these diseases observed by other physicians, and even with those previously treated by myself in the wards of the hospital. How can you compare one set of cases with another set? Each patient has his own character, and his disease presents its own peculiar features. Cases unduly severe or unwontedly mild are apt to come in groups, extending often over a long period; and the strict comparison of one series of cases with another becomes therefore impossible.

From the summary of the cases placed in your hands, which contains a short narrative of each patient, you will see that, during the two years and a half ending May 1868, I have treated 101 patients on this method; and that of these 74 were affected with acute rheumatism, 23 with acute gout, and 4 with one or other of those diseases, these characters being doubtful. During a considerable period, my colleague Dr. Cheadle joined me in the examination of these cases.

It would be out of place for me to give you here a rigid analysis of those cases; but, taking certain points of interest that present themselves in the series, I shall consider the affection of the joints, and the inflammation of the heart, in its interior and on its exterior, keeping steadily in view the influence of the treatment by rest and ease on the disease.

The Joints.—In a large proportion of the cases of Acute Rheumatism, the swollen and painful joints soon lost their pain, and diminished quickly in size, after the patients had been placed in bed, and the inflamed parts had been drenched with belladonna and chloroform liniment, and had been surrounded by cotton-wool, with a covering of flannel pinned over it, so as to make a comfortable amount of pressure. Over all, the cradle was placed, to prevent the pressure of the bed-clothes; the toes being raised when the ankles were affected, so as to take the pressure of the tendons off their inflamed sheaths. The joints were usually at once relieved by the application of the chloroform, the belladonna keeping up that relief; and, as a rule, the swelling of the structures and the increased amount of synovial fluid diminished steadily from day to day, as you will see in the table illustrating this point, placed in your hands. The facts speak for themselves. In one man (411, Henry T.), the knee lessened from 15½ inches on the fourth day to less than 14 inches on the sixth; in another (424, Henry F.), from 14½ inches on the first day to 12½ on the seventh. I need not mention to you other equally notable instances to the same effect, for they are printed on the table in your hands. I cannot, however,

forbear mentioning one more case that excited some interest in the wards. In this patient, Mr. Salaman, now assistant-surgeon in our Indian Army, made careful measurements of the joints without disturbing them. The right knee lessened in size more than two inches from the first day to the fourth; and, what is still more remarkable, the right wrist measured ten inches on the seventh, and less than eight on the eleventh.

Sometimes the pain and swelling of the joints remained, or even increased, raising the temperature, distressing the patient, preventing sleep, and increasing the action of the heart. Then the application of leeches, or the injection under the skin of morphia, was employed, often with great relief, and with the effect, especially after the application of leeches, of lowering the heat of the joint and the temperature of the whole body, and so of calming the action of the heart.

The inflammation of the joints entirely ceased within eleven days in almost one-half, and within twenty-one days in five-sixths of those patients that were not affected with endocarditis, and in those who were only threatened with it.

But the inflammation of the joints was much more prolonged and tedious in a large proportion of those affected with inflammation of the heart, whether within or without. Thus in less than a third of them were the joints free from pain before the eleventh day, and in almost a half of them did the pain last beyond twenty-one days. Of these last, one-half experienced a relapse, which was often brought on by the too early use of the limbs after they were freed from the fetters of pain. In every case, with the renewal of the inflammation was there a return of the high temperature, the latter being undeniably caused by the former.

The illustration that I have given you becomes more striking if I put it into simple figures. Of 27 cases affected with endocarditis, the joints continued to be inflamed in 13 after the twenty-first day; while only 5 were so affected out of 33 of those who had no endocarditis, or were only threatened with it, as you may observe in the table placed in your hands.

This brings me face to face with the pregnant truth, that if we would treat the heart successfully, we must treat the inflamed joints successfully. By doing so, we remove four distinct causes, each of which requires from the heart a larger and more rapid supply of blood, and increased force of action. We lessen the amount and rate of the blood sent to the inflamed parts; we diminish the temperature of the body, and often the amount of perspiration; we assuage the pain that of itself frequently gives violence to the beating of the heart; and we remove that mental distress, that anxious sense, that oppresses, and may even overpower, the action of the organ.

Before I leave the joints, I must touch upon that class of cases that present the great difficulty in treatment—those, namely, that do not tend to get well—that cannot be classed with the gout series—and that yet differ altogether in their behaviour from those cases that happily form a large majority of the patients affected with acute rheumatism.

Of the 74 cases of acute rheumatism, in 19, or over one-fourth, were the joints inflamed for more than twenty-one days. In one-half of them there was a relapse, which was usually traceable either to the over-use or the exposure of the joint too soon after the passing away of pain and swelling. I find that this relapse tends to come on if the patient use the limb before three or four days have elapsed after the temperature of the body has reached its standard, and after all the joints are free from pain. I now lay this down as a rigorous rule of the ward, founded upon this observation; and of late these relapses have been much less frequent among my patients. And here it is that you must enlist the patients in the treatment. They nearly all desire to use their limbs, and to get up as soon as the pain has left them. When, however, you make them understand that if they do so too soon, they will have a relapse, and that, if they have, the case may become much more tedious, and may, as I have seen, give rise to that tedious and intractable disease, articular rheumatism, they then cheerfully submit to the discipline.

But, besides the relapsing cases, I found a set of patients, amounting to one in seven of the whole, that retained the joint-affection for more than twenty-one days.

Among my patients, I found that the younger the patient, the more rapid is the recovery of the joints. Thus, of those at or under the age of 20, in one-half the joints were well within eleven days; while, of those between 21 and 25, only one-fourth were so within that time. The scale turned after the age of 20; and, while in one-third of those between 21 and 25, the joints were still in pain after the twenty-first day, they were so in only one-sixth of those who had not passed that age.

With increasing years there is a greater tendency to prolonged affection of the joints, and to relapses in those affected with acute rheumatism. I have felt that these prolonged cases, while they belong to the

acute rheumatism group, are partially allied to gout, and that they tend to develop into that disease. This view is supported by the fact that several of my patients affected with gout, whose habits were not such as to engender the disease, had suffered from acute rheumatism when quite young.

I have for some time tended to treat these cases, as soon as they declare themselves, in the same way as I treat gout, giving the iodide of potassium, and sometimes the bromide, accompanied by tartrated iron, with, I think, good effect.

The cases of acute gout, on the whole, did well—all, in fact, but one of them, who died with double valve-disease and contracted granular kidney. These patients derived the same immediate relief from the use of the belladonna and chloroform liniment, the application of cotton, and the protection of the cradle. While, however, those affected with acute rheumatism gained comfort from a moderate amount of pressure over the joints, made in the manner already described, those affected with acute gout could only bear very slight pressure. This pressure was always applied so as to be comfortable to the patient, and, if it ceased to be so, was immediately relaxed.

All the cases improved during the first few days. The joints were quite free from pain and swelling in twelve of them in eleven days, and in five more within twenty-one days. But the tendency to relapse in these cases was great, more so than even in those of acute rheumatism affected with endocarditis. Nearly half (eight out of seventeen) suffered from relapse, of those in whom the joints were well before the twenty-first day. Some of these relapses were caused by using the limbs too soon. The tendency to relapse was less frequent in those to whom the iodide of potassium was given early (usually the first day), than in those who took that medicine later or not at all.

The amount of urine increased somewhat when the iodide was given, but not always, as may be seen in the table. It would therefore appear that the amount of good done by the iodide is more than is accounted for by the increase of secretion from the kidneys.

The results, then, of the observation of my cases of gout, shortly stated, are these: The joints rapidly improve under the influence of rest and ease, but they tend to relapse even when that method is carried out.

The tendency to relapse is lessened by the employment of iodide of potassium. It appeared to me that, when I gave iron with the iodide, the cases did quite as well as when that medicine was given alone. It is, therefore, desirable from the very first to combine the two, which I am now in the habit of doing; for it unquestionably tends to increase the amount of red corpuscles, and we know how deficient they become in acute gout. There is reason also to say that the iodide itself tends to lessen, rather than increase, the red particles, unless by its administration, as in syphilis, the patient is restored to health, and so makes red blood in spite of the iodide. The form that I employ is the tartarated iron. I was desirous of seeing the effects of the iodide on the disease when treated by rest and ease, without colchicum; but the few patients to whom I gave that medicine unquestionably did well, and I feel certain that in these cases it is right to give it for a few days during the acute or inflammatory period.

The Heart.—It will have been seen, from what I have just said, that, when I am looking at the inflamed joints in acute rheumatism, I am thinking of the heart.

How can it be otherwise? You see the limbs powerless; every joint swollen, tender, and painful, and the expression of deep helpless suffering on the face. The first turn of the mind is to find relief for that external pain. But you know that, within a given number of days—you may count them on your fingers—those limbs, now so inflamed and shapeless, will lose their suffering, return to the symmetry of their form, and regain their power, and with it the strong desire to escape from their enforced weariness, and to exercise that power.

But you know that, while the outworks are thus visibly attacked, the enemy is already in the citadel; and that this disease, which in its very nature attacks the limbs, in its very nature attacks the heart also, and at the same time that it attacks the limbs; that is to say, almost or quite at the very beginning of the illness.

In my cases, exactly one-half were affected with inflammation of the heart; and, in nearly every one of these, that inflammation pronounced itself by the immediate language of the heart itself, by pain in its region, by the anxious expression of the face and its dusky or glazed hue, and by the disturbed breathing. All of these may not be present at once, but they come in their order. And I would here say, that the murmur made by the blood passing in the wrong direction through the crippled valve is by no means the first indication in point of time.

In most of the cases of endocarditis contained in the paper now in your hands, the murmur was heard from the first. But some of them presented a much more impressive and more certain chain of evidence

of the inflammation going on within the heart, than if you at once heard over the organ a murmur without that disturbance of the powers of life that always accompanies the disease during its acute stage.

Let me ask you to look at the case of Mary C. (475, p. 6). On admission, tightness in the chest; next day, worse, face dusky; and, on the third day, expression heavy, but brighter; no tightness of the chest; but the first sound was prolonged almost to a murmur at the apex; where on the thirteenth day there was a distinct but feeble murmur.

Then take the very next case (Charles H., 402). On admission, heart's action tumultuous; uneasiness over the organ; prolonged first sound, or slight murmur: but, on the fourth day that murmur spoke out, and was heard at the apex of the heart and towards the arm-pit.

In a third, Harriet R., there was pain over the region of the heart on the fourth day; on the tenth she was better; her face was not so flushed as it had been; there was then no murmur, but on the next day one appeared at the apex, showing mitral regurgitation.

Another instance is presented by Martha H. (469), whose face was flushed on the day of admission, when she presented reduplication of the first sound at the apex. On the sixth day, mitral and pulmonic murmurs were heard; and on the seventh, diastolic aortic murmur.

It is interesting to note the successive variations of temperature of the body in this patient, which was 101.3 on the fourth day, and fell to 99.3 on the seventh, when all the murmurs came into play.

In all of these instances the murmur, which was generated after the cessation of the acute symptoms of inflammation of the heart, disappeared in a varying number of days, and they all left the hospital free from heart-affection. But the result was not so happy in the last case of this class that I shall bring before you. It is that of Mary L. (457, p. 9). On the day of her admission, she was very feverish, breathing was difficult, and there was pain over the heart, but no note of murmur; the temperature was 100. On the third day she was less feverish, and there was a prolonged murmur below the heart. On the following day, when the temperature had fallen to 97, there was less pain over the heart, and she was more animated. But, unfortunately, to overbalance this improvement, there was a mitral bellows-murmur, which was even audible, though feeble, below the shoulder-blades.

It is indeed evident that the first effect of inflammation of the valve would not be to induce regurgitation, which cannot take place till exudation is deposited on the valve, or its structure is softened by the inflammation. This prelude of the murmur—of the crippling of the valve—in the form of pain, and flushed face, and anxious expression, is of great practical value, for it enables us to treat the disease in its very infancy, and before it has had time to damage the structure of the valve.

Pain in the region of the heart was present thirteen, and pain in the chest or tightness in five more, out of the total number of twenty-eight who were affected with endocarditis. This is consistent with what we see in affected joints, where acute pain is present in the early stage, but tends to assuage when they become swollen. It was customary, when pain showed itself at the region of the heart, to apply over its seat the belladonna and chloroform liniment, with cotton-wool, or poultice; and if the suffering was great, or was not removed by the liniment, a few leeches were placed over the seat of pain, which invariably produced relief.

These cases were, so to speak, at first dumb, but their very silence of suffering told you more than the loudest rasping or bellows sound, that would by themselves merely say—Here is a heart not now inflamed, but crippled by a bygone attack—bygone, but leaving its work done on the damaged structure of the heart.

In one half of my cases the heart was, as I have just said, inflamed; but, in addition to those, three-fifths of the patients in whom endocarditis was not established, presented unquestionable threatening of that disease; so that only a fifth of the whole number stand apart as being absolutely free from inflammation.

But it is not for me in this place to bring the striking phases of this disease before you, who are so practically familiar with them at the bedside. I will, therefore, at once say what was the result obtained in this series of cases, treated in the manner I have described to you. I have just mentioned those cases, amounting to twenty-two, in which there was a threatening of endocarditis. In all but four of these the first sound was prolonged usually at the apex, being, in some of them, murmur-like, or indeed an actual murmur. In twelve of these cases, this sign was accompanied by pain over the region of the heart, disturbed breathing, flushed face, anxious countenance, or general illness. The prolongation of the first sound, when present, was generally audible on the first day, and it disappeared in most cases on the seventh or eighth day.

In the four other cases there was pain over the heart, and its sounds

were either absent, or unduly loud, or accompanied by pulmonic murmur. In one only were the sounds of the heart absolutely healthy.

Why, then, under these circumstances, do I say that these patients were only threatened with endocarditis, and not actually attacked by it? It is because the suffering and the signs over the heart soon passed away, and the organ was left untouched by disease.

If we turn now to the cases of endocarditis, we shall find that fourteen of the patients, or exactly one half, left the hospital well and free from cardiac valve-murmur. In one or two of them there was a murmur over the pulmonary artery limited exactly to that spot, the second left space. But I need not tell you that this points out no valve disease, but merely too much action, too little blood, and too thin a blood in the right ventricle; and then, as the red corpuscles and the volume of the blood increase, the sound vanishes.

The murmur as it disappeared generally passed into a prolonged first sound. In eleven of the fourteen cases of endocarditis in which the patient left the hospital free from valve-murmur, in three of those cases the prolonged sound preceded the murmur.

These cases show that prolonged first sound is closely allied to a valve-murmur, not merely by the character of its sound, but also by its actual relation to inflammation of the interior of the heart, whether established, as in the fourteen cases just referred to, or only threatened, as in the twenty-two previously alluded to.

Of the remaining cases, we held that seven came in with valve-murmur of some standing from previous disease. This inference was drawn, from the loudness, situation, and quality of the murmur, the increased size and force of the ventricle, usually the right one, and the history of previous attacks, accompanied by symptoms over the heart, and followed by palpitation or shortness of breath on exertion. These seven cases came in with valve-murmur, and went out with it.

The only one of the seven cases that is open to question as to its nature, is that of Mary H. (445, p. 8); but at the time, we made up our minds, that she also had old mitral disease, after considering the many previous attacks, the history, and the murmur, changing with the changing force of the heart, for inflammation is told in these cases by this very variation.

Of the remaining seven cases, four presented, after recovery from the attack of acute rheumatism, faint murmurs or prolonged first sound at the apex, very different from the noises heard during the acme of the disease. These four sustained, I hope, no permanent danger to the valves. The remaining three left the hospital with mitral murmur at the apex; and in them mitral disease was probably established. I say probably, for I have, and many of you must have, in view patients who have left the hospital with a murmur which has disappeared after a time, when they have returned as out-patients.

Pericarditis.—Perhaps one of the most striking peculiarities in the returns of these cases of acute rheumatism, is the very small numbers of the patients who have been affected with pericarditis. These amount to only six. I find that, if I had drawn the line so as to include two more cases, one of those patients came in with pericarditis. From the date on which that patient left the hospital, June 25th, 1869, to this, I can only find one additional case of pericarditis.

The abstract of the six cases is contained in the tables with which you have been furnished. It is, therefore, only needful for me to give a sketch of these cases. They were all males. Three of them were young men, from 18 to 21; and three of them ranged from 28 to 34 years of age. The two more recent cases were also men aged 22 and 29 respectively, the last patient being affected with gout.

It will be seen on examining the tables that a large proportion of my cases, amounting to thirty-two out of seventy-four, were at and below the age of 20, and of these only three men affected with this disease. Besides these, two of the cases of endocarditis—John A. (435, p. 7), aged 20, and Mary L., 32 (457, p. 2)—were affected with transient friction sound as each sustain audible only one day, so that these cannot rightly be included among the cases of pericarditis.

Patients affected with acute rheumatism and acute gout are usually weakened and blanched in a remarkable manner, owing to the lessening of the whole volume of the blood and the diminution of its red particles. I gave, therefore, sooner or later, a proportion of them iron and quinine—preferring, as a rule, the old tried forms of the tincture of the muriate of iron and the sulphate of quinine. To a few patients, who were wanting in colour and strength, I employed the iron at once. I find that I gave it in the later stages of the disease to about four-fifths of those affected or threatened with inflammation of the valves, and to less than half of those in whom that organ did not suffer.

I am almost afraid to express the inference that I am about to draw; for I know that suddenly—to-morrow—I might begin to have a string of patients affected with pericarditis, and with endocarditis, producing serious and permanent mischief to the valves; but still I do feel, after

pondering over it much and often, and weighing in the scale every theory that I could think of, that my inference is supported by the small number of these cases of acute rheumatism that presented pericarditis, and the happy results in those who were threatened and affected with endocarditis, so large a number of whom left the hospital with valves faultless, so far as we could detect. But the inference is, that we do own to a marked extent, the small proportion of cases of pericarditis, especially in the young patients, and the happy result of those threatened and affected with endocarditis to the care which is taken to keep the inflamed joints at rest, to shield them from external pressure, and to give them ease.

ADDRESS IN SURGERY,

BY GEORGE Y. HEATH, M.B.,
Surgeon to the Infirmary, Newcastle-upon-Tyne.

MR. PRESIDENT AND GENTLEMEN,—So many eminent and gifted men have discharged this duty which is now mine, that to have been chosen to succeed them and to address you might well arouse feelings of pride and elation in the minds of the most distinguished. I know, however, that it is not to me personally that this compliment is paid, but rather to the surgeons of this town and neighbourhood, whom circumstances more than any merit of my own have placed me in a position to represent. To them be all the honour arising from the choice of one of their own number to address this important professional gathering; to me the disgrace if I fail to satisfy your expectations and to attain that standard of excellence which the many learned luminous and eloquent addresses hitherto spoken have established.

How am I to interest this great assemblage, wherein I see so many of the chiefs of our profession? A mere gleaner in the great field of surgical experience, I must not expect to tell any new thing to those who reap the full crops; or even to display the present state of surgery with anything like completeness, or in a manner worthy of attention, before those who are the creators of its modern aspects. I may only hope to imitate the painter who puts on canvas a well remembered scene from some popular story, and endeavour to give expression to ideas already existing in your own minds.

In carrying out this endeavour, I propose to confine myself to the subject of Operative Surgery; and, taking some of its main characteristics, to illustrate these from the experience of others and from my own. It will be allowed by those who are most familiar with the matter, that modern Operative Surgery is characterised by the boldness and magnitude of its proceedings; by its respect for the integrity of the human body, and its reticence of the knife; and by the general superiority of its results. It stretches out its hand to regions, and takes within its grasp, organs formerly thought beyond its reach, and grapples not unsuccessfully with diseases hitherto considered incurable by scalpel or drug. Dangers and difficulties do not appal it, nor does it fear to undertake the gravest responsibility, if only its audacity be justified by the well founded hope of destroying a fatal disease, or removing one which, although not fatal to life, may yet render that life a misery, a burden so wearisome to him who carries it, that death itself is not a greater calamity than life so oppressed.

Paradoxical as it may seem, whilst in one direction it is thus acquiring new dominions, and showing itself capable of the most daring enterprises, in other quarters Surgery lays down the knife and employs measures more sure, safer, and attended with less suffering; or it substitutes milder for more severe operations, shrinks from unnecessary mutilation of the human body, and in every way seeks to conserve it and maintain its integrity as complete as may be compatible with the object to be gained.

I claim for it, moreover, that in its bold, as well as in its milder and more conservative measures, it realises a larger and more uniform amount of success, and is thus a more useful and reliable agent than the art of former days—a success which is the more satisfactory, that, though brilliant, it is the result of sound principles, industriously sought after and carefully carried out.

Here, then, are three characteristics, which I think we may consider the chief, or of the chief, characteristics, of modern Operative Surgery. For the sake of shortness, they may be spoken of as its Audacity, its Conservatism, and its Success.

You, gentlemen, among whom are some of the most intrepid operators of the day, will have no difficulty in recalling examples of the

Audacity of modern Operative Surgery. You know that the boldest exploits recorded in surgical annals have been repeated but recently; that, in obstruction of the gullet, the stomach has been opened, and the patient fed through the opening; that the kidney has been cut down upon, and stones taken from it; that the aorta has been tied; that the removal of the whole upper extremity (the shoulder-blade, part of the collar-bone, together with the arm), either on account of accident or of disease, has become a not unfrequent proceeding. Upon the table before you there is perhaps as large a mass as has ever been taken away along with the upper extremity—an immense enchondroid tumour. You know, that operations which but a few years ago were counted unjustifiable, such as ovariectomy, are now established on the firm basis of success; that feats even more startling, which might make even the initiated tremble, have been undertaken in isolated or comparatively rare instances, with a fortunate result; that the spleen has been taken away, the kidney extirpated, as a sequel to ovariectomy; and, not to multiply examples, that the uterus has been removed several times alone, and also together with a large cyst and with all its diseased appendages, constituting a large mass.

But it must not be supposed that, because these great operations are cited as illustrations of the audacity of modern Operative Surgery, they have no other claim to our admiration. Many of them were successful endeavours to save life under the most unfavourable circumstances; and none were undertaken but after a patient investigation of facts, or without a careful and judicious consideration of all the aspects of the disease and of the condition of the patient. All were performed according to sound surgical principles, and for the removal of disease in itself necessarily fatal.

Nor need our admiration of these or similar undertakings engender in our minds a recklessness of human life, any more than their execution indicates the existence of such a feeling. It is, indeed, sometimes said, and even by members of our profession, that the performance of such operations does evince a certain want of respect for life, and that great operators are apt to look lightly upon the deaths of patients where a fatal result ensues. For my part, I entirely repudiate such thoughts, nor do I believe in their existence; and I would appeal to every operator in the room to echo my opinion, and to say if he would not deprecate such a feeling as the worst foe to a really sound operative surgery.

But if in our own ranks there are who believe in such recklessness, we cannot be astonished that we sometimes hear opinions in the same sense expressed by individuals of the non-professional public, and the very virtues of the surgeon, his coolness and self-possession, brought forward to attest his callousness to the sufferings of others and his disregard for the sacredness of life. No accusation could be more unjust. Because, Sir, when the surgeon puts his knife into the palpitating flesh, his hand does not tremble, nor the sight of blood affect his nerves, should he be stigmatised as cruel, heartless, and unfeeling, or regardless of human life? Surely not. This presence of mind is the result of knowledge, not of callousness—of knowledge based on experience, and of forethought. It is the result of a well devised plan of operation. It is, indeed, the result of a true sense of the sacredness of human life, and of the deep responsibility that attaches to him who places his patient's life in possible immediate jeopardy, to rescue him from a certain but distant death. Without such a feeling, no man ever was or will be a truly good and successful surgeon; for more than aught else—more than the love of fame or the desire of success—it impels us to those measures of precaution, of careful preparation, of minute detail, which enable us to bring to a fortunate termination the most hazardous proceedings, and thus to justify the audacity of modern Operative Surgery.

The term Conservative as applied to Surgery is quite of modern origin, and dates from the year 1852, when it was first made use of by Sir William Fergusson. The conservative spirit, however, influenced the practice of surgeons in much more ancient times, as we know from the works of Paulus Aegineta, who distinctly speaks of the excision of the joint-ends of bones, and of the removal of entire bones in lieu of the amputation of the limb.

The story told by Garengeot of the man whose nose, having been bitten off in a drunken quarrel in a wine-shop, fell into the kennel, was picked up, washed and reapplied to the face, and grew there, can scarcely be quoted as exemplifying Conservatism in the special sense which has been given to the term in recent years. A predecessor of mine in this town, some fifty years ago, acted quite within the strict meaning of the term when, in a case of compound dislocation of the ankle-joint, where certainly most surgeons of that period would have amputated the foot, he merely removed the astragalus and saved the limb. The gentleman who had the good fortune to be the subject of

this, at that time, somewhat unusual act of conservatism was afterwards well known to me, and walked with only a very slight halt. Another Newcastle surgeon, who, I am happy to say, is yet hale and well, practised the excision of the os calcis some time before the mention of the phrase by which we would now characterise the operation.

It is, however, since the publication of Sir W. Fergusson's paper that the attention of the profession has been more thoroughly roused and directed to this principle in Surgery, which, during the last ten or fifteen years, has been more and more widely acted on, and is now so completely established as to be one of the most marked characteristics of modern Operative Surgery.

The removal of diseased joint-ends of bones is at present one of our most common proceedings, and has gradually been applied to most of the articulations in the body. The excision of the separate bones of the tarsus and carpus, and of the whole shaft of long bones, is not less frequent; and even such bones as the shoulder-blade and collar-bone have been several times removed, the extremity which they support being preserved.

It is interesting to note the advance which has taken place, in a conservative direction, in the method of performing resection, itself the stronghold of conservatism. The external incision, at first more or less complex, has been reduced in most situations to a linear and less extensive one; the amount of bone thought necessary to be removed is less; and recently the practice of subperiosteal section has been adopted, by which an important structure is preserved and reparation favoured. After excision by this method we rarely meet with those cases of withering, the result of too extensive removal of parts.

Even in what we might call the hostile territory of amputation, the same principle is at work, leading us to remove limbs at points as far distant from the trunk as possible, as in the amputation through or immediately above the ankle-joint, instead of below the knee, and through the knee instead of at the middle or lower third of the thigh. Few amputations are followed by a more satisfactory result than that through the knee-joint, when done so as to leave an anterior flap to cover the end of the bone, from which the articulating surfaces need not be removed. The wound heals rapidly; no raw surface becomes exposed; and a shapely useful stump is the result. These conservative amputations possess several advantages, since they not only leave a more serviceable stump, and interfere less with the symmetry of the body, but they also increase immensely the patient's chances of life.

The cast upon the table was taken from the thigh of a young woman whose recovery would assuredly have been much more doubtful had amputation through the mid-thigh been resorted to. Her leg had been frightfully mangled in a steam threshing-machine, and the bones broken into small pieces up to the knee-joint; a quantity of blood had been lost; and, when seen, she was in such a condition of collapse that the propriety of any operation seemed doubtful. It was just possible to obtain an anterior flap to cover the end of the femur; and, death being otherwise certain, amputation through the knee was done. The pulse afterwards was barely perceptible; and for thirty-six hours it seemed most unlikely that life should be preserved. Subsequently she rallied; and restoration to health was ultimately rapid. She was able to be out of bed in fourteen days; and the stump entirely closed in a very short time.

A peculiar signification is given to the term "conservative" by Sir W. Fergusson, who uses it to designate those operative measures by which limbs or other parts of the body are more or less completely preserved. Such proceedings as have been already mentioned come strictly within this meaning; so, too, would some of the modern operations for the removal of growths from the jaws and the neighbourhood of the orbit. Malignant growths occupying the ethmoid cells and displacing the eye outwards, as well as exostosis springing from the os frontis, may be extirpated by means of a proceeding which preserves the nasal bone, and, as a consequence, the contour of that important feature the nose. This bone is raised up along with the skin covering it, so that it may be laid down again in position after the operation and preserved; the only structure absolutely removed along with the diseased growth, in addition to portions of the ethmoid, being a part of the nasal process of the maxillary bone. The mark left after this measure is exceedingly trifling.

The treatment of an ordinary compound fracture could not be looked upon as falling within the meaning of conservatism in surgery; but I know no other term which can adequately describe the carrying through to a successful termination a case of such aggravated injury as would raise the question of the propriety of amputation.

There are perhaps few questions in surgery which afford a greater test of judgment, experience, and decision, than that which we have to ask ourselves in certain cases of injury—Shall this limb be removed or not? When the question has been answered in the negative, there are

also few cases which afford a greater test of our patience, perseverance, readiness at expedients, watchfulness, minute attention to details, and capability of using mechanical forces.

One at least of the most important elements in the successful treatment of such cases is to be found in the great principle of rest, as carried out by means of apparatus which shall at the same time perfectly support the limb and retain it in position, and allow dressings to be applied without disturbing it.

The large number of collieries in the neighbourhood of Newcastle, and the variety of works in and around the town, have always afforded Newcastle surgeons only too many opportunities of treating these injuries; and our predecessors at the Infirmary, who were also almost invariably surgeons to some of the collieries in the neighbourhood, gave great attention to this part of surgery. Upon the table is the original splint invented by Mr. McIntyre, which still bears his name, and of which various modifications have been made: the splint which I remember as being in use at University College Hospital in London, in Liston's time, and bearing his name, being one. McIntyre was exceedingly careful and also successful in his management of compound fractures; and, owing to this success, his splint obtained great celebrity. There is an adjunct to this splint, upon the use of which McIntyre himself laid great stress, but which is now frequently neglected: I mean the sock by which the heel should be supported and raised. McIntyre thought that, by means of the sock, the bones in oblique fractures could be brought into better apposition, and the heel at the same time relieved from pressure; so that the formation of a sore upon the heel, often very troublesome in compound fracture, might be prevented. The disuse of the sock is an interesting example how a part of a plan of treatment, thought important by the originator, may be forgotten and left out by his followers, and shows why they may not obtain the same successful results.

The McIntyre splint, though a very useful apparatus, has a disadvantage. It does not admit of dressings being applied to the under surface of the limb without raising it. Another Newcastle surgeon (not now practising), a member of this Association, Dr. Greenhow, invented an ingenious sling-splint, of which there is also a specimen on the table. The limb in this apparatus is supported by short lengths of bandage, any one or two of which can be removed without disturbing the position of the limb, so that dressings can be applied to any part.

A third splint, a modification in some respects of Dr. Greenhow's splint, was introduced a few years ago by my friend Dr. Gibb. It is so ingeniously arranged that, while as a whole it forms an excellent cradle for a fractured limb, it admits of being taken to pieces, the separate parts serving as leg, arm, or thigh splints, as may be required.

Having been led into this digression on the subject of splints by a desire to mention those which have been invented by Newcastle surgeons, I may observe in addition that all large heavy apparatus for the lower extremity, whether fixed or slung—although the remark which I am about to make applies less forcibly to sling-splints—have this disadvantage: that, whilst it is easy to fix the foot and the lower portion of the fractured limb to the apparatus, it is not easy to fix the pelvis. Hence, in various necessary movements of the patient, the pelvis moves, and, as it is the side of the pelvis corresponding to the sound limb which is most easily raised, it happens that the pelvis gradually turns upon itself, dragging with it the thigh and upper portion of the fractured limb; so that, while the foot remains straight, the pelvis turns partially on to the side, the thigh and knee are turned outwards, and the bones are displaced. To avoid the deformity which might ensue from this gradual alteration in position, and the frequent readjustment of the limb which would be required to rectify it, I generally make use, when reparation has fairly commenced and the bones are beginning to unite, of simple side-splints, furnished with brackets at the site of the wound, so as to admit of dressing without moving the limb. These splints have also another advantage; viz., that, where there is a great tendency to displacement, such as we often see in the lower third of the leg, they admit of lateral pressure being made in opposite directions by means of pads of unequal thickness, the pads not being placed opposite to each other, but at alternate points on the opposite sides of the limb. In this way, the most obstinate displacement may be overcome.

As I have assumed that we are more fortunate in saving severely injured limbs than were our predecessors, the question may fairly be asked, by what particular means this result is obtained, seeing that thirty years ago the ordinary principle of fixing the limb and keeping it at rest was enforced, as at present, by suitable apparatus; and that the rest of the treatment was also in most respects similar to that now in use, such as the removal of broken pieces of bone, the practice of incisions when required, and so on. I would reply—1. That the attempt to preserve limbs is made more frequently at present, modern surgery being more thoroughly conservative; 2. That we have a greater choice

of, and also improved, apparatus for keeping the part at rest; 3. That our knowledge—though still very incomplete—of the mode in which some of the most frequent causes of failure in the treatment of these injuries, as well indeed as of other wounds, has increased of late years, and therefore our power of coping with them has also increased.

This brings me at once to the verge of two large and weighty subjects—Hospitalism, and the use of Antiseptics; the consideration of which, however, is quite beyond the scope of my design. I should merely wish to observe that, while I believe that the employment of antiseptic agents constitutes an important principle in modern surgery, I also think that their use has scarcely received so unprejudiced a consideration as it deserves, in consequence of its being so much identified in the minds of the profession with one particular method, one special agent, and one peculiar theory of disease.

It happens now and then that our attempts to save limbs, though successful, end in disappointment; the limb preserved being from some cause less useful than an artificial limb, and a source of discomfort to the owner. Such a misfortune may occur in consequence of an extensive destruction of integument, so that a raw surface which nature has not sufficient resources to cover in is left, to the continued annoyance of the patient, who will sometimes ask to be relieved of the extremity which it has taken so much trouble to preserve. We might fairly consider the new proceeding of grafting a portion of epidermis upon the gap to be filled up, as in such cases, partaking of the nature of conservatism. Or this inutility may arise from mal-union, the causes of which I need not here enter upon.

There is here a cast of a badly united leg, which was almost useless, and the seat of constant pain. The patient would gladly have exchanged his burdensome limb for a wooden pin; but, acting in the spirit of conservatism, although the word was not then used, I cut out a wedge from the projecting tibia, divided the fibula with cutting pliers, and set the bones straight. The result is seen in the fellow cast. This operation was performed more than twenty years ago; but I had an opportunity of seeing the patient a few days since, and he informed me that, although the leg operated upon is somewhat shorter than the other, he has never experienced the slightest inconvenience, and for these twenty years it has been a good serviceable limb to him.

The term Conservative as employed and understood by its distinguished originator does not, as already indicated, entirely cover the tendency of modern Operative Surgery to abstain from the use of the knife, and substitute other milder and safer proceedings. I shall venture, nevertheless, to include among these illustrations of the Conservatism of modern Operative Surgery, some such examples of abstention from the knife, since the spirit which pervades them is absolutely identical with that of conservative surgery.

There are few structures of the body which have been the field of more brilliant and daring operations than the arterial, whether these have been executed to stanch the flow of blood from a wounded vessel, or for the cure of aneurismal disease. Such operations have been oftentimes as successful as they have been daring; but too often, also, they have been brilliant failures, followed by a fatal result; sometimes life has only been preserved at the expense of a limb. Much has already been done in modern times to diminish the number of such failures, and to further the conservation of limbs, by the employment of mechanical measures in the place of cutting operations. In carefully adjusted position, for instance, we have a ready means of modifying the force of the arterial stream. The mere elevation of a limb exercises considerable influence over its circulation; but other positions, such as extreme extension and flexion, either with or without elevation, may be so employed as to keep the blood stream under almost perfect control.

A young woman was admitted into University College Hospital, a good many years ago now, whilst I held the office of House-Surgeon under Liston in that institution, with a wound of the superficialis volæ artery, inflicted by the point of an oyster-knife; the injury had been done some days before her admission, repeated attacks of bleeding had occurred, and vain attempts had been made to secure the ends of the vessel in the wound; the hand was swollen and inflamed, and the wound in a sloughy condition. I had her arm raised very high upon pillows, and stretched out in the extended position, by bandages to the hand, whilst irrigation with cold water was employed to the wound, which was uncovered. No bleeding recurred. At the time, I believed that the elevation of the limb was the sole cause of the arrest of bleeding; but I am now inclined to think that the extended position of the arm was also not without some effect.

My attention was first drawn to the effect of this position two years ago, by one of the surgeons of the Lariboisière, who informed me that he had ascertained by experiment that by extreme extension the force of the arterial circulation might be materially modified. I have myself

experimented upon this position, and find that, in thin persons particularly, extreme extension, or, as it may be shortly called, "over-extension" of the elbow-joint, enfeebles the pulse at the wrist, and where the elbow-joint admits of being so extended that the end of the humerus presses forwards against the artery, the pulse is entirely extinguished. Abduction of the shoulder-joint and over-extension of the wrist aid this effect. In the lower extremity, if a hard cushion be placed under the buttock, and the hip and the knee-joints over-extended, the pulse at the ankle is also very greatly enfeebled. I have not employed this method in cases of actual bleeding; but although the position might be difficult to enforce, believe that it would be useful, at least as an auxiliary measure.

The power exerted by the bent position of a limb, or over-flexion, upon the blood-stream, first came under my notice a good many years ago in this way. In the year 1848 or 1849, a travelling jeweller, who had a booth at one of the periodical fairs in this town, having occasion to get up in the night, struck his leg, whilst walking across his booth, against the sharp projecting end of the broken top of one of his jewel cases. He fell to the ground in a fainting state; and Mr. Featherstonhaugh, a surgeon here, was hurriedly sent for to see him. Mr. Featherstonhaugh found a punctured wound high up in the leg, passing deeply between the bones, and bleeding furiously; being alone in the middle of the night, and without instruments, no operation could be attempted; and he endeavoured to stay the bleeding by plugging. This was utterly impossible; in spite of his efforts, the blood continued to well up from the wound like water from a spring. Mr. Featherstonhaugh was at a loss for a time what course to pursue, when it occurred to him to bend the leg forcibly upon the thigh; the flow of blood was at once slackened, and pressure by pads now easily arrested the hæmorrhage. The bent position was not kept up in this case, and bleeding recurred, on account of which I saw the man with Mr. Featherstonhaugh; and ultimately the anterior tibial was ligatured at the wound, and a piece of broken glass removed from the interosseous membrane. This case was reported in the *Lancet* at the time, and was quoted by Mr. Guthrie in his lectures at the College of Surgeons, as a good example of his own principle of treating wounded arteries. The point in the case, however, which I now wish to notice, is the marvellous effect produced by bending the knee. This effect was never forgotten by me; and since that time, but more particularly of late years, I have frequently had recourse to this expedient to stay arterial bleeding, sometimes temporarily, often permanently. For some time I hesitated to trust to this proceeding alone. Latterly, however, I have frequently done so, and have treated wounds of all the vessels of the forearm; of the radial, in the middle of its course, and near its termination, between the metacarpal bone of the thumb and that of the forefinger; of the ulnar and its upper third; of the superficialis volæ and the palmar arch, by flexion of the elbow. I have not had such frequent opportunities of testing this means in the lower extremity, but have employed it occasionally to restrain secondary bleeding from stumps, with marked success, and also in a case of malignant disease in the lower third of the tibia, where profuse hæmorrhage followed an exploratory incision.

A French surgeon has recently impugned the efficacy of flexion as a blood-stopping means. I have therefore had some experiments done at the Infirmary here, with a view to test the effect of this position upon the pulse at the wrist, and at the ankle.

These experiments were done at different times, and on several different individuals, by Dr. Page, our excellent house-surgeon; and by myself separately, with the assistance of Mr. Kaye, my dresser, with the following results.

A. *Upper Extremity*.—1. Forearm bent on arm by muscular action of the individual experimented on. In persons with considerable muscular development, pulse at the wrist entirely stopped.

2. Forearm bent on arm simply, with the hand flat on the shoulder. Pulse weak and indistinct, sometimes, but rarely, quite stopped.

3. Forearm bent on arm, with hand pronated. Pulse more weakened, sometimes stopped.

4. Forearm bent on arm, hand pronated and extended. Pulse usually quite stopped.

5. Forearm bent on arm, hand pronated, and bent at wrist. Pulse either almost imperceptible or quite stopped.

6. Forearm bent on arm, with a roll of lint or cambric pocket-handkerchief rolled up and laid in bend of elbow. Pulse always entirely stopped.

B. *Lower Extremity*.—1. Leg flexed on thigh. Pulse in posterior tibial artery much weakened.

2. Leg flexed on thigh, and thigh on abdomen. Pulse in posterior tibial stopped altogether almost invariably.

3. Leg flexed on thigh, with a roll of lint or cambric pocket-handkerchief laid in the bend of the knee. Pulse stopped in some cases,

not always; but with flexion of thigh on abdomen also, pulse invariably stopped.

4. Thigh flexed on abdomen, the trunk bent forward. Pulse materially weakened.

From these experiments, as well as from those cases of actual bleeding in which this method has been used, it may be fairly inferred that we possess, in overflexion, a blood-controlling agent of considerable power, which can be applied on the shortest notice, which requires neither instruments nor apparatus other than can be obtained in the poorest cottage; which can be put in force by anyone possessing neither special knowledge nor operative skill; which is not dangerous in itself; and which may be relied upon with certainty to restrain bleeding, at least temporarily, even when it may fail permanently to arrest it. The bleeding from a wounded artery is so striking a thing—so many circumstances concur to attract the eye and arrest the attention—the crimson blood flying in jets across the room, or welling from the wound; the deathlike aspect of the bleeding man—his livid pallor and convulsive agitation; these are so appalling; the absolute danger is so great and imminent, that we do not wonder if the ordinary bystander is palsied by affright, and the surgeon himself deeply impressed by the gravity of the situation. It is to such a scene that suddenly, and without preparation, he may be summoned, perhaps to some remote place, it may be in the middle of the night. Without assistants, except the terror-stricken spectators, who encumber the room, by the flickering light of a candle, a practised operator might hesitate to undertake the search after the wounded vessel. If, then, at such a time the mere flexion of a joint will remove the danger, allay the tumultuous excitement, dissipate the apprehension and anxiety, and relieve the surgeon from an embarrassing and perhaps doubtful operation, were it only temporarily, it is surely a valuable addition to our resources.

But when I find that in the upper extremity overflexion may be relied upon as a permanently efficacious measure, enabling us, in wounds of the palmar arch for instance, to avoid a tedious and perhaps mischievous dissection in the palm, or the ligature of all the arteries of the fore-arm or of the brachial; when I recall to mind the controversies which have prevailed as to the best treatment of repeated and secondary hæmorrhages; the choice offered to us between a tedious, difficult, and uncertain dissection in the midst of an ill-conditioned wound, or among a huge collection of clots, in search of the bleeding orifices, and a serious operation to ligature the trunk, in the lower extremity at least—an uncertain, not always effectual, and sometimes dangerous, proceeding; when I read in the most recent systematic works on Surgery, that secondary hæmorrhage from the deep arteries of the leg is a sufficient reason for amputation, and remember that I have myself seen a person narrowly escape amputation of the hand in consequence of wound of the palmar arch, I cannot but think I am justified in offering to your consideration this method as an illustration of conservatism in surgery. If you consider this account tedious and unnecessarily long, I must express my regret; but as this mode of staying the flow of blood from bleeding arteries is only just mentioned in the last edition of Mr. Erichsen's *Science and Art of Surgery*, and not even alluded to in Mr. Holmes's, the most complete and popular systematic works on surgery of the day, it seems that some account of my own experience of the effect of position might not be altogether uninteresting.

A more remarkable example of abstention from the knife is to be found in the pressure-treatment of aneurism. Sir William Fergusson remarks that when Hunter tied the superficial femoral for the cure of popliteal aneurism, he performed a great act of Conservatism; but modern surgery has acquired in the same direction results still more important and more beneficial to humanity; aneurism of nearly every artery in the body, including the carotid, the subclavian, the iliacs, and the aorta, having now been cured by pressure. The old or slow pressure method was an advance upon the ligature; but what I believe was first named by myself—the “rapid pressure treatment”—must be considered to be in some respects even a greater improvement upon the older plan. Having arranged to read a paper upon this subject, it is not my intention now to enter into it; but here in Newcastle where the method originated, it could not be passed over without mention.

The rapid pressure treatment may be considered but the natural development of the older method, and, like many other triumphs of modern surgery, owes its practicability to chloroform. Having been, myself, somewhat concerned in its introduction, it would not become me to speak too strongly in laudation of it.

I should rather leave to those who best know what dangers encompass him who is submitted to the knife and the ligature—the shock, the suppuration, the erysipelas, the pyæmia, the gangrene, and the secondary hæmorrhage—the appraisalment of a measure which, after a few hours' sleep, leaves the awakened patient free from his disease,

with no wound to heal, no further risk to run, and to say whether any surgical proceeding ever more truly deserved the application of the old maxim—*Cito, tuto, et jucunde*.

There remains to be considered the last of the characteristics which I have attributed to modern Operative Surgery, namely, its Success.

It is in one sense a matter of indifference to what part of Operative Surgery I turn for illustrations of its Success; they abound everywhere. They might be found in the subjects we have already treated; or I might take to choosing at random some special department, say the orthopædic, and adduce the wondrous metamorphoses produced by its agency in proof of my position—the variously twisted and useless feet opened out, straightened, and made serviceable; the withered bent limbs made strong and shapely; the hideously distorted trunks conformed into symmetry; transformations worked with a perfection, a facility, and an absence of pain to the patient which seem little short of miraculous when we look at the condition of this branch of our art some forty or fifty years ago;—transformations, too, not now confined to some special metropolitan hospital, but which may be undertaken by any provincial surgeon who understands his business. I might describe the mechanical apparatus, so nearly perfect, constructed upon scientific principles, and adapted with careful design to each particular deformity, and which greatly assist the surgeon to overcome difficulties and enable him to complete the transformations, towards which the division of tendons is only the first step. Here, too, I might refer to an aspect of our art most interesting to study—the moral effect produced by raising a misshapen halting creature to the condition of a straight and well-proportioned man—an aspect which brings mechanical art into a close and remarkable relation with the subtle and mysterious problems of psychology. I prefer, however, as more in consonance with my design, to take examples from fields which have been more generally cultivated, and for a longer period, by the great body of the profession, and from operations which contain in themselves all the essentials of treatment independent of the assistance of the mechanist. The operation of cutting for the stone, for instance, furnishes an example of this description. There have always been individual operators who have been remarkable for their success in cutting for the stone; thus twenty, twenty-five, thirty, as many as forty persons have been cut in succession by different surgeons without a death; but such examples would not serve the purpose I have in view, which is to show the success of modern Operative Surgery in this operation, not the skill of any individual. Let us take, then, the lithotomy operations performed at any provincial hospital throughout a series of years and distributed among several different surgeons—say, for instance, the Newcastle Infirmary. In this institution, between the years 1859 and 1869, both being included, lithotomy has been performed in sixty-four cases, and of this number two operations only have been followed by fatal results. These sixty-four operations occurred in different proportions in the practice of six different surgeons, who, during the time stated, have held office at the Infirmary for longer or shorter periods. The ages of the patients varied from 2½ years up to 70, both of these extremes being among the successful cases; 29 were 10 years of age or under 10; 16 were upwards of 40 years old. Of the two fatal cases one was 38 years of age, the other 52. The average time between the operation and the date of dismissal from the Infirmary was 28 days. The operation performed was the ordinary lateral one, which, introduced by Cheselden and modified by Liston, is that, I believe, most usually practised by British surgeons.

These cases, then, were not of an exceptional character, but in every way examples of the ordinary kind of cases which may be expected to occur in hospital practice; they were not in an unusual proportion of the most favourable age; they were not all in the hand of one operator, who might be supposed possessed of unusual skill; nor did they come under treatment during one particular short period, when for some special reason it might be thought that a run of favourable cases might occur; and they were operated upon in a provincial hospital, where we do not arrogate the possession of unusual skill or success. We may therefore fairly assume that the results give us at least an approximation to the average success which the operation of lithotomy had attained at the period of their occurrence.

The ordinary rate of mortality after this operation, as calculated from a large number of cases, not confined to recent years, is stated by Coulson and others to be about one in seven. Sir William Fergusson states that, out of fifty patients under 15 years of age cut by him in the whole course of his experience, two died: this is above the average of success given by Coulson for the same age, but it must be considered below the rate of success of the Newcastle Infirmary for the time stated, the operations at this institution being on persons of all ages.

If, then, I am correct in putting forward these cases as representing

an approximation to the average results of modern lithotomy, it must be conceded that they constitute good illustrations of the success of modern Operative Surgery.

It has already been stated that the operation performed was the ordinary lateral one, and I am not aware that there was any peculiarity in the way in which it was carried out by any of the operators; with the exception that, in some of the operations on children, performed by myself, the stone was removed by the finger alone introduced into the bladder, and without the employment of forceps; nor was there any peculiarity in the after-treatment pursued. The instruments used were of the simplest description—the usual laterally grooved staff, sharp-pointed lithotomy scalpel, and forceps.

The success of the modern operation of lithotomy may be attributed in part to this simplicity of the instrument used; in part to the greater gentleness with which in modern times we employ our tools, particularly the forceps, so that we avoid the pulling and hauling with both hands, the violent movements of instruments from side to side, which in former days were not unfrequently witnessed, and the consequent bruising of the neck of the bladder and other structures, proceedings fraught with dangers which I need not enumerate; and greatly also to the use of chloroform, by which the operation is robbed of more than half its terrors; and thus patients are encouraged to seek relief from their pain at an earlier period than formerly, and whilst the urinary organs are still not seriously affected by disease.

The modern procedures for the relief of strangulated rupture, for the extraction of cataract, and of ovariectomy, will afford us equally notable examples for the success of the Operative Surgery of the day.

By the modern operation for hernia, I mean especially the operation without opening the sac, perhaps the most satisfactory and successful proceeding in the whole range of Surgery, aiming at so splendid a result as the rescue of a life from imminent danger. The operation, when the sac is opened, is itself much more successful in the present day than it was thirty years ago, being usually put in practice after a much shorter period of strangulation, and followed by a more sensible and rational after-treatment; but the operation without opening the sac is, I believe, as absolutely certain of success as any proceeding can be. I can remember when the result of herniotomy was considered so doubtful that every device was had recourse to to avoid it, from the injection of tobacco to placing the patient on his head, or trundling him down the street on a barrel; and I have heard a physician of great repute condemn the proceeding altogether as dangerous and unnecessary, asserting that the strangulation might always be relieved by repeated doses of calomel.

It is not astonishing that the result was uncertain, when we consider the mode of operation not unfrequently adopted in those days. After a long and dangerous period of strangulation, we had an external incision running the whole length of the hernial tumour, followed by a painfully tedious dissection, occupying sometimes the better part of an hour, layer by layer down to the sac; this reached, it was opened to an extent commensurate with the external incision, and its contents assiduously manipulated, probably by more than one pair of hands, to ascertain the condition of the bowel; the stricture was then divided, the knife being passed in dangerous proximity to the bowel, which occasionally has been wounded even by the best operators; and when the operation was over, the surgeon was not satisfied until the maimed and bruised bowel had been further tortured by purgatives and coerced into unnatural action.

How different is the modern proceeding! A small cut less than two inches in length is made over the neck of the sac; a little dissection with the handle of the knife or the finger-nail reveals the edge of the ligamentous structure; a few fibres are divided; gentle pressure is made upon the sac, which may not even have been seen; the bowel slips up, and all is over. The whole business does not occupy ten minutes; an opiate is given, and the surgeon has no further anxiety about his patient.

I know it may be said that this method cannot always be adopted; and indeed, in looking over some recently published cases of herniotomy, I must acknowledge to have felt some surprise at the frequency with which the sac has been opened.

It has fallen to my lot, as indeed to that of most operators, to operate in such cases pretty frequently; and for the last fifteen years I have rarely found it necessary to open the sac. Unless, indeed, there be some special reason for doing this, such as the great length of time during which the rupture has been down, the manifest pressure of a large mass of omentum, or indubitable signs of change in the bowel, such as emphysema, putrid smell, or the like, I invariably attempt the reduction without opening the sac; and, according to my own experience, the test of the propriety of the proceeding is its practicability, for I have never in my own practice known a fatal result where the sac was not opened.

By the modern operation for the extraction of cataract, I mean the method—by whatever special name we call it, whether scoop-extraction, or Schuett's operation, or modified flap-extraction; whether the iris is touched before or after the extraction of the lens, immediately before or some time before, which consists essentially in a comparatively small incision through the cornea, the removal of a portion of the iris and extraction of the cataractous lens by gentle manipulation, aided by spoon, curette, vectis, or other similar instrument, diversely employed; for I take it the same principle pervades all these methods, however they may differ in minute details. I claim for these modern operations, although each may be more particularly applicable in special cases, a greater and more uniform success than belonged to the old flap-operation.

I acknowledge that nothing can be more brilliant and striking in its performance, nor more excellent in its result, than a perfectly successful flap-operation after the old mode. After such a proceeding, when entirely successful, there is a scarcely perceptible cicatrix, a transparent cornea, an unimpaired iris, an undisplaced, round, central, clear, black pupil, and consequently sight as perfect as is possible after the removal of the lens. But then, how frequently does this perfect and complete result ensue? We must confess but rarely. How often, on the contrary, are the hopes of the operator disappointed even when all goes well at the operation! How often do we find that the edges of the wound become separated, that part of the iris protrudes, that the healing is delayed, and that ultimately there is a partially closed or distorted pupil, with broad cicatrix and more or less imperfect sight!

In the modern operation, although the pupil is necessarily somewhat misshapen, we can yet reckon with considerable if not absolute certainty upon a result so far successful as to give good useful sight. Although, then, the old operation in exceptional cases gave a result which left nothing to be desired, the new operation gives a more universal and assured success.

I need not detain you by any lengthy reasoning to show the success of ovariectomy in recent times. You know that, from being looked upon as one of the most fatal performances a surgeon could undertake, from being stigmatised by some of the greatest men as a frightful butchery, it has risen to take its place as a well-recognised proceeding—more successful than some older and long established operations. It is, indeed, emphatically one of the most brilliant examples of the success of modern Operative Surgery.

These three operations do not, at first sight, appear to bear any close resemblance to each other, being undertaken for very different purposes, and one taking place in a little world as it were apart from the rest of the body. Yet a brief examination will show that they possess some features in common; and, although each may depend for its success upon some particular proceeding more or less special to itself, will enable us to discern certain principles common to all three greatly influencing their favourable termination. Thus, in all three operations, a serous cavity containing important structures is more or less involved, and each may fail by reason of inflammatory action destroying or impairing the functions of these structures; or, as in ovariectomy and hernia, by reason of other serious consequences, to which procedures affecting such regions are more particularly liable.

The operation, without opening the sac, manifestly owes its success mainly to the fact that the peritoneum is not opened, and to the consequent exclusion of air, blood, or other contaminating fluids from the abdominal cavity: but the small size of the external incision as compared with the importance of the structures actually divided, and with the still greater importance of those indirectly affected, is also not without great influence, as well as the trifling amount of bleeding and consequent absence of blood within the external wound.

The modern modes of extracting cataract are less frequently followed by unfavourable results, mainly because the removal of the iris prevents prolapse of that structure between the lips of the wound and consequent delay in healing, morbid changes in the cornea, and contraction of the pupil: but also because the limited size of the corneal wound prevents loss of vitreous humour, excludes air from the anterior chamber, assists generally in preserving the integrity of the eye, and allows more rapid healing; whilst the entrance of blood into the chamber is always an accident to be deplored, and sometimes injuriously affects the result of the operation. And in ovariectomy, although special circumstances affecting either the tumour or the patient exercise undoubtedly great influence over the result, nevertheless I conceive that this remarkable operation, which does not really require great operative skill or extraordinary manual dexterity, and which not unfrequently succeeds under apparently unfavourable conditions, as when adhesions exist, or when the patient is reduced to a condition of extreme weakness, is most likely to have a favourable termination where the wound in the abdominal parietes is small, four inches or less in length; when the time

occupied is comparatively short; where the abdominal cavity and its contents have been little exposed to the air; and where in particular neither blood nor other fluids have entered in any quantity, or remain in the abdominal cavity. Ligatures, whose material seems almost a matter of indifference—wire, catgut, or hemp—may remain with impunity, but not blood, at least in any quantity.

Here, then, are certain common principles greatly affecting the success of each of these different proceedings. 1. The limitation of the external wound, as compared either with the magnitude of the part to be removed, or the importance of the deeper structures involved, or the greatness of the result to be obtained, or, in other words, the approximation of the operation to a subcutaneous wound. Herniotomy without opening the sac, and the new operation for cataract, may be really regarded as equivalent to subcutaneous operations; whilst the small opening in the abdominal wall, through which the enormous mass of disease is drawn, really gives to ovariectomy a certain approximation to that form of proceeding. 2. The exclusion of air from the wound itself, or from the serous cavities involved. 3. And last, but not least important, the exclusion of blood from the wound itself, or from the cavities involved. Although these principles may be considered specially important in such cases as these, where a serous cavity is implicated, we have constant opportunities of observing their importance in operations generally. Indeed, it is but natural to infer that the principles which, carefully carried out, lead to the success of such an operation as ovariectomy, should also powerfully affect the success of proceedings upon less important structures.

In the excision of joints as now performed, as well as in the extirpation of growths from the bones of the face, we have examples of the limitation of external incisions. This principle, quite distinct from conservatism, not only favours rapid healing and diminishes deformity, but also, by covering in raw surfaces more effectually and permanently, diminishes the risk of entrance of air into wounds.

Amputation by anterior flap, though not an example of the limitation of incision, shows the good effect of the complete covering in of raw surfaces. There is a cast here of another stump left after amputation of the knee-joint, where a posterior flap was formed. The flap was amply sufficient to cover the bone at the time; but, primary union not taking place, the flap gradually slid down, leaving a raw surface uncovered. Healing was long delayed, and the patient was necessarily exposed to many risks which I need not enumerate.

The importance of the exclusion of blood from wounds left by operation can hardly be overrated. Every amputation of a limb, or removal of a tumour or diseased breast, affords an example of the impossibility of effecting rapid union where blood or bloody serum is allowed to collect between flaps or in the cavity of a wound; and the danger of septicæmia from such a cause in the early days of an operation will be recognised by every one. The application of torsion to bleeding arteries will greatly assist us in carrying out this principle; and the exclusion of air has been considered a matter of such importance, that a variety of means have been employed to effect it, which I can only allude to here, such as the water-bath used in Berlin and the *appareil pneumatique* at the Hôtel-Dieu. But, without employing any such special apparatus, by the management of our preliminary incisions, and by methods of dressing, with or without antiseptics, much may be done to effect this important end.

In the foregoing observations I have endeavoured to demonstrate the increased success which attends modern operations, and at the same time to trace out some of the principles which tend to that success, such as the management of primary incision so as to limit the external wound, approximate it to a subcutaneous wound, and facilitate the covering in of raw surfaces; the concurrent principle of exclusion of air, with or without the assistance of antiseptics; the exclusion of blood, with the consequent increased immunity from blood-poisoning; and the use of chloroform, which brings our patient to the operating-table so much earlier, and before secondary diseases have arisen, lessens shock, and facilitates all our proceedings. In addition to these, there is another of totally different character, which must not be overlooked: this is the greater diffusion in the present day of operative skill throughout the surgical profession.

It is greatly to the improved education, which places at the disposal of the student the means of learning the use of his hands, that this increased amount of operative skill is owing. The time is not so long past, but that some here may remember it, when the student of Surgery might be said to have been taught everything but Surgery: how to write in Latin; how to make chemical experiments; minute and transcendental anatomy; intricate questions in physiology, and many other things. But the one thing which more than any other he would be called upon in actual practice to do—namely, to use his hands, he was not taught. He attended lectures, indeed, upon the principles of Sur-

gery, and, if his inclination lay towards practical Surgery, he might gather some knowledge of it in passing through the wards of hospitals, and in the operating theatre; but he was not put through any systematic course of teaching, by which he might learn how to use a knife; how to put on a splint, or even a bandage: and he might pass, as many a student absolutely did pass, into the ranks of the profession a highly educated man, full of professional learning, and yet totally unversed in the practical proceedings to be adopted in the simplest cases to which he might be called.

How completely all this is changed in the present day, I need not tell you. You know that in every medical school and hospital by means of systematic courses of lectures; by means of clinical teaching; and by means of dresserships, and other appointments, every opportunity is afforded to the student of educating his hands, his touch, his muscular sense, and of familiarising himself with proceedings in which manipulation is required. Hence, although it may be in some degree true of the surgeon, as of the poet, that "*nascitur non fit*", nevertheless, men do now enter upon their active professional life infinitely better prepared, and more likely to make good and successful operators, than they did in former times.

The interchange of knowledge, by means of the periodicals of the day, the rapidity with which a new and improved proceeding or a brilliant operation becomes known throughout the profession, tends also to the general level of our success; and, moreover, I will venture to say that an association like this, which gives to us obscure provincials the opportunity of seeing and hearing the brighter luminaries of our time, and brings vividly to our minds every advance which from year to year may be made in our art, exerts a more potent influence upon the origination and spread of improvements and upon the upraising of the general standard of professional power than has yet been recognised.

I have now, sir, completed the task which I proposed to myself at the commencement of this address; and I trust that, in placing before you these illustrations of some of the most striking characteristics of modern operative surgery, I have also made it apparent, that our special branch of surgical art is not stationary, but progressive; and that we may fairly challenge comparison with other arts and sciences, both as to the amount and rapidity of our progress.

As the world grows older, and the results gathered by past workers and thinkers accumulate, each succeeding generation stands on more advanced ground than its predecessors; facts already ascertained, furnish a basis whereon to build new and truer theories, more efficient instruments are at command to investigate and to construct. Thus the arts and sciences which increase our knowledge, teach us the properties and conditions of matter, tell us of the true place, and value of this little world in the crowded universe, or forge us weapons to fulfil our destiny and subdue the earth, press onwards with more and more rapid strides. Philosophy strikes out new laws and blends together forces formerly thought distinct; gigantic telescopes sweep the sky, dissipate nebulae into their separate stars, pierce the dazzling atmosphere of the sun himself, to find out how he shines, or penetrate far into the depths of eternal and illimitable space to seek the light of some far star; the centre which suspends our system, round which it swings in ceaseless march. Railways scale steep mountain sides; electric cables realise the words of Ariel; rivers are under-tunnelled, and seas are joined to seas.

Our fellow-workers, the physiologist, the chemist, and the physician, are not idle; the innermost recesses of living things are made to give up their secrets; the mysteries of life in health and in disease are wrested from the minute molecules of structure; new drugs rise from the alembic; strange plants yield up their juices and their fruits to soothe our pains or cure maladies hitherto incurable; and, with greater knowledge and more effective means, the physician advances to the combat of disease with bolder and more certain steps, with greater assurance of victory.

What have we, the votaries of the knife, to show beside these marvels? If we cannot answer this question, this address has been written in vain. Gibbon asserts that the meanest insect which crawls along the dome of St. Peter's is more worthy of regard, more wonderful than that magnificent structure; and human life is surely more precious than the appliances which are subservient to it; but life itself may be far below its value, or a mere burden, when cumbered by painful disease or by deformity. We have seen with what audacity the modern surgeon encounters the most formidable enemies of life, what slight traces of his work he leaves behind, how limbs are preserved and yet the diseased part taken away; with what facility the cripple is rendered active, the hump-back made straight, deformities conjured into symmetry; with what safety the thickened lens is taken away from the eye, the torturing stone extracted from the bladder. We know with how much confidence

he can say to you poor wretch writhing in inextinguishable sickness—Suffer me to put you to sleep for a brief space, I will undo in a few minutes the cause of your complaint, and you shall be a sound man in not much longer time than would see you in your grave without such assistance. From that haggard creature, too, whose form is rendered misshapen, and whose life is being exhausted by a monstrous growth, he will, whilst she is unconscious, take away the encumbrance that oppresses her, raise her in a few weeks from her bed of suffering, and restore her to the world a fresh and blooming woman.

These are but samples of his triumph. Time and space forbid me to enter further into their catalogue.

But we must not boast too much, we must confess that there are still foes whom we cannot yet overcome; still wide domains where the great enemy death remains victorious, but which it is for us and our successors to rescue from his scythe and bring under the dominion of the knife.

Nevertheless, what I have been able to relate of the achievements already accomplished, will suffice to show that Operative Surgery has not stood still whilst other arts have advanced, and that, if we do not occupy the foremost place, we are at least well to the front in that glorious race which they win who do the most to diminish human suffering, and to prolong life to elevate and improve the condition of man.

It remains for me to thank you for the patience with which you have listened to this long discourse, and to express my regret that it is not more worthy of the audience.

HISTORICAL NOTES.

*Medical Charges, etc., in the Seventeenth Century.**

In the reign of James I, Dr. Giffard and Dr. Baskerville visited Paul D'Ewes, Esq., twice daily during his illness in Chancery Lane. They received for every visit 20s. each.

In 1665, we have a record that a medical man rode twenty-five miles to see the Rev. Giles Moore in Sussex, and received each time 12s. A physician came the same distance, and received £1. Another physician came to the same patient, stayed two days, and received altogether only £1 : 10.

1602. Two surgeons, who "searched (*i. e.*, made a *post mortem* examination) a corpse suspected to be of the plague," were paid each 3s. 4d. (Nichol's *History of Leicester*.)

The following is a medical bill about the time of Charles I.

	Goodman Hoor	ows per.	s.	d.
p: a purgative potion	.	.	01	00
It: p: 2 purges more	.	.	2	06
Sum	.	.	3	6

For salere and ointment (the sum is defaced).

Paid 5s. for William Hore, by consent.

SAMUEL LACY.

We may conjecture that the second purges were stronger than the first, and therefore charged higher.

In 1646, a young lady at school at Richmond required a purge, and the sum of 1s. 6d. was charged for it by her apothecary.

When John Howard visited Exeter Gaol, he found that in the contract between the magistrates and the surgeon was a clause exonerating the latter from attendance and services when the gaol-fever should rage.

Bloodletting, which was usually practised twice a year (spring and fall), was performed in the case of labourers on Sunday mornings, and the charge was 6d. each.

In the time of Charles II, bleeding in bed was sometimes charged in the case of a lady as high as 10s., and for a gentleman 1s. or 2s. 6d.

Leprosy in Lyme Regis in 1569.

The Mayor of Lyme in 1569 put in his account-book the following.

Item, gave to a toker (*i. e.*, a tucker or fuller) who had the leprosy, to rid him iiij s.

There was a leper-house in West Street (now Broad Street), Lyme. (Roberts, p. 269.)

A Lady Surgeon in Dorset.

In the seventeenth century, the magistrates of Dorset had submitted to them a petition from Grace Greetel, wife of John Greetel, of Stockwood, setting forth that she had endeavoured to cure Bridget Parker, of the same place, of a disease she had; that she had taken the patient

into her own house for treatment; that she had there died; and that the charges of the funeral had fallen upon the doctress. Sir John Strode, Knt., had already ordered the overseers of the poor to pay Mrs. Greetel eighteen shillings for the medical care of her patient and the burial expenses. This the overseers, however, not very unnaturally declined to do. On second application, the court made out an order to the overseers to pay the money, or to be bound over to the next sessions to answer their contempt. (Mr. T. Hearn, "Qui Quondam," in *Dorset Chronicle*, quoted by Mr. Roberts, p. 265.)

Contract for Cure and Prepayment of Fee by the Parish.

The following exhibits in a strong light the absolute faith in medical art which was once felt, and which is still met with not very seldom.

At the January sessions held at Blandford in 1634, it was represented that a widow, one Agnes Hoble, of Toller Porcorum, was languishing of a dangerous and deadly disease, for the cure of which £12 were demanded. The court ordered the churchwardens and overseers forthwith to levy a rate upon the whole parish to raise the sum of £8, which they were directed to pay to "the partie that shall undertake the said cure, taking from him good caution for the performance thereof." How interesting would be the clinical notes of this case—what the disease was; what the doctor designed to do; what he did; and how it fared with his patient. We should also like to know if, under the supposition that he did not succeed in his expected cure, the parish took any measures to recover the money.

Supervision of Doctors by Bishops.

From the records of the Sussex archæologists we learn that it was formerly usual at bishops' visitations to summon all physicians, surgeons, and midwives, to show by what authority they practised and exercised their several offices; and that even now the custom is adhered to, though in form only. Can any of our readers inform us as to the present custom?

Lady Surgeons in the Seventeenth Century.

In the early part of the seventeenth century, we find it recorded that Mrs. D'Ewes, mother of Sir Symonds D'Ewes, was attended in her confinement by a midwife. Sir Symonds suffered in his right eye all his life, as was believed, from her want of skill. Mrs. D'Ewes travelled with her infant to London; and, owing to the shaking of the vehicle and the child's crying, he ruptured himself. At Dorchester he was left behind on account of the rupture, in the hands of a female practitioner, Mrs. Margaret Waltham. (Roberts, p. 264.)

Surgical Treatment in the Surgeon's Own House.

The custom of taking patients to live in the doctor's house during treatment appears not to have been uncommon in the sixteenth century, and later. Mr. Robert Davy, Mayor of Lyme Regis in 1569 took under care a Fleming who had been hurt; and the following entry was made as to the cost.

Item, paid to William Merchant for healing the Fleming's head, and three days his meat and drink 20d.

A short treatment, and a moderate charge.

In other cases, the patient was placed in lodgings near to the doctor.

One Elizabeth Harris was ill at Lyme in 1569. The mayor, John Garland, made her various donations in her sickness, and at length sent her a distance to a priest-doctor.

Item to her when she went to Lechecraft with her ii vi

When the doctor saw her, the following charge occurred.

Item for the coming first of the prist for his paynes iis.

She stayed a month near to her attendant, at a cost for lodgings of 1s. 4d.

Item more payd for her tables for four weeks vs. iiij d.

A separate charge for advice is thus entered.

Item more for Lechecraft first iijs. iiij d.

Item more to Bowden's daughter to fetch salve for her xij d.

We may conjecture that many of the patients for whom these special arrangements were made would be the subjects of outward maladies—ulcers, cancers, and the like. Hence the frequent entries for salve, and for the doctor's "paynes"—probably his applications of dressings.

Irish Surgery in the Seventeenth Century.

Irish surgery would appear to have long enjoyed repute. In the parish-book of Lyme Regis, under date 1665, it is recorded that the mayor paid to one "Robert Vickory the sum of 10s., to help him to Ireland, to cure him of his lameness." The reputation of the Irish surgeon must have been very well authenticated and widely spread, to induce such an expenditure. Can any of our Irish readers help us to a conjecture as to who the famous surgeon probably was?

* Most of these extracts are from Mr. Roberts' valuable book on the *Social History of the Southern Counties*.

REVIEWS AND NOTICES.

ERFAHRUNGEN UEBER SCHUSSWUNDEN IM JAHRE 1866, als Nachtrag zu den Maximen der Kriegsheilkunst. Von Dr. L. STROMEYER. Hannover: 1867.

DIE FREIWILLIGE KRANKENPFLEGE IM KRIEGE. Von Dr. W. BRINKMANN. Berlin: 1867.

UEBER DIE SCHUSSFRACTUREN DER GELENKE UND IHRE BEHANDLUNG. Von Dr. B. VON LANGENBECK. Berlin: 1868.

VERBANDPLATZ UND FELDLAZARETH. Von Dr. F. ESMARCH. Berlin: 1868.

DER ERSTE VERBAND AUF DEM SCHLACHTFELDE. Von Dr. F. ESMARCH. Berlin: 1868.

UEBER DEN KAMPF DER HUMANITÄT GEGEN DIE SCHRECKEN DES KRIEGES. Von Dr. F. ESMARCH. Kiel: 1869.

DAS PREUSSISCHE MILITÄIR-SANITÄTSWESEN UND SEINE REFORM. Von Dr. F. LOEFFLER, Chief Surgeon of the first Prussian Army. Parts I, II. Berlin: 1868 and 1869.

DAS KRANKEN-ZERSTREUUNGSSYSTEM IM FELDE. Von Dr. E. ROSE. Berlin: 1868.

KRIEGSCHIRURGISCHE BEITRÄGE AUS DEM JAHRE 1866. Von Dr. H. MAAS. Breslau: 1870.

[Concluded from page 141 of last number.]

WHEN we turn from the pages of Loeffler, Brinkman, and Mass, to those of ROSE, who is Clinical Professor of Surgery at Berlin, and remember the abundant provision for the casualties of war considered to have been made previously to 1866, we dwell upon an observation of Esmarch in his pamphlet "On the battle of Humanity against the Horrors of War", or the apparent paradox in the juxtaposition of two things so utterly opposed to each other as humanity and war. We tremble at the thought of the miseries probably at this moment being perpetrated near the Rhine. It was bad enough to read of the wounded at Königsgratz that the Prussian medical men had, after having been obliged to leave behind them, unattended, thousands of wounded to be dressed by other surgeons who might possibly arrive in time to help the severely wounded whose cases, if delayed forty-eight hours, would become desperate, on arriving at the grand battle-field during the fight to find themselves the same night and following days face to face with 13,000 wounded Prussians and not less than 15,000 severely wounded Austrians, the slightly wounded Austrians having gone off with their fleeing countrymen. What amount of human succour would be needed to tend such a host of sufferers? The pages of Rose show that even food and water were deficient, so that numbers sank from thirst and hunger, to say nothing of the necessity of leaving hosts unattended to, and not brought in from the neighbouring woods and swamps for days after the battle. Happy the lot of the poor wretches whom the fertile cause of death on the battle-field—hæmorrhage—carries off where they fall. The strain of war incidental to the onward movement of an army when its opponents rapidly give ground, ending in a decisive pitched battle, may be a valid apology for the insufficiencies of the medical and other "humanity assistance"; but what can be said in justification of the fact narrated by Rose, that on the return of peace, two months after the fight, the withdrawal from Bohemia of the victorious Prussians, and the assumption of authority by the Austrians, the convalescent severely wounded soldiers were obliged to be then prematurely removed into Prussian territory, and thence into permanent hospitals at Berlin and elsewhere? As a consequence of this premature removal, numerous relapses took place; in some instances, through the supervention of hospital gangrene, erysipelas, and suppurative inflammation of lymphatic glands. In many cases, before peace was proclaimed, many soldiers and officers, owing to a natural desire to quit the wretched accommodation of Bohemian peasant hovels, took French leave of their doctors and sought their way homewards, often falling victims to their longing for home. Dr. Rose considers removal of the severely wounded before recovery has taken place, to be most highly prejudicial. There is still much to be wished for in the interest of the severely wounded. We can perceive no reason why in such cases, on the resumption of peace, suitable arrangements should not be made with the power which is again entering into occupation of the territory where the wounded may be lying, and may be satisfactorily recovering from their injuries, by which these poor sufferers could remain and be attended by their own surgeons until cure was complete, or the patients were certified to be capable of removal without detriment. "The battle of humanity against the horrors of war", as Esmarch phrases it, has yet many a contest before it. Truly, even in peace as in war, we see too much evidence that, amidst the rejoicings of the one and the excitement of the other, the sufferings of individuals whose bodies and limbs

have been offered upon the altar of patriotism are not sufficiently reckoned; indeed, Dr. Rose shows that a *military order* to evacuate hospitals may be as destructive to convalescents and as saddening to the friends of humanity, represented in this case by the surgeons in charge, as the heartrending miseries unavoidably inflicted amidst the rush and hurry of actual warfare. But for Dr. Rose's pages, we would not have believed that, after proclamation of peace, after the severe cases remaining in Bohemia had fairly passed the critical stage and offered every probability of recovery, waggons for the conveyance of these patients were deficient in number, and without even straw on which to place the weak convalescents whom a long course of attention and trouble "had entwined around the heart of the surgeon" (die einem durch lange Mühen ans Herz gewachsen waren). "Mattresses for these poor people, still suffering from compound fractures of their limbs, were quite out of the question."

On reaching the railway, after fifty miles' jolting in such carts as we have described, even badly wounded officers were put into goods-trucks, in which even cattle were at the same time carried, so that the smell of horses and chlorine contending for the mastery, rendered a prolonged stay in these trucks unbearable. "On the Bohemian side of the Giant mountains, all those who had been the most severely wounded underwent this purgatory." It is scarcely necessary to add, that the wounds of those suffering from compound fractures, and from head, chest, and abdominal wounds, in many cases reopened and terminated fatally. It is refreshing to learn that, through the reforms in the Prussian Army Medical Department, and the increased solicitude evinced by the extended volunteer help departments, such scenes as we have quoted will not recur. It appears to our simple mind that, at any rate after peace was proclaimed, the question of safe removal of the wounded at the proper time is merely one of money. Dr. Rose writes strongly in favour of the diffusion of patients—what we term in England the cottage system—in preference to the aggregation of many in the same building. He mentions the large number of recoveries he witnessed of cases of the severest wounds of lungs, intestines, and hip-joints; the number of recoveries from the severest operations, which from his experience elsewhere in large hospitals would have died in a far larger proportion. He attributes the success attending the dissemination of patients not to each patient in a hovel having more air, or air oftener renewed by artificial means—for it is notorious that, in the Bohemian peasant hovels, the quantity and quality of the air were extremely deficient—but to each wounded man being more distant from other sufferers from similar suppurating wounds. In the order of excellence for the recovery of the severely wounded, other things being equal, he puts treatment in well-located tents, each tent containing not more than four patients; barracks, consisting of the small farmers' boarded barns, the sides of which, from their imperfect building, permit free ventilation; and, last of all, permanent stone and brick-built hospitals.

The work of LANGENBECK, who forms, with Stromeier and Esmarch, the trio of surgeons of Northern Germany of the highest reputation as military and civil surgeons, is worthy of wholesale quotation, for which we have left ourselves no room. He begins by acknowledging that it was natural that fifty years of peace before Sadowa should have allowed medical army arrangements to become unequal to the demands of the times; and he considers that the wars of the last few years have given a mighty impulse to the organisation of the efforts to be hereafter made for the care and cure of the wounded. "In future wars, thanks to the Ghent Convention, thousands of wounded men will now receive the first attention needed upon the field of battle itself, or in its immediate vicinity; and those, forming the more numerous class, who have hitherto sunk through insufficient means of conveyance, will hereafter be saved. In future, the surgeon whose exertions have been paralysed, and too often condemned to do nothing for many hours after the fight, may hope, by improved organisation, to do all that can be effected for the severely wounded, by commencing his work immediately after the fight, and completing all the largest surgical operations and settling the most puzzling of surgical questions within the first 48 hours." God grant that it may be so in the Franco-German war now commencing. We cannot help suspecting that Langenbeck's experience or turn of mind leads him to take too sanguine a view, and to regard matters in a different colour from that in which Dr. Rose saw the reality after Sadowa. We hope we may be wrong, and that the reform of the Prussian army medical arrangements may enable the German surgeons to cope as successfully as Langenbeck expects with 28,000 or more wounded who may fall any day to their charge during the approaching contest.

Langenbeck's experience and example in operations, and his opinions of the proper time for the performance of resection of the large joint, of amputations, and indeed of all capital operations, will have the greatest weight with the profession. He quotes Stromeier's and Esmarch's experience of the success attendant upon primary resection of the joints.

His own opinion is, that the greater number of resections of the shoulder, elbow, and ankle-joints, may be secondary; whilst extensive destruction of these joints, as well as gun-shot fractures of the hip, also, in some cases, of the knee, urgently require immediate resection. His observations on the mode of performing these resections are full of practical wisdom. He advises subperiosteal resection; *i.e.*, not to sever the muscles and tendons, as is often done, but to retain them as far as possible in connection with the fibrous capsule of the ends of the bones and the periosteum. This is to be accomplished by simple longitudinal incisions in the joint to be resected. These subperiosteal resections, which he has carried out in all the articulations, and which can be effected without difficulty in all recent injuries, offer the great advantage that the tissues are less disturbed, and that the most complete restoration of the joint, and the possibility of subsequent active mobility of the new articulation, may be anticipated. We cannot permit ourselves to follow Langenbeck through his valuable remarks on the various branches of military surgery. We must refer our readers to the work itself.

The young military surgeon should carefully study Langenbeck's observations on resections of the smaller as well as of the larger joints; his experience of the relative value of amputation as compared with resection; and the hopes which he entertains that in 25 years' time, resection will be performed in many cases now subjected to amputation. There is one point on which Stromeyer, Langenbeck, Rose, Esmarch, are all agreed, and on which all civil surgeons will confirm their opinions; that, after all capital operations, absolute rest of the part and of the whole individual is desirable. Langenbeck speaks favourably of the plaster of Paris bandage as a means of obtaining immobility of joint and limb. No work which we have seen contains such full practical directions for applying this bandage in military surgery as Esmarch's book which stands first on our list. Langenbeck is a warm supporter of the moderate use of the ice-bag, actively advocated by Esmarch. Langenbeck speaks of having witnessed many of the severest injuries to the knee, thigh, and leg, bear long journeys by railway remarkably well. But surely if the wounded, their surgeons, and their stores, are, according to the Swiss Convention, to be neutralised in the enemy's country, the necessity which has existed in former wars of hurrying the wounded and their attendants into safe quarters and distant hospitals, will no longer exist.

Rose's book contains some facts which the thoughtful surgeon can well understand and appreciate. He remarks that many of the most severely wounded who remained unattended to, and were considered for several days to be moribund, made ultimately good recoveries. It is worthy of consideration whether surgical help often does not do too much for the wounded or not enough. From our experience of injuries and treatment of wounds, if we had the misfortune to have a relative suffering from gun-shot wound involving fracture of the knee, thigh, or hip-joint, we should anxiously consider which of the following two plans would offer the best chance of ultimate recovery.

First Plan.—That the patient should be treated and left under a dry hedge, in an open barn or hovel, to which he could be carefully carried by his fellow-men; be supplied with sufficient plain food and drink; have the limb amputated or resected or not, according to the rules adopted by the best surgeons. If not operated on, and many hours have elapsed since the receipt of the injury, the surgeon, avoiding the search after bone fragments and disturbance of the coagulum (Langenbeck) which already occludes the course of the bullet, and prevents further hæmorrhage and entrance of air, should apply the best immovable apparatus at hand—splints, plaster of Paris, pieces of small faggot-wood, straw, etc.

Second Plan.—Removal from the field of battle to the first dressing place; first examination of surgeon to ascertain, perhaps, the course of the bullet; removal of splinters of bone; application of temporary splint; transport in a cart to the nearest field-hospital, perhaps five or six miles distant. Here a second investigation of the case, whether or not the first surgeon who examined the case had time to pin on the wounded man's clothes a statement of the case as to whether bullet, or bone, or pieces of clothing, etc., had been removed from the wound; a second examination of the wound in all directions to verify or complete the diagnosis of the extent of the injury; perhaps a *débridement* or other operation effected to remove a foreign body. After a few days or a fortnight, when suppurative fever and pus discharge had set in, removal to a more permanent hospital; again a few miles' jolting to the nearest railway—possibly in a cattle-truck, as Rose shows, without a mattress or any means of preventing jolting of the injured part; a fourth removal by hand or in a cart from railway to the hospital; and again, after another week or two—unless death intervene from pyæmia, hospital gangrene, or tetanus, caused one or the other by aggregation of the sick and wounded, by exhaustion, by irritation of the wounded parts by disturbance—possibly,

one more removal one hundred or more miles farther, with change of doctors at every turn.

Surgery cannot be blamed for the disappointing results of the most orthodox treatment under Plan No. 2. We are sure we should prefer the first of the above plans as affording the better chances of recovery. Meddlesome surgery is bad; and we consider that the consent of the surgeon to his patient's further transport is the worst of surgery.

The military surgeon may take a hint from the medicine of the present day, and leave Nature, as much as possible, to do her best, removing obstacles from her path and placing none in her way, such as removals and exposure to the danger of proximity to other suppurating wounds. We hope to see, as already stated, that the adoption of the terms of the Swiss international convention, and the placing the charge of the wounded entirely on the shoulders of the medical officers and Volunteer Help corps, as in America, without interference from the military staff, will accomplish an entire revolution in the proportion of recoveries. Loeffler shews the truth of the old saying of military surgeons, that the mortality amongst the wounded increases with the seriousness of the fight:

Ranging from 3.7 per cent., where 54 were wounded.

"	7.2	"	"	134	"
"	6.7	"	"	163	"
"	10.5	"	"	2496	"
"	11.5	"	"	7404	"

Therefore, the old saying is true, that the less readily help is obtainable the greater the mortality. It is well known that of certain classes of the severely wounded ninety per cent. die. There is, doubtless, a large margin for improvement in this class of cases alone, by avoiding disturbance of the part wounded and of the individual himself, rest being essentially the first canon of the practice of medicine and surgery in internal disease and in external and internal injuries. Non-aggregation of the sick and wounded, as far as possible, is the second great canon of clinical medicine and surgery. If these principles be adhered to, and wounds be not unnecessarily interfered with, there appears no reason why the 11.5 per cent. of deaths after a great battle, according to Loeffler, from all wounds, slight and severe, might not be reduced, at least, to 3.7 per cent., which is the proportion of deaths observed after a slight engagement.

Dr. MAAS's book appears a very trustworthy record of his experiences after the battle of Nachod. Being Clinical Professor of Surgery at Breslau, his reports of the fate of 212 severely wounded under his care present the peculiar interest of being prepared by a man accustomed to weigh facts in a calm judicial frame of mind. He quotes approvingly many of Stromeyer's "maxims of military surgery", and recommends Lister's plan of dressing wounds both in civil and in military surgery. The 212 cases treated by him after the fight at Nachod illustrate two of the most serious dangers to which the wounded are exposed. In the first place, he mentions that his mortality was four per cent. greater than that of Stromeyer after Langensals, which he attributes to the facts that the majority did not come under his care until five days after the fight, and that they were treated in ill-ventilated rooms in an old castle. We are not told how far the wounded had been carried from the battle-field. The officers died in a considerably larger proportion than the men; and this Maas ascribes to the officers being located in small rooms on the second floor, whilst the men were placed in large rooms on the first floor.

Of 212 severely wounded, there died 50; *viz.*: from pyæmia, 23; exhaustion, 14; tetanus, 3; tuberculosis, 2; inflammation of lung, 4; injury of abdominal viscera, 3; spinal cord, 1.

Particulars of the whole 212 cases are given, and will serve the future student of military surgery with useful materials for comparison on the relative success attending different modes of treatment. Maas makes the sagacious reflection on the difficulty of comparing apparently similar, but in reality very dissimilar, things. Take, for example, the resection of a hip or knee: in the one case performed within twelve or twenty-four hours after the receipt of the injury, and treated, for example, in one of Stromeyer's well-designed barrack hospitals; in another, the operation being delayed four or five days, and treated in an old, badly ventilated castle, without any provision for efficient drainage and removal of filth-poison. This is a good illustration of the errors of conclusions derived from statistics in military surgery.

All the writers whom we have quoted, who mention the services afforded by volunteers of both sexes, speak highly of the services rendered, and of the probable advantages to humanity likely to result from a still wider extension of the system.

The physical woes of the sad war now commenced will need all the patriotism which the charity and humanity of the civil population can render. Volunteer help and nursing in war can do but little, unless it be directed by organisation into proper channels, and carried out

in a proper manner, with the right persons and materials, at the right place, and at the right time. We have little doubt that the permanent organised societies in Germany, established in readiness for the eventuality of war, will do all that is possible for the mitigation of its evils. It would be some satisfaction to be informed that France is as well prepared with similar humane means for availing herself of the private resources and natural good feelings of the non-belligerent French people and their religious orders.

It is a matter of history that the French commenced the Italian war apparently with a precipitancy almost equal to that displayed in entering upon the present contest with Prussia; and it is equally a matter of history that nearly 200,000 French soldiers were thrown hurriedly into Italy, with extremely slender provisions of medical assistance—with less than half the strength—scarcely one-third the strength—of the ambulance corps (Loeffler) which appeared upon paper.

We hope for better things from our nearest neighbours in the present campaign. Notwithstanding the urgent representations of her best military surgeons, we cannot collect from the French press and literature that the French Government have organised even the civil help to the wounded on anything approaching to the scale which the experience of the Prusso-Austrian war has since led Prussia to adopt. Even Prussia will need the active co-operation of all her enlightened subjects to help to fight the battle of humanity against the horrors of war.

We fear that, after the present war is over, we may miss the services of the pioneer of modern German military surgery, Stromeyer, in any report of the doings and progress of military surgery during the present campaign. We have learned with regret that Stromeyer, who, up to the time of the conquest of Hanover by Prussia, had been General Stabsarzt or Medical Director General of the Hanoverian army, to whose labours the high position of German surgery is so much indebted, has been since placed on the retired list, because of his unwillingness, on the annexation of Hanover to Prussia, to accept an appointment much inferior in rank to that which he had up to that time held. We cannot believe now, that a great emergency has arisen to afford opportunity for his great skill and experience to become available in the promotion of scientific surgery, in company with his medical colleagues of the Prussian army, that the Prussian Government, which has so often shown itself superior to provincial and national prejudices, will, in the interests of science, any longer decline the services, in a fitting sphere of activity, of a man who has only loved his own country too well, and science and his profession (as shown by his works) as well, at least, as his country.

Judging from the tone of German surgical writers, when quoting the maxims and numerous writings of Stromeyer, we believe that the German surgeons in general would hail his re-appointment as an honour to themselves, and a tribute to his world-wide reputation.

CONTRIBUTIONS TO THE THEORY OF NATURAL SELECTION. A Series of Essays. By ALFRED RUSSELL WALLACE. Pp. 384. London 1870.

THIS is a book to be taken with one during a holiday. By this we do not mean that it is either trivial or amusing, for it is neither; we refer rather to the abundance of ideas contained and suggested by it, many of which may be readily illustrated during a country tour. The volume is for the most part a reprint of various essays on subjects connected with natural selection and the origin of species, which were originally published in various scientific periodicals, and were therefore read by comparatively few. One new essay has been added, and various alterations and additions made in the old ones. Mr. WALLACE's object in publishing the book is, partly at least, to put its readers in possession of the author's claims as an originator of the theory of natural selection, and partly to put on record certain points in which he differs from Mr. Darwin.

We have not space for notice of all the essays; that on Mimicry and other Protective Resemblances among Animals is probably known to many of our readers, as it was published originally in the *Westminster Review*. It is extremely interesting and suggestive. The same may be said of a Theory of Birds' Nests; showing the relation of certain Differences of Colour in Birds to their mode of Nidification, in which Mr. Wallace proves that the colour of the female bird is to a great extent dependent on the kind of nest peculiar to the species. The females of birds which build open nests are for the most part dull-coloured on their upper surface, whatever be the colour of the males; but if the nest be concealed, the colours of the female are as bright as those of the male. The essays on Instinct, the Development of the Human Races under the Law of Natural Selection, and the Limits of Natural Selection as applied to Man, may be mentioned as likely to attract popular attention. With reference to the last-named essay, we scarcely feel

satisfied that Mr. Wallace's conclusions express the whole truth, and that the "limits" which he established from known facts will not be removed by the researches of future investigators.

REPORTS ON THE PROGRESS OF PRACTICAL AND SCIENTIFIC MEDICINE IN DIFFERENT PARTS OF THE WORLD. (For the Year beginning June 1868, and ending June 1, 1869.) Edited by HORACE DOBELL, M.D. London: Longmans. 1870.

THE very laudable design of the editor of this work is "to bring together in the English language original and independent reports from all parts of the world, written by distinguished men resident in the countries which they represent." If we look simply to the material contained in the volume, we must congratulate Dr. DOBELL on having collected a great deal of valuable matter. The reports from Germany, France, and the United Kingdom, appear to be well done, and representative of progress in those countries. Dr. P. Leslie's article on "Hospitals, Infirmarys, Dispensaries, etc.," gives an account of the most recent improvements in these institutions in the United Kingdom, as well as an abstract of discussions on Hospitalism, etc. The Hospital Reports are fairly done, although perhaps not always quite equally representative. Mr. Heather Bigg's contribution on Improvements in Mechanical Appliances, etc., is admirable. Dr. Rasmussen's Report on Denmark and Sweden, and that from Dr. Hjaltelin on Iceland, also possess considerable merit. Dr. Brandt's article on Portugal contains some interesting facts about the mineral springs of that country (of which there seem to be a great many), a full account of the regulations with reference to prostitution in Lisbon, and other facts of interest in connexion with prevalent diseases and methods of treatment. There are several long articles on the climates of various health-resorts by Drs. Brewer Mattocks (Minnesota), T. M. Madden, J. H. Bennet, and C. B. Fox. Dr. Madden's report is the most comprehensive, although the writer in one or two passages displays, we think, rather questionable taste. An article is given to the Therapeutic Uses of Etherised Cod-liver Oil, Pancreatic Emulsion, and Pancreatine. The report from Ireland on Pancreatic Emulsion, by Dr. R. J. Kinkead, is the fullest on that subject, and is by no means exhaustive.

When, however, we ask ourselves whether Dr. Dobell has fulfilled his self-imposed task, we are bound to answer in the negative. The work of collecting from medical men in all parts of the world information on the recent progress in medicine, and publishing it early in the succeeding year, is almost herculean; and that Dr. Dobell should have attempted it, is highly creditable to him. The magnitude of the work, however, is but little excuse for a hasty plan of execution and an incomplete result. We should probably not be considered too exacting, if we expected from the editor that he should exercise freely his official discrimination in excluding articles on extra-medical subjects and in withholding any reports which displayed want of necessary care and inquiry on the part of their authors; and especially that he should refuse to admit any communications which were in the least open to the suspicion of desire for personal advancement on the part of the authors.

We trust that in the next volume of these Reports much of the space occupied in the present number by articles of doubtful worth will be filled by valuable reports from India, America, Australia, and South Africa, all of which are but poorly represented in the present one.

ON THE PRESERVATION OF HEALTH; or, Essays Explanatory of the Principles to be adopted by those who desire to avoid Disease. By THOMAS INMAN, M.D. Lond., Physician to the Royal Infirmary, Liverpool, etc. Second Edition. Pp. 207. London, 1870.

Dr. INMAN's book is a curious production. It contains, of course, a good deal of valuable matter; but, then, a book which does not contain some good must be very bad indeed. Its value is not cloaked by names unintelligible to non-medical readers; this is laudable when it is consistent with precision and completeness, conditions which, by the way, are very difficult to fulfil without the use of technical terms. It is difficult, however, to accord any further praise to Dr. Inman; and there are some features about the work which strike us as decidedly objectionable. The use of such expressions as "tipple", "turning the tap off", "gorge rises", etc.; the employment of examples of doubtful sex as instances of the difficulty of defining words; the frequent citation of medical cases which have occurred in the writer's practice, for purposes of illustration, show a want of good taste, which we should think will go far to limit the sale of the book. There is, at the end of the book, a list of Dr. Inman's works, with very complete descriptions of the scope and contents of each. We are not surprised at this after what has gone before.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 13TH, 1870.

THE NEWCASTLE MEETING.

THE Newcastle meeting—although at the time we write we are only in its middle—may be reported to be, as have been all our recent ones, a great success. Although at such a great distance from most parts of England, and especially from the metropolis, its attractions have sufficed to draw together an assemblage of medical men which few of our anniversaries have seen exceeded.

To say that the Association has been received hospitably by the Newcastle profession, is to say what is not in the least adequate to the case. No effort has been spared on the part of our entertainers at any of the places recently visited; and it seems to have been a point of emulation with each to excel its predecessor. Dublin, Cambridge, Chester, Oxford, and Leeds, have each in succession left their very pleasant memories in the minds of those who visited them; but we are much mistaken if those of Newcastle will be one whit behind any of them.

At the first general meeting on Tuesday evening, the attendance was large. The President (Dr. Chadwick), in a short speech, gave a *résumé* of the year's duties, which in connection more especially with the Medical Bill had been unusually onerous. In appropriate terms he introduced his successor—"The President is dead! Long live the President!" and Dr. Charlton stepped up to the post of honour. The address of the latter held the audience in close attention for nearly an hour. Having adverted briefly to the history of Newcastle, and especially to its past and present in reference to sanitary matters, he then adverted to medical politics, and to the more pressing medico-social questions of the day. In reference to the Medical Bill, although well satisfied with its withdrawal, he spoke far less exultingly than his predecessor had just done—perhaps from the circumstance that he had been less directly engaged in the battle. To the use and abuse of alcoholic stimulants he next adverted in very suitable terms; and his assertions as to the extreme importance of the question were received with much approbation by his audience. To the opponents of the Contagious Diseases Act he applied the happy epithet of "an association of strong-minded women and weak-minded men." The presence of ladies (two in number) perhaps prevented him from entering more at length into the discussion of this topic, and he contented himself with this single back-handed blow.

In the proposal of thanks to the retiring President, Dr. Stokes made a humorous speech, and was permitted, from the light-handed way in

which he dealt with it, to speak of several subjects not precisely on his card. Amongst these was the Medical Bill, the premature extinction of which had been claimed by Dr. Chadwick as a laurel for the brows of the Association. Dr. Stokes denounced the action of the Association as "a great mistake"; and having very briefly stated some reasons, passed on to other subjects. When Dr. Paget, in seconding the vote of thanks, proceeded to make a serious and detailed defence of the defunct measure, he was stopped very properly by Mr. Husband, on the plea that the subject was not in order, and that it was essential that both sides should be heard if one were permitted to express its opinions. With admirable taste and temper, the President of the Medical Council (Dr. Paget) accepted the rebuke, and apologised for himself and Dr. Stokes. Dr. Chadwick, in responding to the vote of thanks, began by quoting the proverb about not looking a gift-horse in the mouth; but seemed much inclined to question the value of the donation of thanks he had been asked to receive when both mover and seconder had found so much fault with his policy. That policy, he protested, was simply the expression of the wishes of the Association, and as such his plain duty. Dr. Paget, in the strongest terms, denounced the idea that either himself or Dr. Stokes had intended to imply censure on the President; and here the matter ended. It gave, however, an opportunity—irregular although it undoubtedly was—for some sort of expression on the part of the large meeting of its feelings in reference to the Bill itself; and we are bound to record that a considerable majority, in spite of Dr. Stokes' argument, seemed well satisfied with the result.]

The Annual Report, which was subsequently read by the Secretary, showed that the Association has elected 414 new members during the past year; that, after deducting resignations and deaths, it has a clear gain of 258; and that it now numbers 4,258.

THE ANNUAL MUSEUM AT NEWCASTLE.

THE Annual Museum is this year by much the best that has yet been held. It is the third, and we have the advantage of experience. Great credit is due to those on the spot who have taken charge of its management, and especially to Dr. Banning, the Secretary of the Museum Committee, and Dr. Page, the House-Surgeon of the Infirmary, for the excellent arrangements which have been made. Two large rooms in the Infirmary have been set at liberty for it, and well provided with the required fittings. Even on Saturday evening, the Museum was already in good order, and at that time a large half of the objects had yet to arrive. We are especially encouraged by the fact that the number of exhibitors increases each year, as also the variety of objects shown. We have this year wax models which emulate the original in their admirable accuracy of detail; and we have diagrams of somewhat primitive design—made, however, by the aid of a description, to tell their tale instructively. There are numerous drawings illustrative of symptoms or of pathological change, and many of them admirable as works of art. Instruments, as usual, are in abundance; the firms of Krohne and Seseman and Messrs. Mayer and Meltzer having especially distinguished themselves. The collection of pharmaceutical preparations exhibited by Mr. H. Brady of Gateshead has attracted much attention; and Messrs. Hopkin and Williams of New Cavendish Street, and Savory and Moore of New Bond Street, are also prominent in the same department. Messrs. Hopkin and Williams have an excellent collection of new or rare chemicals used in medicine, including Asparagine, Curari, Furfurine, Chloride of Ethyline, Prophylamine, and many others. Messrs. Fox and Co. are bold enough to exhibit "Palatable Castor-Oil", "Palatable Cod-Liver Oil", and "Palatable Cod-Liver Oil with Quinine"; but we have not heard of any visitors who have subjected the accuracy of their adjectives to the test of a trial. A

committee ought certainly to be appointed with that duty. A pleasant castor-oil would be one of the greatest boons which the family practitioner could have placed in his possession. We have our fears, however, and well remember that, at the Oxford meeting, an enthusiastic contributor sent some illustrations of a new mode of preserving morbid specimens, which, on being opened, stank so abominably that they had to be forthwith banished.

Amongst the exhibitors of new books, we miss Messrs. Williams and Norgate, who last year furnished a splendid collection of foreign works, which excited much interest. This year, Messrs. Churchill are the chief contributors, and show a very good collection of our standard works—new publications or new editions. Mr. Lewis also shows a dozen or more valuable works, most of them foreign, and a complete set of the New Sydenham Library, for which Society he is the agent. Altogether, we may say of the book department, that any country associate who may prefer to see the book he thinks of ordering, before doing so, has here an excellent opportunity for making his investigation.

We shall report on the Museum at more length next week.

THE new Borough Lunatic Asylum at Ipswich has been opened, and several patients admitted.

UNWHOLESOME fish, amounting altogether to fifty-four tons, was seized during the last month in or near Billingsgate or Columbia Markets by the officials appointed by the Fishmongers' Company.

Mr. WALTER BENNETT, brother-in-law and assistant to Mr. W. W. Howard, surgeon, of Glossop, on going to visit a patient a few days since, fell dead immediately after knocking at the door.

THE Bolton Infirmary has received a legacy of £2,000 under the will of Peter Greenwell, Esq., and a donation of £100 from Miss Mary Crow.

THE Library of the Royal Medical and Chirurgical Society will be closed from Monday, August 15th, to Saturday, September 10th, both days inclusive.

THE vacancy in the office of Surgeon to Christ's Hospital, London, occasioned by the resignation of Mr. Thomas Stone, has been filled by the appointment of Mr. Herbert Alder Smith.

THE total amount of money received on behalf of the Hospital Sunday Fund from the Manchester and Salford Medical Charities for 1870 is £5,501:8:6.

THE *Athenæum* states that the will of the late Dr. Auzias Turenne desires that his body may be dissected and his skeleton cleaned, articulated, and hung up in the museum of the medical school of Christiania.

MR. T. HOLMES's work on the *Surgical Treatment of Diseases of Children* has been translated into French by Dr. O. Larcher, who has also made some valuable additions from the writings of Guersant, Giraldès, Marjolin, and other authors on the subject. The translator publishes a letter from Mr. Holmes, "who regards the value of the work as much increased by the labour which M. Larcher has bestowed on it."

THE EMPEROR NAPOLEON III.

WE are informed on good authority that the Emperor's health has suffered considerably from the exhaustion and fatigue incidental to the great physical exertion and mental excitement through which he has passed. Baron Larrey and M. Nélaton are in attendance, and have prohibited the active exertions which the Emperor wished to make on two occasions since he has assumed command at Metz. Letters which have reached Paris from two medical sources, however, describe the Emperor as displaying wonderful serenity under serious physical and mental trials.

PERILS OF THE STREETS.

ON Saturday last, at St. Mary's Hospital, no less than five young boys were in the accident wards, all suffering from broken limbs, caused by the reckless driving of cabmen and carmen during the past week.

MORE BUTTER MYSTERIES.

It is stated that the meat which the London inspectors seize, as unfit for food, is paid for at the rate of a halfpenny a pound. It is not, unless the case is very bad indeed, absolutely destroyed; but melted into fat and sold to whomsoever may choose to buy it. Plenty of people are very willing to acquire this treasure, for it is used in making butter!

THE CHOLERA.

A TELEGRAM from Constantinople, under date of August 4th, announces that in consequence of several cases of cholera being reported from Taganrog, the Government has ordered all arrivals from the Sea of Azoff to undergo quarantine.

NEW ACT ON CHARITABLE FUNDS.

MANAGERS of hospitals will be glad to know that on the 1st instant an Act received the Royal assent as to the investment on real securities of trust funds held for public or charitable purposes. Corporations and trustees holding money in trust for any public or charitable purpose may now invest the same in real securities.

THE CONTAGIOUS DISEASES ACTS.

THE Director General of the Navy Medical Department, Dr. Armstrong, during his recent official visit to Portsmouth, was engaged in investigating the working of the Contagious Diseases Act at that port; and it is believed that one result of his inquiries will be, that the medical duties will be intrusted to a surgeon belonging to the service, instead of to a private practitioner, as is at present the case.

SURGEONS FOR THE WAR.

WE are requested to state, in answer to frequent inquiries, that the North German Government will admit British medical men as volunteers in their army hospitals, provided that they speak German fluently, that they have the licence to practise medicine and surgery in the United Kingdom, that they have the permission of their Government to serve as medical volunteers in Germany, and that they will place themselves unconditionally at the disposal of the North German Government.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A QUARTERLY court of the directors of the above Society was held on July 13th. The President (Dr. Burrows) took the Chair. Fresh applications for relief were received from two widows and four children, and grants were made to them in accordance with the necessities of the applicants. There are now 58 widows and 256 children receiving assistance from the Society. The sum of the grants for the half-year amounted to £1406, being an increase of £26 in the amount voted last half-year.

DIAGNOSIS BETWEEN REAL AND APPARENT DEATH.

DR. LABORDE, in a paper recently read by him before the Academy of Medicine in Paris, has endeavoured to show that the effect produced on a bright steel needle inserted into the body indicates whether death has or has not occurred. When life is present, he says, the needle, generally very soon, becomes more or less tarnished by oxidation; when, on the other hand, death has taken place, the needle, even at the end of half an hour or an hour, will retain its brightness. M. Laborde believes that, in the first instance, the occurrence of oxidation, with its attendant electric phenomena, indicates that death is only apparent; while, in the second, the complete absence of oxidation is a sign of real death. The communication has been referred to a committee consisting of MM. Gavarret, Béclard, and Vulpian.

FINANCIAL STATEMENT OF THE GOVERNMENT OF INDIA.

Mr. GRANT DUFF, in making the financial statement of the Government of India, said that the Committee was familiar, from some papers that had been laid before the House, with the excellent results of the chinchona cultivation. Peru and Ecuador had given increased facilities for combating fever, one of the worst enemies of man in India. It was now the turn of Brazil to enable them to combat acute dysentery, a hardly less formidable foe. Measures had been taken to send out from Kew, from Edinburgh, and also directly from Brazil, the *ipêcacuanha*, which is now considered almost a specific against that terrible malady.

DR. CORMACK'S RECEPTION AS A "DOCTEUR EN MÉDECINE" OF THE FACULTY OF PARIS.

SOME time ago, Dr. Rose Cormack passed the examinations for the medical doctorate before the Faculty of Paris. On Thursday, the 4th instant, he publicly defended his thesis in the "Salle de Thèse", before the Faculty, and was forthwith in due form admitted as a Doctor of Medicine. By referring to the *Medical Directory* we cannot find that any other physician in Paris holds both the British and French degrees of Doctor of Medicine. The title of Dr. Cormack's thesis (which is printed) is, "De l'Entrée de l'Air dans les Orifices béants des Veines Utérines, considérée comme Cause de Danger et de Mort subite peu de Temps après la Délivrance." It consists of fifty quarto pages. The professors who interrogated Dr. Cormack on his thesis were Professors Pajot, Béhier, Peter, and Polaillon. The dedication—a warm tribute of friendship and admiration—is to the following effect: "À SIR JAMES COXE, KNIGHT, M.D., F.R.S.E., Commissioner in Lunacy for Scotland, dont la haute intelligence, la persévérante énergie et la sagacité administrative ont rendu le traitement des aliénés pauvres de l'Ecosse aussi excellent qu'il était naguère mauvais, scandale qui faisait rougir la science et l'humanité; cette Thèse est dédiée avec de profonds sentiments d'estime, d'admiration, et d'affection, par l'auteur."

ORGANISATION.

It is stated that the committee appointed to inquire into and report upon the present organisation of military hospitals, consisting of Dr. Crawford, Dr. Murchison, F.R.S., Mr. Bourne, and Mr. Bridgsett, and Mr. Charles S. Bevill, secretary, have been engaged during the past few days in the Southern military district, including the Royal Victoria Hospital at Netley and the hospital establishments in Portsmouth garrison. One of the results of the labours of the committee will most probably be, with hospitals such as Netley, or large garrison hospitals as at Portsmouth, that the principal medical officer in charge will have a power of control quite independent of the executive military branch of the army, and the whole system of organisation remodelled in accordance with the spirit of the recommendations contained in Lord Herbert's report of 1858.

LONDON WATER.

PROFESSOR FRANKLAND, in his report to the Registrar-General on the quality of the metropolitan water supply during the month of July, states that all the waters delivered in London were clear and transparent except that of the East London Company, which contained brown particles and filaments among which living organisms were observed. Dr. Frankland makes two suggestions of great importance in a sanitary point of view. He points out that the patent for Clark's softening process having expired, all water companies are free to avail themselves of this simple method of reducing the hardness of water and removing from it a large proportion of its organic impurities. It would not be an undue return for their monopoly of the supply, if the London water companies were in future to apply Clark's process to all the water delivered by them for the public use. Dr. Frankland insists also on the good quality, for bathing purposes, of the Thames, as it passes through London, after its water has been filtered through sand. "The river current", in his opinion, "would afford power for effect-

ing this filtration, and public floating baths established on the Thames, through which a constant current of filtered water was made to pass, would be much superior, both as regards convenience and purity of water, to the best bathing attainable in the Serpentine." The establishment of swimming schools for both sexes, on the Thames, would put an end to the unfavourable comparison between London and some other cities of Europe as regards this valuable adjunct to public hygiene.

BROKEN RIBS.

ON Friday week, Mr. A. Cain, Government Inspector, held an inquiry at the Marland Workhouse, Rochdale, respecting the death of James Doran, a lawyer's clerk. In June last, Doran was taken to the workhouse as a lunatic, and on the following Tuesday he was removed to Prestwich Asylum, when it was discovered that seven of his ribs were broken, and he died a few hours after his arrival there. An inquest was held, and the verdict returned was to the effect that death had resulted from disease of the heart, accelerated by fractured ribs. An impression prevailed that Doran's ribs had been broken in Marland Workhouse, and the official inquiry was looked forward to with interest. Mr. James Gent, the master of Marland Workhouse, stated that he ordered William Pilkington and Robert Putterworth to put the strait waistcoat upon deceased, as he was striking his chest, and it was done in his presence without any resistance. Dr. Lawton visited the deceased daily. Witness's impression was that the deceased's ribs were broken before he entered Marland Workhouse. Mr. James Lawton and other witnesses were examined, after which Mr. Cain remarked that the whole of the evidence went to show that no violence had been used towards the deceased in the workhouse. However, he would lay the evidence before the Poor-law Board.

CARE OF THE WOUNDED.

THROUGHOUT Germany, from the Rhine to Berlin, and further East, the most careful preparations have been made for the reception and transport of the wounded. As, to prevent typhus and other epidemical diseases, the sick and wounded are to be distributed over a wide area, it was necessary to have everything in readiness for their conveyance from spot to spot. For this purpose localities have been hired in the towns on the route and converted into hospitals or temporary resting-places for the sufferers. How extensively this system has been carried out you may infer from the fact that hospitals for several thousands are being formed at Berlin, at a distance of nearly six hundred miles from the battlefields, and that all the way from Saarbrück to this capital the rooms in which the unfortunate travellers will rest are already fitted up and waiting their arrival. To inform any doctor, who may treat an invalid, of the view taken of his case by the medical man who saw him first, a label will be attached to the sufferer's neck, describing symptoms, etc. In addition to this, every soldier in the army has a sort of ticket on his person containing the name of his regiment, battalion, and company, with a number by which his identity can be easily ascertained.

AID TO THE SICK AND WOUNDED IN WAR.

WE have already intimated the successful formation of an influential committee for organising a national society in connection with that of Geneva. On the 4th instant, at a large and influential meeting held at Willis's Rooms, the Duke of Manchester presiding in the absence of his Royal Highness the Prince of Wales, the society was publicly formed, and resolutions passed expressive of the urgent necessity for immediate steps being taken to obtain official recognition from Government, and to complete the arrangements required for affording assistance to the sick and wounded of France and Prussia. An admirable letter, sympathising with the objects of the meeting, and offering advice in the organisation of the society, was read from Miss Nightingale. It was decided that Captain Furley, one of the secretaries, should leave at once for the continent, to obtain the necessary information for the

organisation of the society. The daily papers continue to publish letters from isolated and independent individuals, requesting money and material for affording aid to the sick and wounded. It would be much more to the purpose if these charitable persons would exert themselves in aiding the national society just formed to carry out the objects it has in view. It would save much time, much money, and much trouble.

SCOTLAND.

THE ABERDEEN ROYAL INFIRMARY.

AT a meeting of the Managers, held on July 25th, it was resolved, on the recommendation of the committee, that the vacancy caused by the resignation by Dr. Keith should be filled up by the appointment of a fourth or junior surgeon, to act literally in the capacity of an assistant-surgeon, but without receiving any salary. At the ensuing meeting, held on the 29th ultimo, Dr. Alexander Ogston, who had strong claims on their support, was elected by a decisive majority of the Managers to the appointment. Notice was given at the same time by one of the Managers, that he would move, at the next quarterly meeting in October, that the resolution of the Managers at their previous meeting, with regard to the duties and non-remuneration of the fourth surgeon, should be rescinded, and that he act as full surgeon, and receive with the other surgeons equal emoluments; or, alternately, that he should receive a salary from the funds of the infirmary for his duties as junior surgeon. In so far as the remuneration is concerned, it is but fair that the services of the junior surgeon should be recognised in some way. It is difficult to see on what principle the junior men at some hospitals are denied any pecuniary return for their services, generally of a more tedious and uninteresting character than those of the seniors, while, at the same time, they are in a position in which to them pecuniary aid, however small, is often of considerable importance. That the scant duties of the new appointment should give dissatisfaction we are not surprised, and they will likely require to undergo some addition. Were the surgical out-patients handed over to the junior surgeon, there would not only be additional opportunities afforded him to prepare himself for the heavier and more responsible duties of the wards, but he would be enabled to devote more time to the instruction of the students than could be expected by the surgeons. A similar appointment on the medical side, as suggested by us in our Report on the Infirmary, would go far to relieve the in-patient officers of much irksome work, and enable them to devote more time for clinical teaching in the wards.

THE ABERDEEN ROYAL LUNATIC ASYLUM.

WE have received the annual report for 1869 of this well known institution, containing, as usual, a succinct and interesting medical report by Dr. Jamieson. At the beginning of the year 1869, there were resident in the Aberdeen Asylum 412 patients, divided into 194 males and 218 females. During the year, there were admitted 77 men and 91 women, in all 168 new cases. The total under charge amounted, therefore, to 580; being an increase of 50 patients over the gross number for 1868. The average resident number was 420, ranging from 414 on January 1st, to 432 on October 1st. 132 were removed, and 22 died. During no previous time, therefore (the report states), had the operations of the house been on so extended a scale. The deaths numbered 22 only—a remarkably low mortality. Twelve died from cerebral diseases, or affections of the head; seven of thoracic diseases, or affections of the chest; none of abdominal disorders; one of gradual exhaustion vital force; and two by the unusual way of suicide or accident. Of the 132 patients removed, 55 were discharged recovered, and a still greater number in various degrees of improvement, such as to render an enforced deprivation of liberty unnecessary, or the medical treatment of the asylum no longer requisite. This class of removals was much swollen by the larger number of patients transferred to the recently opened wards for incurable cases in the various poor-houses of the dis-

trict; a movement which, Dr. Jamieson is of opinion, while it may in some degree lessen parochial expenditure, is not otherwise beneficial to the community, and capable of telling unfavourably both on the financial and medical history of the institution. To counterbalance 154 removals from all causes, 168 cases were admitted, which are classified in some well arranged and instructive tables appended to the report, carefully drawn up by Dr. R. Alexander, one of the Resident Medical Assistants. Of these, the most numerous class was that in which intemperance was the associated condition, a class twice as numerous as any of the others; next the epileptic, nine in number; the paralytic and those in whom morbid mental symptoms succeeded cerebral disease. After these, came cases arising from child-birth and nursing, cases connected with disordered sexual functions, cases developed in phthisical and scrofulous subjects, disordered manifestations resulting from climacteric changes, and, lastly, decay of mind from old age. These groups always form marked divisions in the annual admissions of every asylum, and make up more than a third of the whole number of the new entries for 1869. The hospital was formally and carefully inspected by the Lunacy Commissioners thrice during the year, and the general management was much commended. They, however, suggested that a dining-hall should be added to the asylum, as exists in all the newly erected district hospitals—an improvement which the report states to be more than usually difficult, architecturally, and less than ordinarily suitable where the inmates are not conveniently all of one grade, as in a county or district asylum. The Commissioners also pointed out the crowded state of the house and the necessity of further enlargement for the accommodation of district cases, and of the lower class of private patients, and also as a step preliminary to several desirable internal improvements. This recommendation the Committee of Management at once acted on, and at a special general Court of Managers, held on July 29th, it was resolved immediately to extend the east wing of the women's side, so as to provide additional accommodation for from fifty to sixty patients, at a cost of £1200.

REPORT OF EXPERIMENTS ON THE BROMIDE OF POTASSIUM USED IN MEDICINE.

THE bromide of potassium now used in medicine is remarkably pure. Out of six samples described below, only one contained iodine; and even in that case the amount of iodine was very minute. The crystals of bromide of potassium, like those of the iodide, are sometimes transparent and sometimes opaque; the latter kind containing a certain amount of water, while the former are almost, if not entirely, anhydrous.

Analyses of these six samples gave the following results.

No.	Obtained from	Quantity taken. grains.	Silver-salt obtained.	Silver required.
1.	Eye Hospital, Moorfields; transparent kind	5.955	9.32	5.40
2.	London Hospital; ditto	5.955	9.32	5.40
3.	Douthwaite, 58, Bishopsgate; ditto ...	5.955	9.22	5.40
4.	Skin Hospital; ditto	5.955	9.40	5.40
5.	Warner and Co, Fore-street; ditto....	5.955	9.26	5.40
6.	Bell and Co., Oxford-street; opaque kind	5.955	9.05	5.26
	The theoretical numbers for absolutely pure bromide of potassium are	5.955	9.40	5.40

A determination of water was made in the sample of opaque bromide (No. 6). It contained 2.7 per cent. of water.

The sample No. 3 from Douthwaite's contained a trace of iodide of potassium; all the rest were quite free from iodine.

These results show that chlorides are almost entirely absent from the commercial bromide of potassium in some instances; and that in the worst of the samples examined, there was not more than 5.2 per cent. of chloride of potassium.

The method of examination adopted in this case was the same as that described in the Report on iodide of potassium.

THIRTY-EIGHTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in NEWCASTLE, August 9th, 10th, 11th, and 12th, 1870.

THE thirty-eighth annual meeting of the British Medical Association commenced on Tuesday last. At eight o'clock in the evening, Dr. CHADWICK, the President for the past year, took the chair in the lecture-theatre of the Literary and Philosophical Institution at Newcastle-on-Tyne. A very large number of members and visitors were present. The Mayor of Newcastle, in his official robes, occupied a seat at the left hand of the President.

Dr. CHADWICK, on taking the chair, delivered a brief address, in which he reviewed the work of the day. In conclusion, he said: I must not forget that my chief duty here is to introduce you to my excellent successor. [*Loud applause.*] In Newcastle, it would be folly to attempt his praise, even though I speak with the authority of more than thirty years' acquaintance. [*Applause.*] He has made for himself a position here which warrants this great Association accepting him as their President. He belongs to a class of medical practitioners well deserving consideration—a class doing much, in the unostentatious exercise of their medical duties, to maintain the dignity of the profession and secure the esteem of every class of the community. Dr. Charlton is an honour to the profession of this district, and will, by the discharge of his duties as President of the Association, materially enhance his own reputation, and bring credit to the body of which, for the next twelve months, he becomes the head. [*Applause.*] Bear with me for a moment, whilst, with loving and reverend hand, I would lay a memorial wreath upon the recently closed graves of those who, since our last anniversary, have gone “to that bourne whence no traveller returns”; for the losses we have sustained by death this year have been remarkable in our annals. *Facile princeps* is Syme, then follows Simpson [*applause*], and, with an interval, Nunneley and Jeaffreson, men of mark, long familiar not only to us, but to the world, with whom as associates we were privileged to hold sweet converse; these will meet us no longer in our annual gatherings. It is not for me to draw comparisons, or to mete out the eulogy they each deserve. They are now beyond the reach alike of criticism and praise; but their works endure, and by these they will be judged. It will long be for us a subject both of pride and pleasure that in their lives they were of us, and that our objects secured their sympathy and approval. [*Applause.*]

Dr. CHARLTON then took the chair as President, and delivered an address, which is published at page 157.

Dr. STOKES (Dublin) moved, “That the cordial thanks of the meeting be given to Dr. Chadwick for his valuable services during the past year, and that he be elected a permanent Vice-President.”—Dr. PAGET (Cambridge) seconded the motion, which was unanimously carried.

The PRESIDENT called attention to the fact that the Mayor of the town in which the Association was assembled was present. He regarded the attendance of his worship as a high honour, and proposed a vote of thanks to him, and also to the Sheriff of Newcastle.—The motion was seconded by Dr. FALCONER, and carried by acclamation.

“*Report of the Council, 1870.*—Your Council offer their congratulations to their fellow-members of the British Medical Association, on holding their thirty-eighth anniversary, in the town of Newcastle-upon-Tyne, a locality remarkable for its historical associations, its manufactures, and its commerce. The great increase of members in the Northumberland and Durham Branch, and their distinguished position, have induced the Association to accept their cordial invitation to meet in this town. The number of members in Northumberland and Durham in 1866 was 33, since which time it has increased to 234, a result chiefly attributable to the formation of the Northern Branch, and the indefatigable zeal and energy of its Secretary, Dr. Philipson.

“Soon after the last annual meeting, the President of the Medico-Psychological Association applied to the Committee of Council, on behalf of that Society, that a Psychological Section might be formed at the next annual meeting of the Association, to which the scientific work hitherto transacted at the annual meeting of the Psychological Society might be transferred. The Committee of Council have complied with the request, and this year a Section will be specially devoted to Psychological Medicine under the Presidency of Professor Laycock.

“Your Council have the pleasure, again, to report the continued increase in the number of members of the Association.

“At the annual meeting in 1869, there were on the list 4066 members, of whom 62 have died, 96 resigned, and 64 have been removed for non-payment of subscriptions: 414 new members have been elected this year. There are now 4258 members on the books.

“The Treasurer's accounts, audited by Mr. Church and Dr. E. L. Fox, are appended to this Report.

“Your Council desire to express their grateful acknowledgment to the President of the Council for the great attention he has given to the business of the Association, which this year has been unusually heavy, for besides six ordinary meetings of the Committee of Council, six meetings of Subcommittees and a special meeting of the Council have been held; at all of which they have had the advantage of his presence.

“All the Branches are reported to be in a very satisfactory condition, and are doing much good work.

“To the Secretaries of the Branches your Council desire to offer their warmest thanks, for without their efforts it would be impossible for the executive to carry on the work of so great an Association.

“Your Council regret to announce that Mr. Hutchinson has resigned the Editorship of the JOURNAL. Mr. Ernest Hart has been unanimously elected as the future Editor by the Committee of Council, who have been influenced, not only by their experience of his successful management of the JOURNAL during his former editorship, but also by strong testimonials in his favour from Sir Jas. Alderson (President of the Royal College of Physicians), Sir W. Jenner, Dr. Gull, Mr. James Paget, the Rev. Professor Houghton, Sir Henry Thompson, Dr. Parkes, Dr. Rumsey, and other distinguished members of the profession.

“The Association has lost by death during the year several very distinguished and highly valued members. Among them must be named Sir J. Y. Simpson, Bart., Professor Syme, Mr. Nunneley, Mr. C. H. Moore, and Dr. Jeaffreson (a Vice-President of the Association, and President in 1865, when the annual meeting was held at Leamington).

“*Hastings Medal.*—The Committee of Adjudication on the essays for the Hastings Medal have been unable, in consequence of the number and great length of the papers received in competition, and the very short time allowed for their perusal, to come as yet to any decision. Their award will be duly published in the JOURNAL.

“*Medical Reform.*—The Report of the Direct Representation Committee will give in detail the efforts of the Association and the Committee to secure the adoption of the two great principles of Medical Reform so long advocated by the Association; viz., one uniform qualification for all, and the direct representation of the profession in the General Medical Council. The Council cannot forbear acknowledging the unwearied exertions of the President of the Association, the President of the Council, and Dr. Waters of Chester (the Chairman of the Direct Representation Committee), who brought the influence of the Association to bear so powerfully upon the Houses of Parliament and the Government, that the latter was compelled, at the last moment, to withdraw from the House of Commons a Bill, which was found to be very generally condemned by the profession. To Dr. Waters especially the Association is deeply indebted for a sacrifice of time and an amount of labour which materially contributed to a renewed recognition, for the first time, of the influence of the profession, and its right to have its wishes considered in medical legislation.

“Your Council would suggest that, as another Medical Bill will most probably be introduced during the next session of Parliament, the Direct Representation Committee should be merged in a Medical Reform Committee, which shall have more extended powers, and thus be enabled more effectually to contend for the adoption of the principles advocated by the Association, which can alone secure a satisfactory solution of the question of medical reform.

“Your Council recommend that Sir William George Armstrong, C.B., be elected an Honorary Member of the Association.

“Your Council have to express their gratification at the extension, during the present session of Parliament, of the superannuation allowance to the Poor-law medical officers of the whole of the United Kingdom, through the action of Dr. Brady, to whom the best thanks of the Association are due.

“The only business that has engaged the attention of the State Medicine Committee during the past year was an application to the Home Secretary to reconsider his decision as to the area to be included in the inquiry of the Royal Commission. The result was a renewed negative to the request preferred by the Committee. The Council suggests to the Association the propriety of reappointing the Committee, of which Dr. Rumsey has been appointed the Chairman.

“Your Council feel that a great future is before your Association; whose influence has been felt by the Legislature and the Government; whose JOURNAL is everywhere recognised as an able exponent of medi-

cal science, and a firm upholder of the just rights and claims of the profession; and whose long roll of members, increasing year by year, comprises the most eminent of our brethren in this extensive empire."

The Treasurer's Report, which has already appeared in the JOURNAL, was also presented.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, August 9th, 1870.

1. *The Siege of Paris: the War and the Wounded.*—2. *Foreign Medical Volunteers.*—3. *Small-pox.*

THE SIEGE OF PARIS: THE WAR AND THE WOUNDED.—Writing on July 25th (p. 121), I said: "The fortifications of Paris are now being put in a state of defensive completeness: this unpleasantly tells us that we may see much bloody surgery without going to the Rhine or the Moselle." Since that date, or rather let me say within the last four days, the march of events has been appallingly rapid and disastrous. On Saturday, Paris was jubilant; flags floated from every balcony and window. France had gained a decisive victory; the French were marching on Berlin! Soon it transpired that no battle had been won. The Government assured the public, at eleven o'clock at night, that they were without any important news. On Sunday morning, the false joy of the preceding day was transformed into stupified consternation. Dismay was depicted in every countenance on the streets; and every friend we spoke to expressed anguish and alarm. The Government had told the terrible truth—mildly, perhaps, but still pretty nearly the truth—that on the previous day, at the very time that Paris was wild with its *fausse joie*, the Prussians had routed two French *corps d'armée*; that now the question was, not the invasion of Prussia, but the defence of Paris. A more fearful revulsion of emotion was never perhaps before simultaneously felt by millions. The proclamation announcing the disasters and appealing to the patriotism of the people, dated at 6 A.M. on Sunday morning, signed by the Empress Regent and all the Ministers, convoked the Houses of Parliament for Thursday, the 11th, declared Paris in a state of siege, and concluded with these words: "Pas de défaillances! Pas de divisions! Nos ressources sont immenses. Luttons avec fermeté, et la patrie sera sauvée. Paris, le 7 août 1870, 6 heures du matin." The pressure on the Government was such, that a second proclamation convened the Senate and the Chamber of Deputies for this day, at one o'clock. They are at this moment in session, surrounded by anxious multitudes, and strongly guarded by troops. *Thirty-three thousand men* are toiling with pick and spade, and all the appliances of engineering science, in completing the works comprised in the nineteen miles of fortifications which encircle this capital. Within three days, 2,600 guns are to be in position. We are looking every moment for news of a battle before Metz, which has been imminent for the last two days. That battle will probably decide the question as to whether the Prussians will or will not be permitted to advance on Paris. The momentous political question will also assuredly have been settled ere these lines are printed.

Hitherto, the war-surgery seen in Paris is limited to the slightly wounded. About two hundred and fifty arrived during the evening of Sunday, from Saturday's battles. Two hundred of that number are at the Val de Grace; and the remaining fifty, being Prussians, are elsewhere. Next week, more serious military surgery may be before our eyes in Paris.

The session at the Ecole de Médecine was to have been formally closed on Thursday, the 11th, by the annual distribution of prizes, and an *éloge* on Velpeau by M. Broca. The disasters of Saturday have caused this day of ceremony to be dispensed with. By an error of the press, or a mistake in my hurriedly written manuscript, the word *Strasbourg* was omitted in my last letter. It was the closing of the Medical School at *Strasbourg*, and not at Paris, I meant to announce.

There is much to say about ambulances, the sick, and the wounded; but, when the terrible crisis of to-day is passed, these subjects will be more easily discussed.

FOREIGN MEDICAL VOLUNTEERS.—I cannot quite understand why some foreigners are, and why others are not, accepted as medical volunteers. Probably the rules have been changed, and changed again and again. Last night, Dr. Brigham, of Boston a very able American surgeon, who has been studying for the last six or eight months in the hospitals of Paris, called on me to say good bye, having in a few hours to start for the military hospital at Nancy, to do duty at which he has

just been appointed. Dr. Brigham has no domicile in France; nor does he hold any French medical title to practise his profession. His services have been accepted irrespective of any such qualifications.

SMALL-POX.—At last there is a decided abatement in the mortality of the epidemic. In the week ending Friday, August 5th, the deaths from small-pox were 151. The mortality for the week from all causes was 1,126. The enormous efflux of population now taking place from Paris must necessarily make the apparent mortality less than it really is. The people who are not in Paris cannot swell the mortuary returns of Paris; while nominally the population is still spoken of as 1,825,274, the number of the census of 1866. The small-pox returns for the last four weeks stand thus:—

Week end. July 15.	Week end. July 22.	Week end. July 29.	Week end. Aug. 5.
225	215	227	151

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES BRANCH: ANNUAL MEETING.

THE Eighteenth Annual Meeting of the Metropolitan Counties Branch was held at the Castle Hotel, Richmond, on Friday, July 22nd. The chair was taken by the retiring President, Dr. GEORGE JOHNSON, who afterwards resigned it to T. HECKSTALL SMITH, Esq., President for 1870-71.

Report of Council.—Dr. HENRY, one of the Honorary Secretaries, read the following Report.

"The Metropolitan Counties Branch, at this its eighteenth annual meeting, contains 368 members. Since July 1869, there have been 9 deaths and 7 withdrawals; 15 new members have been added; so that the number of members is one less than at the Annual Meeting last year.

"The members of the Branch who have died during the year are: Mr. W. J. Allison, of Brighton; Mr. Joseph Chapman, of Hounslow; Dr. W. T. Coleman; Dr. Henry E. Eastlake; Dr. F. W. Gibson; Mr. Edward Headland; Mr. J. Zachariah Laurence; Mr. Charles H. Moore; and Mr. W. J. Stuart.

"Two ordinary meetings of the Branch, and one special meeting, have been held during the year.

"At the first ordinary meeting, held on March 30th, the President read a paper, accompanied by microscopic specimens and drawings, on Hypertrophy of the Arteries in Cases of Chronic Bright's Disease; and at the second meeting, on April 29th, Dr. Ford Anderson read a paper on Provident Dispensaries, their Object and Practical Working. Both these papers were followed by well sustained discussions.

"Your Council, believing that the Branch might profitably occupy itself at one of its ordinary meetings in the discussion of the present state of vaccination, and the best means of counteracting the popular prejudices against it, made a request through Dr. Stewart, one of your Secretaries, to Dr. Edward Seaton, that he would bring the subject before the Branch. Dr. Seaton, while signifying his willingness to comply with the desire of the Council, stated in reply that for the present his duties would prevent him from doing so. Your Council hope, however, that in the course of the next year the Branch may have the advantage of Dr. Seaton's extensive acquaintance with vaccination in its popular bearings. Dr. Lockhart Clarke was also invited by the Council, and had kindly consented, to bring before the Branch some of his able researches on the Physiology and Pathology of the Nervous System. He was, however, prevented by severe illness from reading his paper at the time fixed for the meeting; and the Branch is indebted to their President, Dr. Johnson, for supplying, with the very interesting paper already mentioned, the deficiency which would otherwise have existed.

"A special general meeting of this Branch was held on April 21st, to consider the present aspect of medical reform. The Branch took into consideration the Medical Acts Amendment Bill, which had been introduced into the House of Lords by the Lord President of the Privy Council; and resolutions were passed, which were published in the JOURNAL for April 30th. At the same meeting, a Committee, consisting of the Council of the Branch and such other members as they might think it advisable to add, was appointed for the purpose of examining and watching the progress of the Medical Acts Amendment Bill, and of other Parliamentary Bills affecting the medical profession. Two meetings of the Committee have been held. At the last of them, held on May 16th, a series of resolutions to the following effect was passed.

"1. That the Branch will offer its determined opposition to any

Bill which gives to the Privy Council more extended or other control over the medical profession than is given by the Medical Act (1858).

"2. That the Committee is of opinion that the government of the Medical Council should remain in its own hands; and that the Medical Council, when rightly constituted, is the only body which should be entrusted with the general control of the education, ethics, and registration of the profession.

"3. That this Committee is of opinion that no Bill will be satisfactory which does not provide for the direct representation of the profession in the Medical Council.

"4. That the Medical Council, when amended as above-mentioned, ought to have full power given to it for enforcing its decisions.

"5. That a copy of the foregoing resolutions be forwarded to the Committee of Council of the Association."

"Since this meeting, the Bill has passed the House of Lords, and has been sent down to the House of Commons, altered in some material points from its original condition. The late period at which it has been possible to obtain correct copies of the Bill has prevented the Secretaries from calling, as they had intended, a meeting of the Committee to examine and report on it in time for the present meeting.

"Your Council regret to observe the continued omission from the Bill of any provision for the direct Representation of the Profession in the General Medical Council. A resolution on this subject, and one on the omission of the clause which in the original copy of the Bill prohibited the medical authorities from granting diplomas or degrees to persons who had not passed the examinations of the central boards, will be laid before the meeting.

"Your Council are informed that the second reading of the Bill in the House of Commons is fixed for next Monday. They would therefore urge the members of the Branch to communicate with such members of Parliament as they may be acquainted with, to explain to them the wishes of the profession, and induce them to support the endeavour that will be made either to remedy the defects in the Bill or to reject it if these amendments be not made."

Mr. WILLIAM MARTIN proposed, Mr. J. W. BARNES seconded, and it was resolved—"That the Report of Council now read be received, adopted, and entered on the minutes."

The Treasurer's Report was presented. The following is a summary.

Receipts.—Balance on hand, July 1869, £13 : 15 : 6; subscriptions and arrears since paid, £31 : 12 : 6; total, £45 : 8.

Expenditure.—£25 : 5 : 9; leaving a balance in hand of £20 : 2 : 3.

Mr. ROGERS-HARRISON moved, Mr. HECKSTALL SMITH seconded, and it was resolved—"That the Treasurer's account be received, adopted, and entered on the minutes."

It was proposed by Dr. HENRY, seconded by Mr. W. MARTIN, and carried unanimously—"That the Treasurer be authorised to pay a donation of Five Guineas from the funds of the Branch to the British Medical Benevolent Fund; and a like sum to the Royal Medical Benevolent College."

Notice of Alteration of Laws.—Dr. WALLER LEWIS handed in the following motions, and gave notice of his intention to propose alterations in the Laws of the Branch in accordance therewith—"That the present system of appointing members in Council is not satisfactory, inasmuch as it has the effect of enabling such members as can spare time to attend every or nearly every meeting, to remain permanently on the Council. That, as this Branch numbers now nearly four hundred members, it is desirable to increase the number of the ordinary members of Council. That for this purpose the word 'twelve' in Law IV be changed to . . . That Law VIII be altered to the effect that all ordinary members of Council who shall have acted for . . . years consecutively as Councillors cease to be re-eligible for the space of one year."

Election of Officers and Council.—A ballot having been taken, the following Officers and Council were declared to be elected for 1870-71. *President*: Thomas Heckstall Smith, Esq. *President-Elect*: J. Russell Reynolds, M.D., F.R.S. *Vice-Presidents*: John E. Erichsen, Esq.; George Johnson, M.D. *Treasurer*: Robert Dunn, Esq. *Secretaries*: A. P. Stewart, M.D.; Alexander Henry, M.D. *Ordinary Members of Council*: John Armstrong, M.D., William Bartlett, Esq., Samuel Day-Goss, M.D., Robert Druitt, M.R.C.P., C. H. Rogers-Harrison, Esq., Jonathan Hutchinson, Esq., George A. Ibbetson, Esq., Francis Mason, Esq., J. H. Paul, M.D., William F. Ramsay, M.D., Walter Rivington, Esq., Joseph Seaton, M.D.

Dr. GEORGE JOHNSON, after a few valedictory remarks, resigned the chair to his successor, T. HECKSTALL SMITH, Esq.

Mr. ROGERS-HARRISON moved, and Dr. DAY-GOSS seconded, the following resolution—

"That the cordial thanks of this Branch be given to Dr. George

Johnson, the retiring President, for his able and courteous conduct in the Chair on all occasions."

The motion, after a few words in its favour from the new President, was carried by acclamation; and the vote was acknowledged by Dr. Johnson.

President's Address.—Mr. HECKSTALL SMITH then delivered an Address, of which the following is an abstract.

He thanked the Metropolitan Counties Branch for the distinguished honour which they had conferred upon him. He might well hesitate, as he did, before accepting that honour. His utmost ambition, in connection with the British Medical Association, had been satisfied by the Presidency of the South Eastern Branch, "to which he still clung with the ardour of a first love", and by the position conferred upon him in the Executive Council; but he believed that the Branch intended to recognise the present *status* of the rural practitioners, and do honour to them; and that decided him to accept the offer of the Presidency. Mr. Smith then rapidly sketched the rise and progress of the Association, and dwelt especially on its earlier efforts as the "Provincial". He took as his theme one of the objects set forth at its origin—"The maintenance of the honour and respectability of the profession generally in the provinces, by promoting friendly intercourse and free communication of its members, and by establishing among them the harmony and good feeling which ought ever to characterise a liberal profession." This showed the object, and the want of the provinces at the time. Men of the highest attainments were numerous; and we could now refer back with pride to the volumes of *Transactions*, and to a *JOURNAL* conducted for many years with energy and success; but, thanks to the licensing authorities, the land was sown broadcast with men of whose education no proper test was required, and whose social *status* took the level of their imperfect education. The Provincial Association slowly but surely did its appointed work. Its meetings brought men together; its influence penetrated everywhere; it insisted on a higher standard of education; it originated the movement in medical reform; and very early in its career it pronounced the words "one portal" as the basis of ultimate success. The time arrived for receiving the metropolis into its ranks; the edifice was complete; and it now can claim to be the one great exponent of the wishes and requirements of the profession. It is generally admitted, and partially carried out in practice, that a more practical test shall be required in the examinations for degrees. But it is useless to insist on this unless a system of clinical training be more thoroughly enforced; not mere oral teaching, but a training by which individual minds are enriched with bedside knowledge. Mr. Smith would not advocate a return to the old system of apprenticeship, with its years of mere drudgery; but he maintained that the most critical period of a youth's career should, after an educational test in languages and physics had been passed, be spent in the family of an intelligent working practitioner, where habits of industry would be acquired, powers of observation developed, a true tone of feeling established, and an important amount of elementary clinical knowledge acquired. The pupil would then start on his hospital career with great advantage, and on his moral career with a higher tone. But in a reform in hospital clinical training must be sought the means of meeting the requirements of the present time. The large hospitals—officer as they must be by men of the highest repute—are, from the numerical weakness of their staff, unable to afford this training to the mass of students. Small classes—each with its clinical trainer—should be "told off" for the clinical teaching of the profession. This is now effected in some hospitals; and, as the Association last met at Leeds, the Hospital of that town was selected as an illustration; and a very able letter from one of the staff (Mr. Wheelhouse), explaining the method pursued there, was read by Mr. Smith. Mr. Smith then referred to one or two points in medicine. He said the time is passing rapidly by when men who were engaged in clinical observation 45 years ago and upwards would be alive to state their opinion on the question of change of type in disease; and yet the fact could only be met by the testimony of such observers. He had the misfortune to be one of these. He had been occupied from the year 1823 to 1832 in close clinical observation, under various men of the highest attainments, amongst the poor of a provincial town, engaged in sedentary occupations, and poorly fed. He had then passed to London, and observed disease in the Borough, the lowest haunts of Westminster, and the heart of the City; and he had then gone to the lusty population of a rural district. In all, the type of disease was, as a rule, acute, and life could not be saved without resort to active measures, including blood-letting. Then, in 1832, came the outbreak of cholera; but still the general type of disease was unchanged. The extraordinary epidemic of influenza followed in 1833; and from that date, practising among the same rural population, and in nowise unwilling to use the lancet, he had had no case for years in which a pretext could be found

for its employment. There had been anxious periods since, during which time it required some hesitation about abstaining from its use; but the periods were of short duration, and never presented the diagnostic character of the older period. The conversion of Sir Thomas Watson from his published views was so startling that it might well occasion hesitation in others as to the correctness of an adverse opinion to his; but, after reviewing again and again the opinion which he had formed, Mr. Smith adhered deliberately to his own. The recently revived subject of the employment of water in the cure of disease, Mr. Smith commended to the careful study of the rising generation of practitioners. Trained in his earliest years where the views of Currie of Liverpool were held and practised, Mr. Smith has ever followed them; but their elaboration into a system, based on no scientific basis, seems of late years to have cast a shadow over Currie's views. It will be found that in the employment of water, aided by the clinical thermometer, we have a most valuable therapeutical agent. After alluding to one or two other points in clinical medicine, Mr. Smith concluded by referring to the mighty power raised by the Association, not for the benefit of the profession only, but also for the benefit of mankind. Our successful exertions for the medical officers of the public service—our efforts to ameliorate the condition of the Poor-law medical officers—the earnest exertions of the Association to effect sanitary improvements and lessen the sum of human suffering, in which a very distinguished member of the Branch, Dr. Stewart, has taken the labouring oar—and the persistent demands for medical reform and a just recognition of the rights of our profession—are each and all a means to one end, the public welfare.

Representatives in the General Council.—The following members were elected representatives in the General Council of the Association for the ensuing year: W. Bartlett, Esq.; S. Day-Goss, M.D.; R. Dunn, Esq.; W. Farr, M.D., F.R.S.; C. H. Rogers-Harrison, Esq.; A. Henry, M.D.; Graily Hewitt, M.D.; T. Holmes, Esq.; J. Hutchinson, Esq.; H. Lee, Esq.; W. Lewis, M.B.; W. Martin, Esq.; H. Maudsley, M.D.; W. F. H. Ramsay, M.D.; J. Seaton, M.D.; F. Sibson, M.D., F.R.S.; H. Walton, Esq.; G. Webster, M.D.

Auditors.—On the motion of Dr. J. SEATON, Mr. W. Martin and Dr. G. P. Rugg were appointed Auditors.

The Medical Bill.—Dr. HENRY explained briefly the present position of the Medical Acts Amendment Bill, and stated that Dr. Waters, Chairman of the Committee on Direct Representation, with some of his colleagues, had been for some days in London using their utmost endeavours to obtain, through intercourse with members of the House of Commons, the recognition of the principle of direct representation. The Committee deserved the hearty approval and thanks of the Branch for their labours. It was highly important that this Branch should at once express an opinion on the matter. He proposed,—“That the President be authorised to sign in the name of the Branch a petition in favour of the direct representation of the profession in the Medical Council, and of the reinsertion of the eighteenth clause.”

The motion, having been seconded, was unanimously carried.

Dinner.—The members, with several visitors, among whom were the Rev. A. Welch, Major H. Marshall (9th Lancers), Dr. Gavin Milroy, Dr. James Alexander, Dr. Carr, Dr. Miller, Mr. Horace Smith, Dr. Tomkins, etc., dined together after the meeting; the President in the Chair.

THE ALLEGED MURDER AT BECCLES.—Bury St. Edmund's, Aug. 6th. Crown Court. (Before Mr. Baron Channell.)—This remarkable case (partly heard yesterday), in which a young man named Jacob Ling was charged with causing the death of Anna Maria Chenery, at Barsham, near Beccles, by an attempt to procure abortion, was resumed this morning. The medical gentlemen examined yesterday stated that the injuries from which she died were caused by the introduction of some foreign substance into the vulva for the purpose alleged, and that arteries were penetrated by this substance, causing her to bleed to death. This morning, two other medical gentlemen were examined, and stated positively that they had examined the parts of the deceased's body that were affected, and could see distinctly that she was suffering from a varicose vein, which had burst and caused her death, and that the bursting of that vein might have been caused by very slight pressure—even by a sudden movement of the body. Moreover, they expressed a confident opinion that the appearance of the stick, which was supposed to have been the instrument used, did not indicate that it had been applied to such a purpose, but seemed more as though it had been put in the ground at the spot where the pool of blood was; as had been stated by one of the witnesses to have been the case. His Lordship having summed up, the jury acquitted the prisoner. The trial occupied two whole days.

CORRESPONDENCE.

ACTION OF THE CHOLERA-POISON.

SIR,—Dr. Murray, in reply to my complaint that he had erroneously attributed to me the doctrine that “the *primary* action of the cholera-poison is to cause spasm of the pulmonary artery”, now says that he merely expressed the views attributed to me by the profession in India.

If my theory of cholera is to be refuted, this can be done only by controverting my own statements, and not by discussing opinions attributed to me by those who probably have not taken the trouble to read what I have published. I have never stated that the *primary* action of the poison is upon the pulmonary artery; and, in the passages which Dr. Murray, in his letter published on July 23rd, quotes from my writings, that doctrine “is conspicuous by its absence.”

The theory of the arrest of the circulation *during collapse* by the contraction of the minute branches of the pulmonary artery, is an inference from the undoubted facts of the disease—facts which it explains as no other theory does. Dr. Murray surely does not expect to have the arterial spasm demonstrated, either during life or after death. The hypertrophy of the minute systemic arteries in cases of chronic Bright's disease affords conclusive evidence of their long continued over-action; but it is impossible to obtain the like evidence of the transient spasm of the minute pulmonary arteries in cases of cholera collapse or acute apnoea.

Dr. Murray maintains that the heart is enfeebled during collapse. I admit the fact; but, as I have elsewhere explained, this appears to be a secondary result of the defective circulation, through the coronary as through other systemic arteries. The muscular walls of the heart are weakened in consequence of the defective blood-supply which results from the obstruction in the pulmonary artery. The failing circulation is the cause, and not the consequence, of the cardiac weakness, and cardiac weakness does not explain the fulness of the right cavities of the heart, with emptiness of the left.

Dr. Murray argues that arrest of the pulmonary circulation, and the consequent apnoea, are not the cause of the suppression of bile and urine, because a saline injection into the veins restores the circulation without restoring the secretions. Is this a valid objection? Is it not notorious that, in the majority of cases, the circulation is restored by the saline injections only for a very brief period, and that soon the arrest of the circulation is as complete as before the operation? When the circulation is permanently restored and life saved, as it sometimes has been, by the injection, the secretion of bile and urine returns, as in all cases of recovery from collapse. Dr. Murray says truly that there are cases in which the characteristic cholera secretions have been found in the alimentary canal of the foetus *in utero*, although in the foetus the blood does not pass through the lungs. But surely he does not suppose that this fact is opposed to my explanation of the suppression of bile and urine during collapse.

I have elsewhere (BRIT. MED. JOUR., Feb. 17th, 1866) referred to the interesting physiological correlation of the lung, liver, and kidney, as illustrated by their functional inactivity in the foetus, and their energetic co-operation immediately after birth when respiration is established. The meconium in the intestines of the foetus represents the scanty and modified bile-products which result from placental respiration. The secretion of bile and urine by the foetus is even more scanty than that of a patient in cholera collapse, while the abundant formation of those products by the new-born infant is analogous to the restoration of the biliary and renal secretions during the reaction from collapse. Bile, urine, and carbonic acid, are joint products of oxidation; and their suppression is a necessary result of arrested pulmonary circulation, and consequent apnoea. The secretion of bile by the liver without a free circulation of aerated blood is a physiological impossibility.

I am surprised to find that Dr. Murray, in his lecture, explains the absence of bile from the intestines during collapse by spasm of the gall-ducts. His credulity here more than counterbalances his scepticism as to arterial spasm.

Dr. Murray asserts that syncope is of common occurrence during collapse, and he refers to this as evidence of cardiac asthenia. I admit that sudden death not unfrequently occurs. Sudden death, too, is a common result of pulmonary embolism; but this form of sudden death is quite distinct from cardiac asthenia and syncope. The peculiarity of the collapse of cholera, as distinguished from ordinary exhaustion and syncope, consists in the fact of “patients being able to walk even after the circulation has been so much arrested that the pulse has not been discernible at the wrist.” (See Scot's Report on Epidemic Cholera,

Madras, 1824, p. 24.) The exertion of walking or standing, which, for a collapsed patient, is highly dangerous, is simply impossible for one on the verge of syncope. Dr. Murray, apparently, does not see the distinction between arterial asphyxia and cardiac asthenia, and, therefore, he fails to give the true interpretation of cholera collapse.

I have reason to believe that this distinction is fully appreciated by a large and increasing number of the profession. Assistant-Surgeon Hall, in an article on Cholera in the *Indian Annals of Medical Science* (March 1870), expresses his opinion that the majority of the profession now believe with me "that the stage of collapse is one of true asphyxia, and that it does not depend on loss of fluids by the system."

Dr. Murray declares that "in more than fifty per cent. of the cases that have come under his observation of *malaise*, which is recognised as a stage preceding diarrhoea, there has been no increased action of the bowels." If, by this statement, Dr. Murray means that diarrhoea did not follow the *malaise*, it may fairly be questioned whether they were cases of cholera at all. During a cholera epidemic in a tropical climate, *malaise*, from panic and from physical exhaustion, must be of common occurrence; but surely it would be an erroneous assumption to return all cases of *malaise* as cases of incipient cholera.

Your correspondent admits that "the bowels form one channel through which Nature eliminates the poison". Is it not the only channel of which there is any satisfactory evidence? Dr. Murray "has seen the operation of an ordinary purgative followed by congee stools and collapse." I have seen the application of a mustard-poultice for sore-throat followed by the eruption of scarlet fever; but I did not suppose that the poultice caused the specific fever, which, though latent, must have existed before the poultice was applied.

Has not Dr. Murray seen, as I have, the abrupt arrest of the discharges by opium directly followed by deadly collapse? He appears to hint at something of the kind in his lecture, when he says: "The frequency of the stools may be diminished, and their consistence increased, by opiates and astringents, without improving their colour, removing the tendency to recurrence, or curing the disease."

Surgeon-Major Farquhar, of the Bengal Service, says, in a paper on Cholera, in the *Medical Times and Gazette*, July 30, 1870: "A gentle aperient, guarded by carminatives and a few drops of laudanum, seems to act like a charm in relieving the many who suffer from disordered bowels and the *malaise* of epidemic cholera."

I am happy to be assured that Dr. Murray "concurs with me in my condemnation of opium during collapse." Practically, there are but few points of difference between the head of the Bengal Medical Service and myself; theoretically, I claim to have the facts of the disease and the established principles of physiology on my side; and I hope ere long to number Dr. Murray himself amongst the eminent converts to my theory of collapse.

I am, etc.,

Savile Row, July 30.

GEORGE JOHNSON.

THE REMEDY FOR PROSTITUTION.

SIR,—Thoroughly ventilated although it has been, both for and against, by Mr. Acton and Dr. Drysdale, I venture to plead the great importance of the question as my excuse for attempting to take part in the controversy; and beg the favour of your insertion, in the columns of the JOURNAL, of the following remarks upon the great problem of the day.

My experience as a general practitioner tending to prove that, especially in towns and cities, there are scarcely three youths in a thousand, from the age of sixteen upwards, and often from a much earlier period, who do not commit fornication as often as the opportunity for doing so presents itself, I cannot look upon the existence in our midst of a class of professional prostitutes as altogether an unmixed evil; for I believe that were such a means—deplorable as the necessity for it must ever remain—of gratifying their passions unattainable by the rising generation, far greater evils than those we deprecate at present would result. Onanism would become as rampant with us as it is in France, incest would be of daily and hourly occurrence, whilst crimes against nature would increase to a fearful extent; for the passions will assert themselves, and if deprived of a natural channel in which to expend their force, will undoubtedly find some other and more objectionable vent.

Of the two or three youths per thousand who have abstained altogether from intercourse with the other sex, how many are influenced by moral and religious motives in their abstinence? for my part I believe the fraction to be inappreciable—religion, and still less morality, is but a feeble barrier against the mighty impulse of sex—whilst the other abstinents are onanists, or worse.

A vast distinction should, however, I think, be drawn between the deliberate and the accidental fornicator—the man or youth who, out on legitimate business, is accosted, perhaps touched, by an immodest woman, feels the sexual impulse, and, sinning against his convictions and better nature, obtains a momentary gratification at the expense of much subsequent remorse, is far less guilty, in my opinion, than he who leaves his home with the set purpose of spending his night in a brothel, and should be very differently treated. Nor should this distinction be lost sight of in all legislation—much to be deprecated in any case—upon the subject; for it is our duty to protect the first against himself, while the second must be prevented from injuring us. The question is, how this double end is to be attained? By an extension to the civil population of the Contagious Diseases Act? I scarcely think so. By so doing, we might, perhaps, benefit the hardened habitual fornicator—but is he worthy of our consideration? Should we incur, for his sake, the odium of legalising his filthy propensities? I think not; whilst the accidental transgressor, much more deserving of our interference, would still run the same risk as formerly; for the private prostitutes, whose victims this class most frequently becomes, are as often, and as much, afflicted with the various venereal disorders as their more public sisters; whilst having a certain character for respectability to maintain, they are much less likely to seek medical assistance when diseased; and it would be manifestly impossible to discover and examine them all, and even if it could be done, would debar them from any chance of reforming their lives, in this country at least. No, the true remedy lies in early marriages—say, twenty-one for men, and eighteen or nineteen for women—and free emigration to the newer colonies, which stand in need of population, and where large families are a blessing, as they ought to be, and not a curse. As for the deliberate habitual fornicator, I would say let him alone, let him take his chance. If he will sin, let him do so, but do not let us become participators in his crime by legalising it.

The existence of prostitution is undoubtedly one of the safeguards of society, but it is one of those that organises itself, and needs our intervention rather in repressing than in fostering it, which a removal or fancied removal of its sting would do. Diminish the overcrowding of our cities and towns, and young men will be enabled to carry out the natural bent of their inclinations, and marry. But it is even more necessary to educate our girls for *wives*; when this has been accomplished, and it will be, prostitution will sink into its normal bounds, and venereal diseases diminish in due proportion—in the mean time, legislation on the subject is useless, if not worse.

I am, etc.,

W. T. GREENE, M.B., &c.

218, Old Kent Road, S.E.

DOUBLE AORTIC DISEASES.

SIR,—I have been much astonished by reading Dr. Hyde Salter's remarks on the case of double aortic disease contained in your JOURNAL for July 23rd, at page 82. The case is evidently accurately enough described, but the whole of the reasoning upon it is very faulty. In my remarks upon it, I shall, to avoid unnecessary detail, confine myself to the one or two points upon which the whole ratiocination hinges—these relate entirely to the means by which the diastolic character of the rough portion of the murmur was supposed to be ascertained. Dr. Salter says: "at the apex, a loud single murmur is heard, accompanying the stroke of a very strong impulse, so strong as to raise the stethoscope with great force against the ear. This impulse has all the characters of a heavy thumping systole; but on checking it by the pulse, I found, to my surprise, that it was diastolic, while at the systole there was no perceptible impulse whatever. About the diastolic period of this violent impulse there could be no doubt. I checked it in every way. On applying the fingers of one hand to the apex, and of the other to the wrist, the alternation of the heart's stroke and that of the pulse was very clear and striking; and on applying the stethoscope to the apex, and allowing its free end to move freely as a sphygmoscope, and comparing its movements with those of the visible pulsations of the radial artery, their alternation was equally conspicuous. I do not know that I have ever felt an impulse of greater strength, more thumping character, and wider distribution; and yet with this impulse the systole has nothing to do."

From these remarkable statements we may legitimately enough deduce: 1. That, according to Dr. Hyde Salter, the cardiac movements have nothing in themselves distinctive of systole or diastole, but are systolic or diastolic according to the relation they bear to the pulse; an apex-beat, therefore, and the ventricular contraction upon which it depends, as well as the sound which accompanies it, may be either systolic or diastolic according to the relation it bears to the pulse: 2. That

Dr. Hyde Salter is perfectly unaware that the relation of the pulse to the cardiac sounds varies in disease, and that one of the most marked variations is retardation in aortic regurgitant disease, as was first pointed out by Dr. Henderson of Edinburgh, about five and thirty years ago. This retardation in almost every case is enough to cause the radial pulse to beat just equidistant between two apex-beats, following the aortic second sound if any trace of that remain, or at all events following the pulmonic second sound, instead of preceding it as in health. Sometimes, as is pointed out by Dr. Walshe (*Disease of the Heart*, 3rd ed., p. 76, section 172), the retardation is so great that the arterial pulse produced by one cardiac systole is nearly or quite synchronous with the next. Dr. Walshe states, however, in regard to this extreme retardation, that the only fact he knows in support of this idea is "that in extreme cases of aortic regurgitation the pulse seems most disposed to stand in normal relationship of time to the heart's systole." This statement is important as showing how completely Dr. Walshe homologates Dr. Henderson's view as to the retardation of the pulse, but it is also defective in so far as it does not point out that the carotid pulse, or the aortic pulse, usually to be felt in such cases in the tracheal fossa, conclusively shews by the period of its recurrence, by its rhythmical relation to both impulses, to which cardiac systole each radial pulsation belongs.

I need hardly state that the view entertained by Dr. Salter is wholly inconsistent with all that we know of cardiac physiology, and is utterly untenable. But it is worth while to show briefly how accurately what he ignores explains his own well-enough reported case consistently with our present views of cardiac physiology, and without having recourse to any such notions as a diastole with a ventricular impulse, and a systole without one, or the existence of a pre-diastolic murmur. The case, evidently enough, has been one of imperfectly compensated aortic regurgitation with a double murmur, tending to death from a systole, from which the patient did die. The apex-beat, as is usual in such cases, was somewhat diffuse and forcible, and accompanied, as is also usual, by a somewhat loud and rough murmur, the apex-beat and its accompanying systolic murmur preceding the radial pulse by a period equivalent to the full half of a cardiac pulsation, the radial pulse being retarded just so much as was necessary to bring it to a period equidistant between two apex-beats, which, as I have just pointed out, is not more than the normal retardation of the radial pulse in cases of aortic regurgitant disease, and very much less than what often happens.

We have thus a heaving ventricular systole, accompanied by a loud rough systolic *bruit*, preceding the radial pulse by the full half of a cardiac pulsation, and followed by a soft and faint diastolic *bruit* into which it runs, precisely the phenomena most commonly observed in cases of aortic regurgitation, and requiring no very great clinical skill either to detect or accurately to describe.

Any one who will take the trouble to go over the case with Dr. Walshe's book in his hand, will recognise at once the accuracy with which the facts have been described, and the fallacy of the reasoning employed to interpret these facts, which has resulted in the production of a very absurd interpretation of a very simple case.

I am, etc., GEORGE W. BALFOUR.

21, Alva Street, Edinburgh, July 25th.

THE LONDON HOSPITAL MEDICAL COLLEGE.—The following are the names of the gentlemen who have obtained the prizes, etc., awarded during the session 1869-70. *Clinical Medicine*: £20 Scholarship given jointly by the House Committee and the Medical Council, to Mr. Geo. Ernest Herman and Mr. Tom Robinson, equal. *Clinical Surgery*: £20 Scholarship given jointly by the House Committee and the Medical Council, to Mr. Tom Robinson; honorary certificate, to Mr. C. W. Vickers. *Clinical Obstetrics*: £20 Scholarship given jointly by the House Committee and the Medical Council, to Mr. Tom Robinson; honorary certificate, to Mr. George Ernest Herman. *Dressers' Prizes for Zeal, Efficiency, and Knowledge of Minor Surgery*: Given by the House Committee, £15 prizes, to Alfred Kebbell, C. J. Stocker, Alfred Hill; £5 prizes, to Lewis Mackenzie, Albert Morton, Kelly White. *Buxton Scholarships*: Given this year by the Medical Council, for proficiency in the subjects required for the preliminary examinations, £30 Scholarship, to Mr. F. E. Pocock; £20 Scholarship, to Mr. C. J. Vallance. *Osteology*: £20 Scholarship given by the Medical Council, to Mr. C. W. Drew; honorary certificate, to Mr. H. T. Shapley. *Anatomy, Physiology, Chemistry*: £25 Scholarship given by the Medical Council, to Mr. John Blunsom; honorary certificate, to Mr. H. T. Shapley. *Special Certificates of Honour awarded to Medical Assistants*: For three months' service, to Mr. R. W. Parker, Mr. H. C. Fox, Mr. W. Ley, Mr. Philip Thornton; for four months' service, to Mr. H. W. Page; for six months' service, to Mr. G. E. Herman. *Botany*: Two books given by Mr. Baker, to Mr. Blunsom and Mr. Grogono.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the quarterly meeting of the College, on Thursday, July 28th, 1870, the following gentlemen, having passed the required examinations, were admitted as members.

Fenwick, J. C. J., M.B. Cantab. Kelly, Charles, M.D. Lond.
Baxter, E. Buchanan, M.B. Lond. Roberts, Frederick T., M.B. Lond.

The following members were elected Fellows on July 28th.

Bastian, Henry Charlton, M.D. Lond., Queen Anne Street, W.
Bealey, Adam, M.D., Harrogate, Yorkshire
Cheadle, Walter B., M.D. Cantab., Hyde Park Place
Cholmeley, William, M.D. St. And., Russell Square
Church, William Selby, M.B. Oxon., Bryanston Street, W.
Clapton, Edward, M.D. Lond., St. Thomas's Street, S.E.
Duckworth, Dyce, M.D. Edin., Grafton Street, W.
Elam, Charles, M.D. Lond., Harley Street
Fagge, Charles Hilton, M.D. Lond., St. Thomas's Street, S.E.
Fenwick, Samuel, M.D. St. And., Harley Street
Fox, Edward Long, M.B. Oxon., Clifton
Gee, Samuel Jones, M.D. Lond., Harley Street, W.
Halford, George Britton, M.D. Lond., F.R.C.S. Eng., Melbourne, Australia
Martyn, Samuel, M.D. Cantab., Bristol
Playfair, William S., M.D. Edin., Curzon Street, Mayfair
Pollock, Arthur Julius, M.D. St. And., Montague Place, Russell Square
Pye-Smith, Philip Henry, M.D. Lond., Finsbury Square
Ringer, Sydney, M.D. Lond., Cavendish Place
Sturges, Octavius, M.B. Cantab., Wimpole Street
Sutton, Henry G., M.B. Lond., Finsbury Square
Tuckwell, Henry Matthews, M.D. Oxon., Broad Street, Oxford
Wadham, William, M.D. St. And., Park Lane, W.
Ward, Stephen Henry, M.D. Lond., Finsbury Circus, E.C.
Wilson, Edward Thomas, M.B. Oxon., Cheltenham

UNIVERSITY OF LONDON.—First M.B. Examination. Entire. Pass Examination. 1870.

First Division.

Barfoot, George Harry, University College
Benham, Henry James, University College
Birt, George, Sydenham College, Birmingham
Coupland, Sidney, University College
Greenfield, William Smith, University College
Nankivell, Charles Atkinson, University College
Ottley, Walter, University College
Russell, Ebenezer Geer, Guy's Hospital

Second Division.

Barlow, Thomas, B.Sc., University and Owens Colleges
Bindley, Philip Henry, University College
Bird, Cuthbert Hilton Golding, B.A., Guy's Hospital
Bomford, Gerald, King's College
Breeze, Richard Goodwin, University College
Cane, Leonard, University College
Cockburn, John Alexander, King's College
Cornelius, Walter Bernard, University College
Dalton, Benjamin Neale, Guy's Hospital
Deakin, Charles Washington Shirley, University College
Duncan, Andrew, King's College
Eastes, Thomas, Guy's Hospital
Godlee, Rickman John, B.A., University College
McCann, Thomas Anthony Aloysius, University College
Percival, George Henry, Guy's Hospital
Philpot, Joseph Henry, King's College
Railton, Thomas Carleton, Owens College and St. Bartholomew's Hospital
Ramsay, Ebenezer John, University College
Rose, William, King's College
Saunders, Arthur Rich, University College
Saunders, Henry William, St. Thomas's Hospital
Taylor, Herbert, St. Bartholomew's Hospital

Excluding Physiology.

Second Division.

Davies, David Arthur, University College
Williams, William, Guy's Hospital

Physiology only

Second Division.

Darby, John Thomas, University College
Eardley-Wilmot, Robert, King's College

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 28th.

Battersby, William E., M.B., Killarney (Dublin School)
Browne, Henry William L., West Bromwich (Birmingham School)
Clarke, Joseph Hirst, Sheffield (Sheffield School)
Dixon, Henry Edward, Watlington, Norfolk (Guy's)
Harding, Alfred William, Percy Street, W.C. (University College)
Hardman, William, Blackpool (University College)
Hibberd, Henry Jukes, Peckham (Guy's)
Hollinshead, Francis, Coventry (Birmingham School)
Hunt, Joseph, Hopwood Allchurch (Birmingham School)
Lloyd, Thomas L., Wrexham (Birmingham School)

Lovell, Francis Ottley, Kilburn (St. George's)
 Macan, Jameson John, Cheam, Surrey (St. Bartholomew's and Cambridge)
 Mitchell, Alexander, Birmingham (Birmingham School)
 Ravenhill, Edmund Burton, Arlingham (Birmingham School)
 Rigden, Walter, L.S.A., Canterbury (University College)
 Vickers, Charles William, L.S.A., Huddersfield (London)

At the same meeting—

Shaw, Bernard John, L.S.A., of Attercliffe, Yorkshire, who passed his examination in Surgery on May 3rd last, having since obtained a Licence in Medicine recognised by the College, was also admitted a member.

Admitted members on July 29th.

Bailey, Henry Bennett, L.S.A., Sutton St. Edmunds, Lincoln (Guy's)
 Clay, Charles, Dewsbury (King's College)
 Eagar, Robert T. S., Andenshaw, near Manchester (Manchester and Edinburgh Royal Infirmaries)
 Fenton, George, L.S.A., Great George Street, S.W. (Westminster)
 Hudson, Hubert E., L.S.A., Cranbrook, Kent (Guy's)
 Lovejoy, William Henry, M.D. New York, Portman Street, W.
 O'Farrell, George Plunkett, M.D. Dub., Boyle, co. Roscommon
 Plowright, Chas. B., L.R.C.P. Edin., North Wotton, Norfolk (Glasgow School)
 Smith, Arthur William, L.S.A., Halifax (Guy's)
 Smith, Charles Wait, Jamaica (St. Bartholomew's)
 Thorpe, George E. K., L.S.A., Sheffield (Guy's)
 Times, Lawrence Kingston, Manchester Street, W. (University College)
 Tothill, Thomas H. F., L.S.A., Topsham, Devon (St. Bartholomew's)
 Warburton, Edmund S., L.S.A., Betley, Crewe, Staffordshire (Liverpool and King's College)
 Wilson, George, L.S.A., Claverton Street, S.W. (University College)

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen passed their first professional examinations during the July sittings of the examiners.

Charles Quarry, Clonakilty; James Findlater, Newmilns; James Henry Lowe, Edinburgh; John F. Stafford, Wexford; Wm. Jackson; M. R. J. Behrendt, Prussia; Alexander Mackenzie, Kelso; Thomas Higham, Manchester; Edward Williams, Mold, North Wales; S. A. R. Monty, Mauritius.

The following gentlemen passed their final examinations, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh.

Nicholas FitzHenry Fitzmaurice, Skibbereen; Edwin Schuster, Lancashire; William Thomas Wood, Edinburgh; Enoch Davies, Cardiganshire; Joseph Farrar, Yorkshire; John Ormsby, Dublin; Samuel Hawkes, Cork; William Birrell, Fife; Eugene Hayes Niall, County Clare; John Henry Reid, County Down; Thomas Marshall Wilkinson, Metheringham; Frederick Wallace Furnell, Limerick; Alexander Matthew, Cupar-Fife; John Husband, Cupar-Fife; Joseph Edward Kenny, Dublin; Horace Parr Yeld, Carlisle; Daniel Hanfin, Milltown; George Pearson, Coldstream; John Blake Adams, Cork; Henry William Drew, Cape of Good Hope; William Dewhurst, Lancashire; Charles Henry Swayne, Carrick-on-Shannon; Francis Barclay, Hawick; Henry Bell, Groomsport.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their final examinations, and were admitted Licentiate of the College, during the July sittings of the Examiners.

John Dobbin, County Armagh; John Frederick Stokes, County Dublin; Charles Macfie, Bute; Thomas Allan Wotherspoon, Edinburgh; Hermann Kunde, Coeslin, Prussia; Henry Priestley, Sheffield; Archibald Craig, Lanarkshire; James Alexander Menzies, Perthshire; John Thos. Leigh, Huntingdonshire.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, August 4th, 1870.

Burgess, William Frederick Richardson, Bethnal Green Road
 Tompsett, James, St. Leonard's-on-Sea
 Walker, Samuel, York

The following gentlemen also on the same day passed their first professional examination.

James, Arthur Culver, Guy's Hospital
 Odell, William, St. Bartholomew's Hospital
 Rendall, William, Guy's Hospital
 Watson, William George, University College

As an Assistant in compounding and dispensing medicines.

Slater, Jonathan, Barnsley Road, N.

MEDICAL VACANCIES.

The following vacancies are announced:—

BRIGHTON AND HOVE DISPENSARY—Resident Medical Officer and Dispenser for the Western Branch: applications, Sept. 5th; election, Oct. 4th; duties, Nov. 1st.

BRISTOL GENERAL HOSPITAL—Assistant House-Surgeon: applications, August 23rd.

CAHERCIVEEN UNION, co. Kerry—Medical Officer for the Valencia Dispensary District: 17th.

CHESHIRE LUNATIC ASYLUM, Upton—Assistant Medical Officer.

COTON HILL LUNATIC ASYLUM, Stafford—Assistant Medical Officer.

DUDLEY DISPENSARY—Resident Medical Officer: applications, 23rd; election, September 7th.

GERMAN HOSPITAL, Dalston—Temporary Resident Medical Officers: applications, August 17th.

JERSEY GENERAL DISPENSARY—Resident Visiting and Dispensing Officer: duties, October 1st.

KENSINGTON DISPENSARY—Junior Resident Medical Officer and Dispenser: applications, 13th.

MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: 25th.

NEWRY UNION—Medical Officer for the Warrenpoint Dispensary District: applications, 15th; election, 17th.

QUEEN'S COLLEGE, Birmingham—Medical Tutor and Demonstrator of Anatomy: applications, 27th.

ROYAL FREE HOSPITAL, Gray's Inn Road—Junior House-Surgeon: applications, August 17th.

ROYAL UNITED HOSPITAL, Bath—Resident Medical Officer: applications, 13th; duties, Sept. 1st.

ST. GILES-IN-THE-FIELDS and **ST. GEORGE**, Bloomsbury—Assistant Medical Officer: applications, 22nd.

ST. THOMAS'S HOSPITAL—Two Assistant Physicians: applications, 16th; appointment, Sept. 8th.

STANLEY HOSPITAL, Liverpool—Physician: applications, 15th; election, 16th.

STOKE-UPON-TRENT UNION, Staffordshire—Medical Officer for the Hanley District.

STRONSAY, Orkney—Parochial Medical Officer and Public Vaccinator: applications, 24th.

WHITECHAPEL UNION—Medical Officer for the Aldgate District: applications, 15th; election, 16th.

YORK COUNTY HOSPITAL—House-Surgeon: applications, 27th.

BIRTHS.

DAWSON.—On August 5th, at Hunmanby, Yorkshire, the wife of C. W. Dawson, Esq., Surgeon, of a son.

GOODING.—On August 9th, at Heath Lodge, Blackheath, the wife of *Ralph Gooding, B.A., M.D. Lond., of a daughter.

PERKINS.—On August 5th, at Hendon, Middlesex, the wife of John Robert Perkins, L.R.C.S., etc., of a son.

MARRIAGE.

***JONES**, John Talfourd, M.B. Lond., to Mary Grundy, eldest daughter of Frederick Broughton, Esq., at Brecon, on August 3rd.

DEATH OF SIR JOHN THWAITES.—Sir John Thwaites, Chairman of the Metropolitan Board of Works, died on Monday morning, the 8th instant, at Putney, after an illness of a few days' duration. Sir John was in his fifty-sixth year, and had been chairman of the Metropolitan Board since its formation in 1856, previously to which time he was one of the Metropolitan Commissioners of Sewers.

LUNATICS IN ENGLAND AND WALES.—Mr. Newdegate has moved an address for return of the total number of insane persons of each sex confined in county asylums, workhouses, and licensed houses, who are known to have been inmates of conventual or monastic institutions; distinguishing the number maintained at their own expense in England and Wales, on the 1st day of January in each of the years 1865, 1866, 1867, 1868, 1869, and 1870. He had been informed there was no means of giving the required information, and if that were so, he should not then press his motion, but bring the subject forward early next session. It evidently showed that the Commissioners, and those who kept those asylums, had neglected their duty. Mr. Bruce, however, said he was sorry to say he could not comply with the hon. member's motion. He had applied to the Lunacy Commissioners, and they had informed him there was no means of giving the required information; and the motion was then withdrawn.

THE PUBLIC HEALTH.—The aggregate mortality of the week was in the ratio of 28 deaths annually to every 1000 of the present estimated population. The annual rates of mortality last week in the seventeen English cities and towns were as follows: Liverpool, 34 per 1000; Bradford, 33; Manchester, 28; Salford, 30; London, 28; Birmingham, 25; Newcastle-upon-Tyne, 24; Leeds, 33; Portsmouth, 18; Sheffield, 34; Hull, 25; Wolverhampton, 26; Bristol, 37; Nottingham, 32; Sunderland, 23; Leicester, 35; and Norwich, 29. In Paris, the deaths registered during the week ending last Saturday were at the annual rate of 33 per 1000 persons living. The reported deaths from small-pox were 227, against 215 in the previous week. Dr. Zuelzer writes with the last report for Berlin: "As I shall not be in Berlin, I cannot continue the weekly returns; I must go to the army. As soon as I shall have returned, I'll do it." War in Europe brings now with it the evils of civil war; science, health, all interests, all nations, suffer. From "simple cholera" and choleraic diarrhoea, 46 deaths were registered, and 371 from diarrhoea. Two deaths of children were registered from sunstroke. Four fatal accidents caused by horses or vehicles in the streets were returned last week.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, July 11th; The New York Medical Gazette, July 23rd; The Parochial Critic, August 10th; The New York Medical Record, July 28th; The Boston Medical and Surgical Journal, July 28th; The Madras Mail, May 30th; The Gardeners' Chronicle, August 6th; The Poor-Law Chronicle, August 2nd; The Shield, August 8th; The Edinburgh Evening Courant, August 5th; The Scotsman, August 4th; The Aberdeen Free Press, August 9th; The Oxford Times, August 6th; The Glasgow Weekly Herald, August 6th; The Medical Mirror, August 1st; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

MEDICAL VOLUNTEERS FOR THE GERMAN ARMY.

SIR,—As I have frequently been asked about the possibility of joining the German Army Medical Service for the time of the war, it may be of interest to your readers to learn that the North German Government is ready to admit British medical men as volunteers in their Army Hospitals, provided that they speak German, that they have Licence to practise Medicine and Surgery in the United Kingdom, that they place themselves unconditionally at the disposal of the North German Government, and that they have the permission of the English Government to serve as Medical Volunteers in Germany, and that of the North German Embassy or Consulate-General. The English Medical Volunteers will at first, at all events, not be employed on the field of action, but only in the Lazarettos in the rear of the armies; this, however, would probably not prevent their seeing and doing important surgical work.

The services of English Medical Volunteers will be regarded as probationary during at least a fortnight, and they will receive no payment during that period; and no reimbursements for the expense of their journey; but if their services prove satisfactory, they will probably be engaged, and receive payment at the rate of from six to nine shillings per day.

11, Grosvenor Street, August 9th, 1870.

I am, etc., HERMANN WEBER.

PASSPORTS FOR MEDICAL MEN.

SIR,—Probably those of the profession who think of going on to the Continent about this time, will be careful to apply for passports before starting. Let us hope that they will meet with a better fate than fell to my share. To save myself trouble, I applied through an agent, and was informed that, in my professional capacity, I could write my own letter of recommendation. I did so. After a few days, I received a reply that a communication had been made to the Foreign Office; but my application had been refused, as my name did not appear in the *Directory*.

Three days afterwards, on calling at the office of the agents, I was told that application had again been made, with the same result. I then went to Downing Street myself, and there saw the head of the department, who gave me the same answer as the agent. I asked his authority; he produced, first, a *Post-Office Directory*, and then a *Medical Directory*, aged ten years, at which time I was not on the *Register*.

I left the office, drove at once to Soho Square, obtained a copy of the *Medical Register*, and stated my case, which was received with some astonishment, as it appeared that if the official at the Foreign Office had not a copy, it was his own fault, as he had only to ask for one. I returned to Downing Street, showed the *Register*, and was informed that it was "all right". Having received my passport, I judged it merely an act of patriotism, not to say philanthropy, to make the Foreign Office of Great Britain a present of so necessary a volume. I accordingly did so, rather to the discomfiture of the official.

It is satisfactory to know that, through my means, any other member of the profession of less than ten years' standing will now run less risk of scant courtesy from the Foreign Office; but, at the same time, it is not rather hard that I should have to suffer in time, temper, and pocket, for the carelessness of an official?

I am, etc., ALFRED WALKER, M.B., etc.

16, Keppel Street, Russell Square, W.C., July 25th, 1870.

CROTON OIL IN SCARLATINAL DROPSY.

SIR,—The perusal of the able paper on Blood-letting as remedy in Acute Scarlatinal Dropsy, by Dr. J. P. Bramwell, in your issue of July 9th, has prompted me to refer to the value of the internal administration of croton oil in such cases. For the last twenty years, in cases of dropsy occurring as a sequela of scarlet fever, I have invariably given croton oil in doses varying from one-eighth to a quarter of a drop, rubbed up with a little mucilage, syrup, and water. This dose is given every morning, and repeated every two hours, until free purgation is produced, and with results highly satisfactory, every case so treated having terminated in rapid and lasting recovery; and in some, after other treatment has failed. In fact, it is astonishing how quickly the dropsical symptoms subside, and the patients are not debilitated by the purgative.

I am, etc.,

Newcastle-upon-Tyne, July 13th, 1870.

JOHN LIDDELL, M.R.C.S. Eng.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

TREATMENT OF ENLARGED TONSILS.

SIR,—In answer to a Country Practitioner, as a local application in chronic cases, I know nothing equal to alum, either as a gargle; in powder, or as a dust of equal parts burnt alum and gum arabic; the former applied with a damp brush and the latter may be blown on the part with an India-rubber bottle. But these, in conjunction with other remedies, require steady persevering application. I, too, never saw any permanent good from excision.

I am, etc., B. B.

Liverpool, August, 1870.

THE LATEST DEFENCE OF THE EDINBURGH CURATORS.

SIR,—If my language was tinged with incivility, as you say it was, I am afraid it was not unprovoked. It is not easy for a brother to sit quietly and, week after week, see his brother unjustly held up to the scorn and derision of the profession, without an arm being raised in his defence. Not that he requires it, but because my own feelings may thereby be relieved, and my own self-respect protected. As I shall strive for the future not to offend, I shall feel obliged by your inserting this communication in your next.

In your "Notices to Correspondents" in your last number, you have plainly misunderstood me. I never sent the extract from Dr. Matthews Duncan's testimonial in favour of Dr. Alexander Simpson in 1868, "in order to prove that Dr. Duncan then said what he did not believe"; much less did I send it "to prove that Dr. Alexander Simpson was the best man for the Edinburgh vacancy." My sole object in sending or quoting it at all was to show that Dr. Matthews Duncan himself, in 1868, was of the exact same opinion as the Municipal Curators in 1870, namely, that he, Dr. Alexander Simpson, was "well qualified to fill a Midwifery Chair", and judging by his "medical writings" he was possessed with the requisite "learning and intelligence." I meant nothing more or less than this.

It was my brother's opinion, and the opinion of the majority of the Curators, that there was not much to choose between the candidates. It may appear strange to very many of my professional brethren, but it is my solemn and conscientious conviction, from personal knowledge of all the candidates, that they were all of them very much of a muchness. A case of "How happy could I be with either." In plain truth, as compared with the late Sir James, there was not one of them anywhere, except it might be in the self-estimation of the candidates themselves. In such a strait, was it to be counted as nothing to be the nephew of such an uncle? or the son of such a father? I trow not! There is not one member of the profession who would not be proud of standing in such a relation to the illustrious deceased, and who would not do his best to make the most of it—otherwise he would be a fool. In my estimation, this was a most weighty, a most natural, and a most successful argument. What is more, it will continue to add lustre not only to the famous name of Simpson, but to the Chair of Midwifery of the University, as well as to the city of Edinburgh itself. Pray, who made Dr. Alexander Simpson what he is? Who made Dr. Matthews Duncan what he is? Who made your present correspondent what he is? The answer is simple—the late Sir James Young Simpson, Baronet. Is it nothing, then, to have been trained up entirely under the eye of such a genius, and to have the honour of being his nephew? God forbid! When doctors differ as to the fitness of rival candidates, what better court than a lay court? and it was a lay court which gave the preference on this occasion; and the same court gave the preference to Dr. James Y. Simpson over Dr. Every Kennedy when they, the doctors, differed on a similar occasion.

I am, etc.,

THOMAS SKINNER, M.D.

4, St. James Road, Liverpool, August 6th, 1870.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. David Evans, Brecon; Dr. W. Orange, Broadmoor; M.D.; Dr. Phillips, London; Dr. J. Ford Anderson, London; Dr. J. W. Watkins, Newton-le-Willows; Dr. H. Mitchell, Cockermouth; Mr. R. B. Benson, Pulverbach; Dr. C. Taylor, Nottingham; B. B.; Mr. H. Lawson, London; Dr. D. Leslie, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. Charlton, Newcastle-upon-Tyne; Dr. Sibson, London; Dr. George Y. Heath, Newcastle-upon-Tyne; Dr. Tilt, London; Dr. Skinner, Liverpool; Dr. Eastwood, Darlington; Dr. Oliver, Redcar; Dr. Aveling, Rochester; Dr. Henry Bennet, London; Dr. Philipson, Newcastle-upon-Tyne; Mr. Dawson, Hunmanby; Dr. M. Fothergill, Leeds; Dr. Richardson, London; Dr. Graily Hewitt, London; Dr. George Johnson, London; Dr. Hyde Salter, London; Mr. Hulke, London; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. Little, London; Dr. Tilbury Fox, London; Dr. De Berdt Hovell; Dr. J. Rodger, Aberdeen; Captain Burgess, London; Mr. R. H. B. Whickham, Edinburgh; Mr. J. Martin, Woodview, Portlaw; M.D. Lond.; Mr. J. Arnison, Newcastle-upon-Tyne; Dr. Ralph Gooding, Blackheath; Dr. Hermann Weber, London; Mr. J. R. Perkins, Hendon; Mr. H. Alder Smith, London; The Vice-Dean of the London Hospital Medical School; Mr. Furneaux Jordan, Birmingham; Mr. J. Pollard, London; etc.

BOOKS, ETC., RECEIVED.

The York Lunatic Asylum Annual Report for 1870.
Fourth Annual Report of the Metropolitan Board of Health of the State of New York. 1869. New York: 1870.
Hospitals and Medical Education; Address to the Birmingham and Midland Counties Branch. By Thomas Underhill, President. Birmingham: 1870.
Relapsing Fever in Edinburgh. By Claud Muirhead, M.D. Edinburgh: 1870.
York Lunatic Asylum Annual Report for 1870.
A *Resumé* of the History of Hygiene. By W. H. Corfield, M.A., M.B. Oxon., M.R.C.P. Lond. London: 1870.
The Treatment of Croup. By Fordyce Barker, M.D. New York: 1870.
Lay Sermons, Addresses, and Reviews. By Thomas Henry Huxley, LL.D., F.R.S. London: Macmillan and Co. 1870.
The Physician and Pharmaceutist. New York: May 1870.

CASES AND COMMENTARIES.

By HYDE SALTER, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Physician to Charing Cross Hospital;
Lecturer on Medicine at the Charing Cross Hospital Medical School.No. II.—*Recurrent Hemoptysis of Four Years' Standing.—Health Perfect.—No Heart- or Lung-Signs Proper.—Murmur in Left Pulmonary Artery.—Diagnosis.*

ALEXANDER WHEELER, aged 27, a remarkably healthy-looking young man, with a brilliant complexion, red lips, blue eyes, sandy whiskers, and light-brown curly hair, by occupation a gunsmith, temperate, has been married two years, and has one child. Father living and healthy; four brothers and sister living and healthy; one brother died in India from diarrhoea (he was told at Guy's, before going out, that his heart was adherent to his side); mother died at 52, of heart-disease and dropsy. The patient never had rheumatism; and, except a little summer diarrhoea, never had a day's illness till the commencement of his present symptoms. He looks the very picture of health, florid and bright.

On September 8th, 1866, when engaged at his work, and apparently perfectly well, he for the first time spat some blood. He was in the act of jumping, in the shop in which he was at work—a gentle, easy jump—swinging himself along a bench at the same time, from mere *gaieté de cœur*, when he felt something in his throat that made him clear it, and on spitting he saw that it was blood. It was about half a teaspoonful; and in five minutes he brought up a little more, but still less than before. He continued bringing it up, five or six times a day, sometimes ten, for about a month: he never could make any exertion without bringing up some; on some days his handkerchief was covered with it. He was afraid to move or exert himself in the least degree, and lived in a state of perpetual dread. On going home, his brother would try to cheer him up and make him laugh, and that would always bring the blood-spitting on, so that to avoid it he would leave the room. It was never more than half a teaspoonful at a time, generally less; it was pure, unmixed with phlegm, and looked fresh. As long as he sat perfectly still it almost ceased, but the slightest exertion—stooping, laughing, filing—would immediately bring it on. He was therefore obliged to give up his work, which he did for six weeks. The blood had then ceased for a fortnight, and he resumed his work, but not heavy work.

I should mention that for six months before bringing up the blood, he had been hawking up yellow phlegm from his throat, in considerable quantities, and his voice was so affected by it that he gave up attending a singing-class to which he belonged.

Having ceased, then, at the end of a month, the hæmoptysis did not reappear for thirteen months; that is, on the 6th of November, 1867. As before, it was preceded by the hawking up of yellow phlegm from the throat; and the blood on this occasion was not pure, but mixed with the phlegm. It only lasted about a fortnight, and was not sufficiently bad for him to give up his work. He then went on nearly two years without seeing a particle of blood. It was then that he got married. Then, in September 1869, it reappeared, preceded, as on the two former occasions, by the hawking up of yellow phlegm from the throat, with which he had been troubled two or three weeks previously; and he attributed the blood to the rasping and scraping of the throat in bringing up the phlegm. At first it was merely a streak. It was on account of the purulent expectoration from the throat that he applied to Dr. Pollock at this hospital; and it was not till a few weeks later, while still under Dr. Pollock's care, that the blood reappeared, as he apprehended it would. It has remained ever since; *i.e.*, more than six months. For some time it gradually increased, and then, on the taking of ice, it diminished; this mitigation of it on taking ice, has occurred over and over again. The largest quantity spat on any occasion during the last bout has not been more than half a teaspoonful—generally not more than would cover a shilling. It would come up sometimes two or three times in a day, at others half-a-dozen times; in fact, whenever he felt there was a little phlegm to come up from his throat, he was sure, on its expectoration, to see some blood. He never, however, swallowed it down—always spat it out, so that, as he expresses it, he saw the outside of it.

He has no pain in his throat, no tenderness, no pain on swallowing; he gets hoarse on reading, and his throat becomes dry; after reading half a column of a newspaper he is obliged to have some water to drink. He has never lost his voice; but any exertion, such as filing, or any strong manual movement in his occupation, brings on a pain in

his left mammary region; any sudden emotion will bring on the same sensation, accompanied by palpitation.

Physical Examination.—On listening to the chest a long time everywhere, with the utmost patience, and in perfect silence, I heard at length for some little time a distinct whiff (systolic) at the left third cartilage. Subsequently, on going to the same spot, or what I believed to be the same spot, I could hear it no longer. It was not subclavian murmur, for, on applying the stethoscope to the subclavian region, it was inaudible; moreover, it was more distinct at expiration than inspiration. There is certainly no presystolic murmur; indeed, I may say, with the exception of the apparently fugitive murmur I have mentioned, there is certainly no murmur at all. The only thing that I can find in any way amiss with the lungs is that the respiratory murmur is hardly so clear on the right side as on the left: deep inspiration, however, develops fair respiratory murmur in every part of the lung, although inferior to that on the left side. I should mention one thing more—that vocal fremitus was, I think, too strong on the right side as compared to the left for the mere normal excess. Beyond that, there was no adventitious sound whatever, and both respiration and heart's action were regular and tranquil.

Diagnosis.—What, then, can be the source and nature of this hæmoptysis? Looking at the state of the heart and lungs at the present time, and bearing in mind that the blood-spitting commenced three years ago, I think it cannot be considered as belonging to any recognised form of hæmoptysis associated with organic heart- or lung-disease. I am inclined to think, myself, that it looks more like the hæmorrhage of chronic tracheal, and perhaps large bronchial, ulceration than anything else. The blood clearly comes from the air-passages, as "hawking" is the method of its discharge; and, except in the first instance, it has always been mixed with mucus. It probably also comes from high up, and not low down, in the air-passages, as genuine cough is never necessary for its discharge; clearing the throat is always the way it is brought up. But the circumstances that the most point to a chronic inflammatory condition of the very upper air-passages being at the bottom of the hæmorrhage, are—

1. That each of the three attacks of hæmoptysis has been preceded for some weeks by the hawking up of a thick yellow matter from the throat.
2. That prior to the first appearance of the blood, the voice had become so impaired that the patient gave up a musical class to which he had belonged.
3. That since its occurrence he cannot read aloud, becoming hoarse and his throat getting dry to an unwonted degree.

I should certainly have expected that there would have been more pain in the throat, more pain on swallowing, and that there would have been other symptoms present distinctly referred to the larynx or windpipe. It is singular, too, that exertion should have brought on the hæmorrhage with such certainty at any time. The man's complexion is exactly that of hæmorrhagic diathesis, although he does not seem to have ever suffered from any other form of hæmorrhage.

April 1st. I have to-day again carefully examined this patient's chest. I find less difference between the two lungs than I thought I did yesterday, and doubt if there is anything that can be truly called deficiency of respiratory murmur on the right side, or whether the difference of vocal resonance and vocal vibration on the two sides is sufficient to be pathological. But on listening for the systolic whiff at the left third cartilage I heard it most plainly, much louder than yesterday; and on exploring the neighbourhood, found that it was louder still at the second left rib, over which, at a distance of two inches and a half from the middle line of the sternum, was its maximum intensity. It was a loud, clear, arterial whiff, not prolonged, and coinciding exactly in its character with subclavian murmur. My first impression was that it *was* subclavian murmur, and that I heard it louder at the second rib than the third because the second rib was nearer the subclavian artery. But I found, to my surprise, on passing upwards from the second rib, that it became fainter, and by the time I had got well over the subclavian artery it was gone. It was clear, therefore, that it was not subclavian murmur. It exactly coincided with the arterial pulse, and accompanied every beat except during inspiration. Any beat taking place during inspiration was free from murmur; but at the next beat, the moment inspiration was over, there was the murmur the same as before. As a rule, it was one beat without murmur and three with; but sometimes two would be without, depending on how the pulse and inspiration fell with regard to one another. My interpretation of the abolition of the murmur by inspiration is, that it effected it by temporarily diminishing the arterial tension, as the hæmadynamometer shows inspiration to do; and its disappearance at inspiration supplies an element of complete contrariety to subclavian murmur, which is

always louder on inspiration, and very often heard only then. This point alone would be diagnostic between the two.

What is this murmur? Has it any relation to the hæmoptysis? If so, what?

That it is an arterial murmur in some large vessel there can be no doubt; its character and the time of its occurrence admit of no other interpretation. Its situation is *exactly over the left pulmonary artery*,

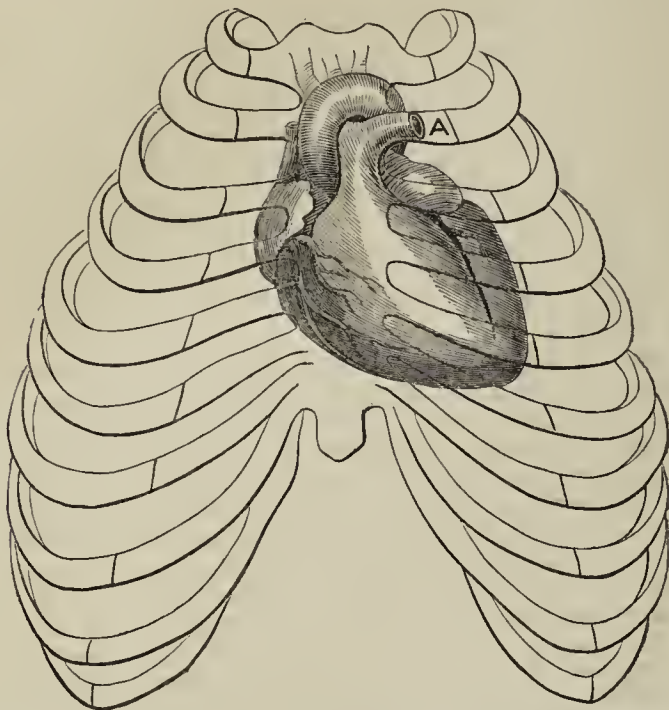


Diagram of heart and great vessels, *in situ*, shewing their relations to the ribs, and the point (A), on the second left rib, at which the murmur was heard, immediately over the left pulmonary artery.

here placed in front of the descending aorta; and I cannot but believe that this vessel is the seat of the sound. If so, this man has such a condition as generates a murmur in his left pulmonary artery. What is that condition? Is it an aneurism? Is it a roughening of the inner surface of the vessel by atheroma, without any aneurismal dilatation? Is it any congenital malposition or maldirection of the vessel which throws the blood-stream into vibration? Is it pressure on the artery by an enlarged bronchial gland, or some other source of pressure? As far as any positive evidence at present goes, it might be either of these. I should say that the congenital idea was the least likely. If it be simply atheromatous roughening without yielding of vessel-wall, it can have nothing to do directly with the hæmoptysis. If it be aneurism one would have some difficulty in imagining it was the cause of the hæmoptysis, as that would involve its existence three years and a half ago, and its being then in such a state as to be a source of bleeding. Now I think that is rather incompatible with the man's condition at the present time, and with the extreme circumscription of the sound. I should be myself, I think, rather inclined to adopt the hypothesis that the murmur depends on the pressure of an enlarged bronchial gland on the artery, which enlarged bronchial gland might, by its pressure on a contiguous vein, offer an impediment to the escape of the blood from a certain district of the lung, and so produce the hæmorrhage. In that case the murmur would be indirectly, and not directly, connected with the hæmoptysis; it and the hæmorrhage would both be divers results of one and the same cause.

There would be, however, the difficulty of the purulent secretion which on all three occasions preceded, and on the last two always accompanied, the appearance of the blood, in the way of any hypothesis that connected the hæmorrhage, even indirectly, with the murmur.

May 5th. This patient has come to me to-day complaining of a great increase in the hæmoptysis, beginning nine days ago, and lasting five days. It appeared to be caused by a cold which he took four days previously, and which settled in his throat, where it produced great irritation and loss of voice, with increase of expectoration. The cold was caught on Friday, April 22nd, and the blood appeared on Tuesday, April 26th; he thinks he spat blood about eighteen times that day; the largest quantity was a teaspoonful, the smallest a streak; it gradually increased till the afternoon, when the largest quantities were spat, and then diminished. The same thing occurred on the Wednesday, Thursday, and Friday, in reduced and reducing quantities, the great majority of the blood being mixed with phlegm. On Saturday, the 1st of May, it ceased. He looks the picture of health. On listen-

ing to the chest, the systolic arterial whiff is heard over the second left rib at the same point as before. Heart-sounds healthy; lung-sounds healthy; respiration 16; pulse 72; pulse respiration ratio therefore $2:9 = 1:4\frac{1}{2}$.

The elements with which we have to deal in this case, for the construction of a diagnosis, are—lungs sound, heart sound, hæmoptysis, and an arterial murmur within the chest. And I think that, in any case in which those four conditions concurred, the *prima facie* impression on nine minds out of ten would be that the hæmoptysis was most probably associated with the arterial murmur. And yet, in spite of the arterial murmur, and in spite of the evidence of soundness of heart and lungs that auscultation elicits, I am inclined to revert to my original opinion, formed before I had detected the murmur. I think, looking at the case all round, that this is the opinion to which one must come. The invariable antecedence, on all four occasions, of evidences of hyperæmia of the respiratory mucous membrane, the admixture of the blood with muco-pus, and the disturbance of the functions of the larynx, all point to the upper part of the respiratory tract as being the probable seat of the bleeding, while the length of time the symptom has existed, and the man's present condition, forbid the idea that the hæmoptysis has in this case its ordinary relation to thoracic arterial murmur.

The case, then, is a case of *coincidence*—a case in which certain conditions concur that would ordinarily be associated, and yet which are *not* associated. Probably in the next case—nay, in the next ten cases—in which, without any physical signs of disease of heart or lungs, hæmoptysis consisted with intrathoracic arterial murmur, the one would depend on the other, and the hæmorrhage would be the hæmorrhage of aneurism. This fact of *coincidence* it is that lends its chief interest to the case; nevertheless, the hæmoptysis of itself—so eccentric in its character, of such long standing, comporting with such health, so easily induced by the slightest exertion, so free from all the ordinary causes and accompaniments of hæmoptysis; and the murmur itself, so uncertain as to its cause, yet so certain and so singular as to its locality—each without the other is sufficient, in my opinion, to render the case one of no common interest.

What the final development will be it is impossible to say; but I shall keep my eye upon the case, and communicate anything interesting that may turn up.

I may remark, in conclusion, that hæmoptysis from catarrhal ulceration of the larynx and windpipe is by no means an uncommon event. The absence of tendency to run into ulceration which, as a rule, characterises inflammation of the respiratory mucous membrane, is restricted to the lower portion of the respiratory tract. There can be no doubt, however, that pressure from enlarged bronchial glands is a real and probably not an uncommon source of hæmoptysis: and were it not for the fact that the hæmoptysis has been on all four occasions preceded by evidences of irritation, and a certain amount of inflammation, of the upper air-passages, my mind would abide by the idea of pressure by an enlarged bronchial gland, or glands, on the root of the left lung as the most probable cause of the hæmorrhage—a cause that would be more compatible with the production of the bleeding by the slightest exertion than that which is most likely its true cause.

IMPACTION OF A PENNY IN THE LARYNX FOR SIX YEARS: LARYNGOSCOPIC DIAGNOSIS AND SUCCESSFUL REMOVAL.

By JAMES PETRIE, M.D., Liverpool.

C. G. M., a pupil in a London orphan school, aged about ten years, whilst at play in January 1864, put a penny on the tip of his tongue; and, as he suddenly turned round laughing, it slipped into his throat. He immediately felt an intense sense of choking, to relieve which he thrust his fingers back into his mouth, and forced the penny downwards. The medical men attached to the institution, having been sent for, examined his mouth and passed down a probang; they then sent him to the school Infirmary, where he remained for several weeks under medical treatment and surveillance.

During the midsummer holidays of the same year, *i.e.*, about seven months after the accident, he came home and was placed under my care. I found his general health somewhat impaired, and there was considerable pain and tenderness on pressure about the upper part of the throat and sides of the larynx, with some swelling, but he had little or no difficulty in swallowing. Internally, the throat presented no unusual appearance except enlargement of the tonsils. The penny could be neither felt nor seen. His voice was weak and shrill, and his

breathing, when asleep, was accompanied by a loud stertor, or a species of snoring, which could be heard in the neighbouring room. He had a frequent and urgent cough, with free expectoration.

Both the stethoscopic signs and symptoms led me to think that, either from the penny passing down, or from some other cause, injury had been done to the larynx; or I thought it just possible that the coin was lodged somewhere in the forepart of the pharynx, giving rise to chronic inflammation of the mucous membrane of the larynx and trachea. Under treatment by tonics and anodynes, his general health improved, the cough became less troublesome, and at the end of the holidays he returned to school. I saw him again in December of the same year, and found very little change in his condition.

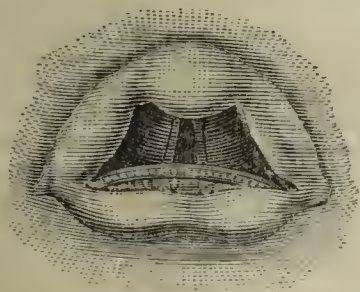
During the next two years (1865-1866), the symptoms of the laryngeal and tracheal affection remained nearly stationary; but he was evidently losing strength, and I could not help fancying that this state of ill-health was in some way due to the retention of the penny.

At the conclusion of 1867, a marked tendency to disease of the lungs showed itself; and he continued so unwell after his return to school, that I advised his mother to bring him home. I now found that I had to deal with a case of incipient phthisis; and Dr. Cameron, who saw him in consultation with me in May 1868, coincided in that opinion. By means of a generous diet, tonics, anodynes, and Dobell's pancreatic emulsion, he received benefit; but his improvement was still more striking from full doses of cod-liver oil, carbonate of ammonia, and Battley's sedative. Having gained sufficient strength, he took two voyages to the Mediterranean, from which he returned with great amelioration of the chest-disease, the condition of the larynx and trachea attracting but slight notice. There being now decided convalescence, I proposed that he should go on a trial voyage to sea, to the Brazils, whence he returned in very good general health about the beginning of December 1869.

Continuing to feel much interest in the case, I requested Dr. Cameron to examine him in the following January, and received the following particulars. He found his general health good, and that he had gained flesh and strength. There were no traces of the pulmonary lesion which had excited our apprehension in 1868; but the voice was feeble, and had a harsh stridulous sound, which was also audible when he breathed. He suffered from occasional cough, which, like the voice, was harsh and stridulous. The expectoration was scanty, and sometimes streaked with blood. He had no difficulty or pain in swallowing unless the morsel of food were unusually large; but he laid no stress on this symptom. The tonsils were enlarged, and on each side of the neck were a few enlarged and painful cervical glands.

It seemed to Dr. Cameron, on considering all the circumstances of the case, but especially the peculiar laryngeal symptoms, that they were inconsistent with ordinary disease of the larynx; and it occurred to him that, possibly, they might be due to the impaction in, or near the organ, of the penny which, it was supposed, had been removed at the time of the accident. An examination with the laryngoscope confirmed his suspicion by revealing the following appearances, which are described as they were seen reflected in the mirror of the instrument.

In the upper part was the epiglottis, considerably altered in shape, size, and position; its apex being bent forwards and downwards, the edges curled inwards on themselves (like the mouth of a pitcher), and the base—much enlarged—losing itself in the aryæno-epiglottidean folds: these were likewise much swollen. In the centre of the image was the upper opening of the larynx, wider and deeper than in health; and the vocal chords, the play of which, during the movements of respiration, was distinctly perceptible. All these parts were unusually vascular. Next was seen, stretching transversely across this opening, an object with a metallic lustre: it was imbedded below and on each side in the swollen aryæno-epiglottidean folds; and, measured by the eye,



seemed about three-quarters of an inch in length, and one-eighth of an inch in breadth at the centre.* Dr. Cameron identified this at once as the rim of the penny which had been swallowed in 1864. At the time of the accident it had probably been forced into the opening of the larynx,

* The woodcut must be regarded rather as a diagram than as an actual drawing of the parts.

and, gradually sinking lower and lower, had become fixed into its posterior wall.

From my knowledge of the case, I readily believed in this discovery of the long-lost penny; which I had also the opportunity of seeing, on several occasions, *in situ*, by means of the laryngoscope. Mr. Minshull, who was present during some of these examinations, formed the same opinion as to the position of the coin.

The exact situation of the penny having been thus satisfactorily determined, it was resolved, in consultation with Dr. Cameron and Mr. Minshull, to remove it without delay. The mode devised for operating consisted in passing down the forefinger of the left hand, as a guide, behind the epiglottis; then carrying the beak of a forceps specially designed for the purpose by Mr. Minshull and myself in the right hand over the tongue and round the base, at the back of the epiglottis, so as to seize the edge of the coin. On the 29th of January, the operation was performed by Mr. Minshull, in the presence of, and assisted by, Dr. Cameron, Mr. Hamilton, Mr. Little of the Southern Hospital, and myself. With considerable dexterity, Mr. Minshull fixed the blades of the forceps on the rim of the penny and extracted it, though not without some difficulty from its position. Its removal was attended by great pain; and for a few moments, owing to the obstruction of the glottis, suffocation seemed imminent. After the operation, a little blood and mucus were expectorated, and the patient soon began to experience the anticipated relief.

The penny was of the 1861 coinage, of a dark-green colour, and eroded on the surface, which presented, with the aid of a lens, a general "honey-combed" appearance. It weighed eighteen grains less than a well-worn coin of the same date; their respective weights being one hundred and forty-six to one hundred and twenty-eight grains—a difference which, we may infer, represents the loss undergone by the metal.

Subsequent Progress.—On examination with the laryngoscope a few days after the operation, it was found that the swelling and vascularity of the parts surrounding the laryngeal opening had much diminished; but there was now observed, on each side, in the aryæno-epiglottidean folds, and corresponding with the previous position of the penny, a clean-cut indentation or notch—evidently the spaces left vacant by its removal.

At the present date (June 18th), these clefts, though partially filled up, can still be distinctly identified, and the surrounding parts have not yet regained their normal condition. The boy's voice continues feeble and somewhat harsh, but it has lost its stridulous character: possibly, owing to the injury done to the larynx, its natural tone may never be completely restored. His health, in other respects, is very good.

The after-treatment consisted in the occasional application to the larynx, by means of the laryngeal brush, of a solution of tannic acid in glycerine, and the administration of tonics.

POSTSCRIPT.—A case has recently occurred in the Southern Hospital, showing the value of the laryngoscope in detecting foreign bodies in the larynx. A woman came to the Hospital, stating that she had swallowed a piece of bone, which she believed was in her throat. A probang was passed, with apparent relief, and she went away. Next day, however, she returned, still complaining; and as the voice and breathing were slightly stridulous, Dr. Cameron was requested to examine her with the laryngoscope, when he detected a small piece of bone stretched across the glottis, from before backwards, so as to cover one of the vocal chords. It was readily removed by Mr. Hamilton, one of the honorary surgeons of the Hospital, with a pair of long and sharply curved forceps, the blades of which opened laterally.

A CASE OF SPONTANEOUS RUPTURE OF THE UTERUS DURING LABOUR.

BY E. R. DENTON, M.R.C.S.E., L.S.A.,
Surgeon to the Leicester Provident Dispensary.

ON July 21st, I was hastily summoned by a midwife to assist in a case of labour. The patient was reported to have fainted. On arrival, I found her undelivered and *in articulo mortis*. On vaginal examination, the foetal head was found presenting normally, and far advanced towards the completion of the second stage. The outlet appeared to be of normal size; and there were no signs of deformity of pelvis or protracted labour. I immediately made several attempts to deliver by means of the short forceps. These were unsuccessful, from the collapsing of the cranial bones, which allowed the blades to slip off on very moderate traction. By this time the patient was dead; and as there was evidence of the death of the child also, the performance of the Cæsarean section did not appear to be indicated. The non-recession of the head and body

of the child into the abdominal cavity induced me to have the hope that the case was other than one of rupture of the uterus. However, on being allowed to make a *post mortem* examination, this at once revealed the true state of affairs.

The husband informed me that the present was his wife's seventh confinement, and that the previous ones had been free from any casualty requiring surgical interference. The health of the patient for the last few weeks of her pregnancy had been indifferent, she having suffered from great debility. The midwife—a woman of some experience—stated that she was called at 9 o'clock the previous evening to attend the deceased, and that the labour had progressed favourably up to within an hour of my being summoned (this was at 2 A.M.) At that time (1 A.M.), she experienced three very strong "good" pains, though her cries during them were not unusually great; after which she immediately complained of feeling very faint. The pains ceasing altogether, and the faintness increasing notwithstanding the usual restoratives were applied, she at once requested that further assistance should be obtained. It should be mentioned that no ergot was administered during the labour.

Post Mortem Examination Seventeen Hours after Death.—The deceased was 40 years old. The body was muscular and well nourished. *Post mortem* rigidity was nearly complete. There were no signs of external hæmorrhage. On laying open the abdomen, a small clot was found lying upon the intestines, and a considerable quantity of bloody serum was present in the cavity of the abdomen. The uterus appeared to be entire; but, on closer examination, the peritoneum covering the anterior aspect was found distended; and underneath, and visible through it, was a mass of coagula diffused between the peritoneum and the muscular portion, which towards the cervix was thin and attenuated. On carefully removing the mass of coagula, the nates and side of the child came into view, whilst the fundus of the uterus was contracted upon itself, and the placenta lay detached but in apposition with it, the rest of the space being occupied by coagula. On examining the muscular walls, a longitudinal rent, several inches in length, was found on the anterior aspect of the uterus, though not extending into the vagina, the edges on both sides being rugged and torn. The child was removed with considerable difficulty, as it was a very large one, weighing about twelve pounds, and fully developed.

REMARKS.—The above case is unusually interesting and instructive, inasmuch as one prominent and characteristic symptom of rupture, as stated by authorities, was entirely wanting; namely, the sharp cry attendant on agonising pain. As stated by the midwife, and also by the mother of the deceased, nothing unusual was complained of by the patient except great faintness; but she had from the time of the last pain a presentiment of impending death, as she gave several directions to her mother respecting the future welfare of her family and other matters of family importance, after which she gradually sank.

This case is, however, not altogether a rare one, as Dr. Radford has reported two cases where rupture of the uterus was complete without laceration of the peritoneal covering; and Dr. Churchill also states that he assisted at a *post mortem* examination in which no rupture of the uterus was discovered, but where great effusion of blood beneath the peritoneal covering was found; but even in his case the symptoms accompanying it were sudden excruciating pain in the abdomen, with vomiting, collapse, etc.

In Waller's note to Denman's *Introduction to Midwifery*, pp. 262, two cases are mentioned in which rupture of the uterus happened without any peculiar sensation being experienced, so that the time of rupture could not be ascertained: he also states that external hæmorrhage is not an invariable symptom when the head is low down.

With this evidence and under these considerations it becomes a matter of mystery as to the immediate cause of so fatal an accident; and any evidence which will tend to elucidate the true cause it is our duty to bring before the members of our profession.

DONATION.—Thomas Rochester, Esq., of Whalton, near Morpeth, has instructed his bankers (Messrs. Hodgkin, Barnett, and Co.) to pay over the munificent donation of £12,000 to various local and national institutions, including Morpeth Dispensary, £1,000; Newcastle Dispensary, £1,000; Deaf and Dumb Asylum, Newcastle, £1,000; Hospital for Sick Children, Newcastle, £1,000; Blind Asylum, Newcastle, £1,000.

THE CONTAGIOUS DISEASES ACTS (WOMEN).—At the Canterbury Petty Session, seven women were summoned for not having submitted themselves for medical examination. In six of the cases orders were made for the women to attend for twelve months; in the other, the defendant was committed to prison for fourteen days, as she positively refused to undergo the ordeal.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

UNIVERSITY COLLEGE HOSPITAL.

THE INTESTINES AND ABDOMINAL VISCERA CUT THROUGH BY THE PASSAGE OF A RAILWAY-TRAIN OVER THE BODY, WITH SCARCE ANY INJURY TO THE ABDOMINAL WALLS.

R. A., aged 19, a telegraph clerk, was seen near Camden Road Station at 11.50 on the night of Saturday, June 26th. He was then sober, had over two pounds of money in his possession, and stated his intention of going to Euston Square by the 11.56 train. Although he was known to the officials, and there were very few passengers, no one saw him get in at Camden Road, or get out at Euston Square. The ticket-collector also said that he should have recognised him at once had he been in the train. The train, after discharging at Euston, was backed into a shed; and, as two shunters who had performed this duty were returning along the line which the train had just passed over, they found R. A. lying on his back just inside the station, straight across the outer rail, with his head between the rails, and his hat tilted over his eyes. He was alive when found, but died in a few minutes. The body was at once brought to University College Hospital. It was clothed in a long jacket, waistcoat and trousers of thick coarse cloth, on which the marks of the carriage-wheels were plainly visible. Only a few pence were found in his pockets. There was not the smallest wound on the body, and only a few abrasions of cuticle across the abdomen. After some hours, pretty extensive ecchymoses appeared. On opening the abdomen, all the abdominal muscles were found completely cut through horizontally, retracted, and curled up, leaving a gap five or six inches wide. The back muscles were in the same condition. The right kidney was cut in half. The transverse colon and a large piece of the ilium were lying free in the abdomen; and the body of the third lumbar vertebra was crushed literally to powder; everything was divided except the skin. The rest of the body was healthy.

The case excited a good deal of interest at the time, and remarks on its occurrence appeared in most of the daily papers. Some suggested suicide; but suicides generally put the head or neck on the line. The position of the body, laid out quite at right angles to the rail, with the hat on the face, favoured this view; but no motive was made out. Many seemed to think he had been stunned, robbed, and thrown out; but the absence of any bruises, and the position of the body, almost negatived this view. His money was loose in his pocket, and probably fell out in the moving. Lastly, the driver declared that it was impossible that he could have been run over at all; for, besides the three carriages and break-van, his engine weighed over thirty tons, and must infallibly have cut him in half! So it did, except the skin, which was protected by three layers of thick cloth, etc. Neither driver nor guard felt any shock as the train passed over him. Altogether, the case presents several points of great medico-legal interest.

LIVERPOOL INFIRMARY FOR CHILDREN.

CASE OF GENERAL DISEASE OF THE LYMPHATIC SYSTEM: WITH REMARKS ON ITS PATHOLOGY.

By RICHARD CATON, M.B., Honorary Assistant-Physician to the Infirmary.

LOUIS J., aged 8, was brought to the Children's Infirmary on 15th January, 1870, with the following symptoms and history. Early in 1868, his health became slightly impaired; a year later, one or two enlarged glands were felt in the neck on the right side. These increased in size, and others appeared. Constitutional treatment and the local application of iodine were employed, but without benefit; the glands increased steadily, and the patient lost flesh and strength.

At the time of his appearance at the Hospital, a large irregular nodular tumour existed under the skin of the neck, extending from the right mastoid process to the clavicle, and hanging downwards over the latter, to the extent of about an inch. The mass felt to the hand like a bunch of small grapes. The nodules were clearly defined, moved freely upon one another, and were not tender to the touch. They probably numbered about thirty. On deep pressure on the opposite side of the neck, two glands could be felt similarly enlarged. There was no further glandular affection externally. His voice was husky; it had been so for three months. On examining the pharynx, a prominence

was seen on the right wall, nearly as large as a pigeon's egg, soft on pressure, not fluctuating.

The patient was thin and anæmic; his weight was fifty-six pounds. He complained of pain in the back and limbs, slept badly, and breathed with difficulty when recumbent; the chest sounds were normal. Pulse 80; temperature normal. Tongue clean; appetite bad. The abdominal organs were apparently normal. His father, mother, and brothers were remarkably healthy; all four grand-parents lived to old age. There was no suspicion of phthisis in any branch of the family.

During the following month a slight cough commenced, the cutaneous veins enlarged in the right mammary region, dulness on percussion began to show itself about the second and third left sterno-costal articulations, and harsh loud respiratory sounds became audible there. During March these symptoms further increased, and temperature began to rise. Early in the month the thermometer registered as high as 102°. The cervical tumour increased, and a similar one began to form rapidly on the left side. On March 23rd, there were dulness and harsh breathing, with a few moist râles in the mid-sternal region, and between the scapulae. There was no marked dulness elsewhere. A vesicular murmur was heard over the remainder of the lungs, along with the loud harsh bronchial sounds. The patient was losing weight rapidly.

April 6th.—The cough was worse. Temperature 103°, and occasionally higher. Numerous enlarged and painful glands appeared at the back of the neck and on the occiput.

April 23rd.—The patient had profuse night-sweats. Glandular enlargement was occurring in the left groin. Temperature as before.

April 26th.—He had a severe attack of fever, and increase of pain in the back and limbs. Red lines were described by the mother as running up the legs and thighs; these disappeared in a few days.

May 7th.—He had had much pain in the right leg and popliteal space during the last few days. A hard mass, feeling like an enlarged gland, was discovered to-day behind the right knee.

May 11th.—He had pain in the back and legs. Enlarged glands were now felt in both groins and both popliteal spaces, also in the axillæ. The left cervical tumour had become nearly as large as the right. There was increased weakness. High temperature, and cough with colourless frothy sputa. The hepatic and splenic dulness were considerably increased. There was œdema of the face and lower extremities. The urine contained no albumen. A number of glands were becoming prominent under the tongue.

May 18th.—He had diarrhoea, and the œdema was increasing.

May 23rd.—There was paralysis of the left arm and leg. He had difficulty and pain in swallowing, and in bringing up the sputum, which was still colourless. A series of convulsive fits succeeded, generally affecting the left side only, sometimes the right only.

June 1st.—The patient became comatose, and died on the 3rd. During the last few weeks of life, many of the enlarged glands, especially those in the neck, became smaller and harder to the touch.

SECTIO CADAVERIS eleven hours after death. The body was much emaciated. The skin of the thorax was dark. Masses of enlarged glands were found in the neck, axillæ, groins, and popliteal spaces.

Thorax.—On removing the sternum, a hard, yellow, somewhat cartilaginous mass was found on the site of the thymus, enveloping numerous glands, and continuous with the great vessels and lung-roots. The pericardium contained about an ounce and a half of yellow serum. There was a small spot of shaggy greenish-yellow lymph near the apex of the heart in front. The heart was apparently healthy otherwise. There were numerous enlarged hard bronchial glands about the roots of the lungs. The central part of each lung, in the vicinity of the glands, within a radius of two inches from the entrance of the bronchus, was felt to contain several hard masses, the largest equalling a walnut in size. On section, these were found to consist of lung-substance infiltrated with a pale yellow or stone-coloured deposit, of firm structure. Small bronchi passing through these masses were found in some instances occluded, and the lung-substance to which they had been distributed completely collapsed. In other parts of the lung, chiefly the apices and anterior margins, emphysematous patches were seen. There were no cavities, no pleural adhesions, and no trace of cicatrix anywhere. By far the greater part of each lung appeared healthy, including apices and bases. *Abdomen.*—The liver was enlarged, perhaps somewhat fatty; there was very little change in colour, excepting one or two pale superficial patches a third of an inch in diameter. The spleen was enlarged, exhibiting numerous small nodules on its surface. The kidneys and capsules were healthy. The pancreas was firm and marked in outline (enlarged?). A hard, oval, flattened body, an inch and a half in diameter, projected from its anterior surface. This tumour was similar in colour to the pancreas. The bowels were apparently healthy externally. Three or four enlarged mesenteric glands were felt. The brain could not be examined.

MICROSCOPIC APPEARANCES. *Glands.*—On section, the cortical layer was found to be distinct, but the characteristic appearance of the medullary substance was entirely lost; excepting a fibrous stroma, scarcely any structure was visible. The gland-substance was infiltrated throughout with immense numbers of minute fat-granules, arranged in lines and groups. Numerous dark masses distributed over the section, by careful adjustments of focus, were seen to consist entirely of fat-granules. This description applies to all the lymphatic glands examined; a few of those situated about the roots of the lungs contained, in addition, the black pigment commonly found in that region. A few vessels were seen in the glands in which the blood remained uncoagulated, the red corpuscles standing out quite clearly. No white corpuscles were seen. The yellow mass described—probably a hypertrophied thymus—presented microscopic appearances similar to those of the glands, as did also the tumour growing from the pancreas. There was no trace of tubercle or of cancer. *Lung.*—Sections through the hard masses in the lung showed an immense number of minute fat-granules, dispersed throughout the tissue, exactly as in the glands. A comparatively small quantity of cell-debris could be seen in the section of lung, and in the fluid on the glass slide; the fragments were very irregular in form, and on the whole did not resemble the elements of a tubercular deposit. It was quite evident that the peculiar appearance of the affected lung-substance depended to a greater extent on the fat-granules than on any other element present. A thin section was found much clearer after immersion in ether; in fact, after that it presented very much the appearance of normal lung. Sections of gland and lung were stained a red brown by iodine, and traces of structure were thereby brought out to a greater extent than by the use of any other re-agent. Sulphuric acid applied after the iodine, produced a blue or violet colour in parts of the gland-sections. In one instance this was also seen in a lung-section, though with less distinctness. It may therefore be considered that waxy or albuminous degeneration was present in the glands and possibly in the lung. *The Spleen* presented no character of special interest, excepting the presence of fat-granules like those in the glands and lung. The number of these granules was not so great as in the other tissues named.

REMARKS.—It is manifest that the affection of the lymphatics was primary in this case. The affection is perhaps best regarded as an instance of that rare and imperfectly known condition termed "Hodgkin's Disease", which was first described in the seventeenth volume of the *Medico-Chirurgical Transactions*. Dr. Markham described a somewhat similar case in 1853, in which the glands were the seat of a fibrinous deposit with fat-globules (*Pathological Transactions*, vol. iv, p. 178). This is the only instance I have been able to find in which fat was present largely. Several of the collateral symptoms have been described before, in connexion with former cases. Cough and dyspnoea are mentioned by Mr. Hutchinson, as present in a case greatly resembling the above. (*Pathological Transactions*, vol. XII, p. 233.) Enlargement of the thymus occurred in another case, described by Dr. Wilks, in the same volume. Enlarged glands pressing on the œsophagus were seen by Dr. Carswell in a third patient, in whom they caused death by dysphagia. (*Medico-Chirurgical Transactions*, vol. xvii, p. 93.) Anasarca I find (after going over a large number of cases) to be an almost constant symptom; as also is enlargement of the spleen.

In former records I have been unable to discover any example of the high temperature, which lasted for three months in this instance. The cause of this elevation of temperature is difficult to discover. It can scarcely be said to have been associated with tubercle formation, for if tubercle were present, which is very doubtful, it was only in a disproportionately small amount. The glandular affection must be distinguished from what the French call *l'adénie*, a mere hypertrophy of the gland-structure. It seems probable that an albuminous or waxy degeneration had taken place, causing increase of bulk and destruction of the medullary structure, and that the general fatty atrophy, which so often attends waxy disease, had set in subsequently. Perhaps the diminution of bulk, which was observed to take place in the glands during the last few weeks of life, was consequent on an acute fatty atrophy.

The function of the glands must have been almost or entirely abolished. It seems not improbable that the pain in the back and limbs may have depended on the consequent obstruction to the flow of lymph. This theory is favoured by the fact that the glandular enlargement in the popliteal spaces and groins was attended by great pain in the legs and thighs, and by the appearance of red lines running up the limb, probably indicating inflammation of the lymphatic trunks. If the flow of lymph were thus arrested or greatly impeded, it may be asked: What changes might be expected to follow (*a*) in the system generally, into the circulating fluid of which the elaborated lymph ought to be poured; and (*b*), locally, in the parts where the lymphatics arise?

(a) Lymph being probably the chief or only source from which the blood derives its fibrin and white corpuscles (*Cellular Pathology*, p. 158), hypnosis and diminution in number of white corpuscles might be expected to result from obstruction to the lymph flow. The fact of the blood remaining uncoagulated in the small vessels, when examined microscopically, also the occurrence of anasarca, render it probable that hypnosis was present in this case. The only microscopic examination of the blood during life was made under circumstances of difficulty, and cannot be relied upon as showing the proportion of white corpuscles. It may, however, be remarked that the blood seen in the vessels of the glands appeared to contain no white cells.

(b) Locally, the stoppage of so important a function as the secretion of lymph, the non-elimination of fibrin (a waste product, according to many pathologists) could not fail to affect nutrition, and might possibly be the cause of high temperature; this theory is suggested by the fact that almost all the instances of high temperature with which we are acquainted are attended by change in the amount of the blood fibrine.

The treatment of this case consisted in efforts to palliate special symptoms, and in the use of the ordinary constitutional means; from the latter, unfortunately, no benefit appeared to result.

MUSEUM NOTES.

THE ANNUAL MUSEUM, NEWCASTLE.

ALTHOUGH the Museum contained a most instructive display of objects, and excited great interest, it was scarcely frequented so much as might have been expected, for a very obvious reason. It was in the Infirmary, and at some distance from the reception room and the places where the sections met. In former years, we have had to express the same regret; for at none of the places where the Museum has as yet been formed was it found practicable to give it location under the same roof where the meetings were held. The question of place is really of great importance, for exhibitors are disappointed when the attendance is poor. The Museum ought, if practicable, to be close to the reception room, so as to facilitate access as much as possible. In making these remarks we by no means criticise those who undertook the arrangements, since we are quite aware of the impracticability of making the arrangements just what could be most wished. We merely express the opinion in order to attract attention to its importance in future.

We shall now continue our notice of some of the more valuable of the objects exhibited.

PATHOLOGICAL SPECIMENS, ETC.

Injuries to the Skull.—Two very interesting head cases were illustrated by specimens. The first of these was an instance of recovery and complete reparation after a severe fracture with depression. The skull was picked up in the Tyne, and there is consequently no history. It shows a ponded depression just behind the right parietal eminence. The depression in the centre of the pond is fully a quarter of an inch, the area of the pond being somewhat larger than a penny-piece. Everywhere the bone is smoothed over by new deposit. From the anterior margin of the pond, a line of united fracture, marked by a conspicuous ridge, passes forwards to the suture between the squamous bone and the great wing of the sphenoid, whilst backwards another line passes through the posterior angle of the parietal, and through the occipital into the foramen magnum. As the skull has not been cut open it is difficult to inspect the interior, but the margins of the pond are quite distinguishable inside as a rounded flat patch. This skull is well worth reproduction by casts, one of which ought to be sent to the College of Surgeons. We have very few specimens which speak so conclusively as to recovery and perfect repair after such severe fractures. In all probability the injury was caused by a heavy blow. It is exhibited by Mr. W. Emmerson.

The second case to which we refer was brought forward by Mr. Anthony Bell, one of the surgical staff of the Newcastle Infirmary. It was illustrated by a cast and a photograph, and by the piece of bone removed by the trephine; for the patient recovered and still retains her calvaria in use. She is now twenty-four years old, and at the age of seven fell and struck her head. She became afterwards liable to pain in the head, and to epilepsy. The epileptic fits were frequent, and the pain very severe. As the symptoms seemed associated with the injury, Mr. Bell considered that they warranted resort to operation, and accordingly employed the trephine. The dura mater having been exposed, a puncture was made through that membrane, and a considerable quantity

of serous fluid escaped. The woman recovered, the wound healed, and she is now alive a year after the operation, having been ever since free from headache and from epilepsy.

The case is a very remarkable one, whether we regard the boldness of the measure adopted, or the success which has apparently resulted from it. The skull at the part where trephined was not found remarkably thickened, and no spicula or other adequate source of irritation were discovered. The puncture of the dura mater must no doubt have added very greatly to the risks of the operation.

Examples of Extreme Cystic Disease of the Kidneys.—Dr. Philipson showed the wax casts of the kidneys of a man who had died of phthisis, and in whom no suspicion of renal mischief had been entertained. In particular, it is stated that no albumen was present in his urine; yet both kidneys were utterly disorganised by cystic transformation. They were greatly enlarged; many of the cysts were as large as cherries. The original specimen has been placed in the Museum. The man's age was forty-five.

Another wax cast, illustrating the same disease, was shown by Mr. Hutchinson. It was executed with marvellous accuracy by Mr. Tuson, and showed the characters of this curious disease to perfection. In this case, as well as in Dr. Philipson's, the absence of kidney symptoms had been remarkable. The patient, a man nearly sixty years of age, had believed himself in excellent health, and was engaged as an able seaman when he received a compound fracture of the leg, of which he died. He had done well during the first month after his accident, and only for a few days before his death were his symptoms threatening. He then, without apparent cause, became delirious, and it is probable that the entire disorganisation of his kidneys, unsuspected at the time, really accounted for his death.

Cystic disease of the kidneys is common enough in minor forms; and every now and then specimens are met with like those above described, in which the whole organ is involved. In these, the condition is usually symmetrical, and sometimes cysts are met with in the liver and spleen also. As yet, cystic disease has not been associated with any special form of diathesis or with any particular cause.

Adult Heart without Ventricular Septum.—The Newcastle Pathological Museum possesses a remarkable, perhaps unique, specimen of a heart in which no trace of a ventricular septum can be found. It is that of an adult who, during life, was the subject of cyanosis. The full particulars of his case were read some little time ago, before the Royal Medical and Chirurgical Society. The heart, as also some excellent photographs of it, were exhibited in the Annual Museum by Dr. Embleton.

Leucoderma.—A photograph and coloured portrait were exhibited by Dr. Philipson, showing a very marked condition of leucoderma. Its subject, a girl aged 10, of unusually dark skin, was spotted over with patches of white, which were abruptly margined and very definite. The patches were arranged with a fair approach to symmetry, but differed considerably in size on corresponding regions. As usual, no cause could be assigned for the piebald condition, and its subject was in excellent health.

Several very interesting drawings were exhibited by Mr. Jeaffreson, one of the assistant surgeons to the Infirmary. One of these shewed a

Chancre on the Lip.—The subject of it was a man in whom, subsequently, the usual secondary symptoms followed. The drawing represented a large ulcerated induration in the left half of the upper lip.

Compound Fracture of the Os Calcis.—Another drawing by the same surgeon showed the condition of the foot after recovery from a compound fracture of the os calcis. The accident occurred in a fall. Some loss of the arch resulted after repair.

Cancer of the Breast of Slow Growth.—A drawing showing an open cancer of the right breast with tubercles in the adjacent skin, which was also shown by Mr. Jeaffreson, was of interest as illustrating the slow growth and progress of the disease. The sketch was taken seventeen years after the commencement.

In interesting contrast with this, we may here mention another drawing which was shown by Mr. Hutchinson to illustrate the manner in which cancer recurs after operation in the skin near the scar. In this case, the scar and the adjacent glands remained free, but all around the scar was a crop of separate nodules. An interval of five years had occurred between the operation and the recurrence, yet the arrangement of the nodules made it probable that their germs had been present during the whole of that period. Inasmuch as the apparent freedom during five years was considered a decided success for the operation, we may note with interest the much longer duration in the case in which no operation had been performed. Both patients are probably yet destined to many years of life; for in both the disease is evidently of

that form which remains long restricted to the structure first attacked, and has little tendency to produce gland-mischief or to affect the blood and viscera.

Dislocation of the Humerus with very Extraordinary Displacement.—This drawing showed the head of the dislocated bone just external to the man's nipple, the arm being, of course, lifted upwards. Mr. Jeaffreson's description stated that the displacement was such that the distance from the tip of the acromion to the external condyle measured only three inches. The ligaments must have been most freely torn away. The accident was caused by the fall of a weight upon the shoulder. The patient, an old man, had received, also, other injuries, of which he died. The dislocation had been reduced.

Mr. Spencer Watson exhibited several important illustrations of disease, chiefly drawings from the pencil of Mr. Christopher D'Alton. Amongst them we noticed a case of congenital syphilitis, with very marked physiognomy and characteristically notched teeth. A study of syphilitic keratitis, also, interested us much. It showed a condition which has, we believe, never before been illustrated, although it is a very definite and important one. We allude to the patches of vessels which creep over the cornea, and which are peculiar both in form and tint. They never resemble the vessels which feed ulcers, or those caused by granular lids, although in mode of arrangement they approach the latter. Their colour is usually salmon-tinted, and the vessels are so close set that individual trunks can rarely be made out. The form of the patch is often crescentic—at any rate it is always broad at its advancing edge, never angular like the leash which runs up to an ulcer. These characters, which often suffice for the recognition of the disease, Mr. Watson had very successfully shown.

Congenital Want of Symmetry in the Skull.—Another of Mr. Spencer Watson's drawings showed the head of a child in which a remarkable want of development of the right eye and orbital ridges was present. The mother referred it to an injury in birth; but Mr. Watson, no doubt correctly, preferred to think that it must have been congenital.

Large Cerebral Tumour in a Child the Cause of Convulsions.—From the Newcastle Pathological Museum was exhibited the cast of a cerebral hemisphere, showing a tumour in the posterior part. The tumour is well circumscribed, and nearly as large as a child's fist. It is stated that the child had, during three years preceding its death, no fewer than 3,923 attacks of convulsions. The label describes the case as one of tubercle of the brain, but it looks quite as much like a glioma-tumour.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Tuesday, August 16th, 1870.

1. *The Invasion from a Social and Psychological Point of View: the Sick and Wounded: Sundry War Topics.*—2. *Small-pox: General Mortality of Paris.*

THE INVASION FROM A SOCIAL AND PSYCHOLOGICAL POINT OF VIEW: THE SICK AND THE WOUNDED: SUNDRY WAR TOPICS.—To think or write about mere medical and surgical details when it is impossible to sit down for half-an-hour at my desk without having to discuss at home or in the street the rumours and current news of the town and the armies, is not easy. Much that is professionally interesting I had noted for this letter; but, under all the circumstances, it will perhaps be better to leave ordinary science for this week somewhat in the background, and present in simple truthfulness the circumstances in which our profession may soon be called upon to act.

Within a few steps of my dwelling is the mairie of the eighth arrondissement, which may be likened to a crowded open-air club: all the official war-news and official notices are there duly posted. On a large yellow placard, conspicuous in typographical display, I read the following, which I believe is on the walls of every mairie in France. It tells its own tale, and a great deal more.

"Société des Secours aux Blessés Militaires des Armées de Terre et de Mer.

"Appel à la France.—Au nom de Dieu, au nom de la patrie, au nom de nos fils, de nos frères, de nos braves soldats tombés avec honneur sur le champ de bataille, et toujours héroïques quoique vaincus aujourd'hui, nous faisons un appel à tous les cœurs Français. De grâce, donnez-

nous de l'argent, du linge, des chemises, des couvertures, des vêtements, de flanelle, etc.

"Là-bas, sur nos frontières, l'élan des villes, les offrandes touchantes des villages ne suffisent déjà plus à nos chers blessés.—Les besoins sont immenses.—Le temps presse.—Donnez, oh! donnez vite!

"Envoyez les dons en nature et en argent au siège de la société à Paris, Palais de l'Industrie, porte No. IV."

I subjoin a close translation of the above, which will assist those who are not familiar with French in estimating the eloquent urgency of the appeal, and the humbled spirit in which it is made.

"Appeal to France.—In the name of God, in the name of our country, in the name of our sons and our brothers, in the name of our brave soldiers fallen in battle—heroes ever, though now vanquished—we make an appeal to the hearts of all Frenchmen. Give, we beseech you, money, linen, shirts, blankets, clothes, flannel, etc.

"Down yonder on our frontiers, the generous outburst of the towns, and the touching offerings of the villages, are already inadequate to the wants of our dear wounded. The wants are immense. Time presses. Give! oh, give quickly!

"Donations in money and in kind to be sent to the office of the Society at Paris, Palais de l'Industrie, door No. IV."

The language in which this appeal is expressed will suffice to carry the sympathies of many readers into the homes of this stricken land, where for the present a keen sense of national humiliation and the news or the presentiment of desolating personal bereavement have entirely submerged national light-heartedness. From private life I could draw many convincing illustrations of this wonderful change of manners and thought, were this the time or the place for the expatiating upon the social bearings of the crisis. To indicate, however, the accuracy of my remark, let me quote the short address to its readers which *Le Tintamare* (a weekly paper of fun) of Sunday, the 14th, placed at the head of its first page, which is usually devoted to caricatures and laughter-moving scraps.

"A nos Lecteurs.—La France traverse une phase pénible pendant laquelle le rire est interdit. Pour aujourd'hui, *Le Tintamare* dépose sa crêcelle, bien convaincu que, grâce à nos héroïques soldats, la tristesse de la nation va cesser. Plusieurs de nos jeunes collaborateurs compris dans les levées partent pour la frontière. Nous les embrassons avec l'espoir au cœur. *Vive la France!*"

The translation is to the following effect.

"To our Readers.—France is passing through a painful period, during which laughter is interdicted. For the present, *Tintamare* lays aside its rattle, though convinced—thanks to our heroic soldiers—that the nation's sadness is about to cease. Several of our young contributors comprised in the levies are starting for the frontier. With heartfelt hopefulness we give them a farewell embrace. France for ever!"

It is not *Tintamare* alone that has to deplore a suddenly diminished staff. Every kind of business has, without warning, been crippled for lack of men: women and boys have been suddenly forced into occupations for which they have neither the strength nor the training. Look at the windows of Potien's great shops for grocery, and you will see notices to "young men of 19", that there are vacancies for them; and an infinity of similar demands may be seen in shop-windows all over Paris. Why, it may be asked, specify the age of 19? Because the new levies embrace every male in France above 20 capable of bearing arms, and not specially exempted by saving clauses in the new law. "Avant peu de jours", said to-day's military chronicle, "la France tout entière sera levée contre l'ennemi." That is a literal truth: in a few days the entire male population of France will be under arms. The clergy are not behind their fellow-citizens in practical patriotism. The pulpits resound with impassioned appeals to arms. But some of the priests wish to practise what they preach, urging that when "la patrie" is in danger, it is as much the duty of the priest as of all other citizens to fight for it. In a no less noble, though less militant spirit, the Abbé Loyson, better known as "Father Hyacinthe", professor of "éloquence sacré" in the theological faculty of Paris, in a letter to the mayor of his arrondissement, offers his services as a navvy in the trenches; reserving, however, the right of becoming a fighting soldier should "le suprême danger de la patrie" open this career to the priesthood. "In the meantime, however", says the Reverend Professor, "there can be no opposition made to our aiding in the national defence by using the pick and the shovel. Will you tell me, then, to what point I may go to assist in the earthworks and fortifications round Paris? Dès demain après ma messe, je me tiens à vos ordres." The French Protestant clergy are acting in precisely the same enthusiastic spirit. On Sunday last, M. Bersier, in the French Protestant church in the Avenue de la Grande Armée, began his sermon by saying—"To-day there is only one topic on which we are thinking, and on that topic alone can I preach: France humbled to the dust by the

triumphant invader; godless France chastened by the Almighty." The great preacher concluded one of the grandest sermons he ever preached by an eloquent appeal to arms. In fact, the "practical application" of his sermon was an out-and-out indorsation of the street-cry of the day—"aux armes, citoyens"! Every Sunday so long as the war lasts there is to be a collection for the wounded at M. Bersier's church. His congregation are at their own charges to maintain one or more small military hospitals.

In calling attention to the humiliated, depressed, and *tense* state of the national mind of a people generally vain, proud, joyful, and playful—naturally light-hearted to a fault—but, this and other faults notwithstanding, a great and a noble people—I wish to attract notice to a phase of the situation which has deeply interesting psychological aspects. This war has already in many homes given its own character to much of the sickness which the physician has to treat; and, as time goes on, we shall no doubt have many sad phases of mental malady occurring in a separate distinct form, and complicating the ordinary course of other diseases. Great social convulsions and emotions, when they suddenly pervade an entire nation, must inevitably lead to noteworthy consequences within the proper field of medical observation and practice.

The provisioning of Paris for a long siege has begun in earnest. Immense arrivals of flour are taking place from Havre. Sanitary precautions are being attended to upon a large scale. The assembling of too many sick and wounded is being checked. Large numbers of the wounded recently arrived from the frontier have been removed from the Val-de-Grâce and other Parisian hospitals to Versailles and elsewhere beyond the precincts of the capital. If the dangerous classes within Paris can be held in check, a desperate resistance will no doubt be made to the Prussians; but if those too numerous individuals whose political creed is comprised in the one word "pillage" get the ascendancy for even an hour—which some dread as a not impossible contingency—it might be necessary to open the gates to the enemy to divert internal dangers. But France has still great armies, vast wealth, and millions of brave citizens. Let us hope, then, that the threatening crash may yet be averted. At any moment the whole complexion of affairs may be changed.

All the English who have no obligatory duties to detain them have either left Paris, or have their passports ready to retire as soon as danger is imminent.

The *intendance militaire* advertised yesterday for estimates for 500 kilogrammes of sulphate of quinine, to be supplied at the rate of 125 kilogrammes a month. Estimates will be received up to the 20th current. This advertisement has suggested various surmises regarding the health of the army, but they are not of sufficient value to repeat. The fact, nevertheless, is worth noticing.

SMALL-POX: GENERAL MORTALITY OF PARIS.—The efflux of inhabitants continues, and daily augments; but, nevertheless, the mortality from small-pox does not maintain the tendency to diminution which I noticed in my last letter. In the week ending Friday, 12th August, 176 persons died in Paris from small-pox. In the preceding week, the deaths from small-pox were 151. The small-pox returns for the last four weeks stand thus:

Week end. July 22.	Week end. July 29.	Week end. Aug. 5.	Week end. Aug. 12.
215	227	151	176

The deaths reported in Paris from all causes during the same weeks stand thus:

Week end. July 22.	Week end. July 29.	Week end. Aug. 5.	Week end. Aug. 12.
1160	1195	1126	1122

At present, there are two special elements which lessen the intrinsic value of these figures: first, there is the sudden exodus from Paris, which has been and continues to be very great, but the exact extent of which there are for the present no means of discovering with even approximative accuracy; and then there is the daily influx of sick and wounded from the armies, which must soon affect, if it have not already affected, the mortuary returns. The healthy are leaving; the sick are coming in; but in what proportions cannot be as yet stated in respect of either class. Besides the sick and wounded from the army who have been placed in the Val-de-Grâce, there are a large number of disabled soldiers who have returned to their families, or to private houses and small infirmaries in Paris. Our respected colleague, the eminent surgeon M. Jules Guérin, for example, has fitted up twenty beds, and provided food, attendance, and all necessities, for twenty wounded soldiers at his house. It will be a matter of time and considerable difficulty to gather up in a separate form the statistics of the sickness and mortality of Paris strictly belonging to the war. The numerical statements upon this subject which are going the rounds of the newspapers seem to be made at random, and are certainly without statistical value.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 20TH, 1870.

THE MEETING AT NEWCASTLE.

NOTHING in human development is monotonous. It is impossible to stamp out individuality; and events which recur with absolute regularity, under equal auspices, and subject to the action of identical moulding machinery, are not the less happily unlike each other. The annual meetings of the British Medical Association belong to the recurrent order of events, and are marshalled under general rules which present but little variety from year to year. But every meeting has its own physiognomy; and for several years these meetings have been thoroughly and brilliantly successful. To look back upon the last few years only, to recal the meetings in Bristol, London, Dublin, Oxford, and Leeds, and to compare the still fresh recollections of those great professional and social gatherings with this latest admirable reception at Newcastle, is to recognise the splendid and growing vitality of the principle which underlies them. They have had each their own features, and their success sprang out of a real living germ, which is susceptible of perennial vitality, and capable of diverse and almost unbounded development. Dr. Stokes expressed, in very brief but pregnant words, the sentiment which underlies these meetings, and the source of their usefulness and success. He said, in effect, that the great means for the elevation of the profession were twofold—the improvement of education, general and technical, to the highest point of which it is capable; and the union of the profession in bonds of concord, and under common impulses of mutual regard and helpfulness. Without perhaps precisely defining for himself in so many words the exact aims of each of the proceedings of the Annual and Branch meetings of the Association, every one must have felt that these are precisely the objects which are advanced by all the acts and arrangements of these meetings. Following this meeting at Newcastle, its occupations may be divided into the work at the general meetings; the work in the sections; and the social festivities provided by the hospitality of the profession in Newcastle, and of the eminent persons whom they interested in the reception of our members. The work at the general meetings included scientific addresses from Dr. Sibson and Dr. Heath, which discussed with power and originality some of the latest achievements and problems in medicine and surgery; and a very highly important discussion on medical education and organisation in connection with the great questions raised by the Medical Acts Amendment Bill. This brought into a strong light the part which the Association has played as champion of medical progress in declining any other solution of the question than one based upon a recognition of the popular rights of the profession, and on its claim to a direct voice in the Council of Registration and Education. The work of the sections is wholly scientific; and we may observe here that, while the occurrence of some very attractive and largely attended excursions during the

hours of meeting of the sections drew away from them no small proportion of their attendance, very excellent results were attained. This was especially the case, perhaps, in the section of Public Medicine and in the new section of Psychology, which are not rivalled and supplemented in their usefulness to the same extent as other sections by permanent metropolitan and local societies dealing with the same subjects under certain conditions of advantage. Thus both professional education and the advancement of science were largely consulted in the arrangements of the meeting. Even wider public interests are involved in the questions discussed in the Public Medicine section, such as the registration of sickness, by Dr. Ransome; and the relation of sickness to pauperism considered as cause and effect, by Dr. Rogers, and connected with the reform of the English system of Poor-law medical relief and the amelioration of the position of Poor-law medical officers. The addresses of the Presidents of sections were replete with interest. These will be reproduced in our columns; and, together with a selection from the valuable papers read and the discussions thereon, will receive an extended circulation and permanent record. But some of the most valuable results of the meeting cannot be so stereotyped and fixed; and it is difficult to gauge them or to display them after a fashion which will secure for them adequate appreciation.

The hospitalities of our members, of Sir W. Armstrong, and of the Warden and Senate of the University of Durham, afforded upwards of three hundred members of the same profession the means of repeatedly uniting in social intercourse, on an equal platform; and did all that liberality, good-will, and energy, could do to cement acquaintance into friendship, and to thaw all formal difficulties. Those only who have attended these annual meetings from time to time know how excellent they are; how full of all that is good, of means of friendly intercourse and pleasant pastime, of health and zest, and of the intellectual variety of interest, which is more replete with refreshment than the mere inactivity which is apt to monopolise the claim to be called rest. In all respects the Newcastle meeting has made good its claim to be considered an entire success. In Dr. Charlton the meeting found a President worthy to fill the place of Dr. Chadwick, and that is very high praise; for Dr. Chadwick has not only done honour to the Association by the admirable ideal which he has now and throughout his life maintained of the place and functions of the physician in the world's work, but in a year of unusual exigencies, which called for real sacrifice of time, labour, and thought, he has been a thorough working officer of the Association; watchful of the interests confided to him, earnest in urging the principles of reform which the Association has adopted by repeated and solemn acts, and prompt to defend the honour and importance of the office which he was called to fill. Dr. Charlton, the newly installed annual head of the Association, has not failed to recognise that the exigencies of the next year upon the energies of the President may be not less onerous than they were during the last; and the excellent spirit and ability with which he fulfilled the duties of President at this meeting gave emphasis to his promise that he would accept his part in the work to come with earnestness and sincerity.

Thanks to the admirable organisation of the officials, the untiring energy and liberality of the leading local officers, and of the profession in Newcastle at large, there was an abundance of all the elements of success: admirable and well-concentrated buildings in which to hold the meetings; large and general hospitalities to individuals; accessible and complete information as to the arrangements and local circumstances. The splendid banquet of Sir William Armstrong was an incident of an altogether exceptional character. He entertained over two hundred and fifty members of the Association at a dinner of rare elegance and completeness, and with a spontaneous grace which will always be remembered to his honour in our Association. The Sheriff, Mr. Gregson; the President, Dr. Charlton; and Dr. Philipson, Local Secretary, each in turn exercised collective hospitalities on a large scale.

At Durham, the Warden and Senate of the University, and at Alnwick, Dr. Wilson and Dr. Fenwick, were largely hospitable. Tyne-

mouth Priory, the Prudhoe Convalescent Home, and Alnwick Castle were among the most attractive objects of excursion; but the factories of Sir William Armstrong, the great glass and chemical works, and the coal-mines of the neighbourhood, all drew their various bands of visitors, and everywhere the visitors were kindly welcomed.

The meeting, then, was in every sense successful; and comparatively few people know how much it means to say this now of an annual meeting of the British Medical Association. Those who attend the meetings know it well; and their number now is becoming increasingly large. If it were yet more widely known outside of the regular *habitués* of the gatherings, the number who attend might possibly increase to an inconvenient extent. Meantime, Newcastle may be congratulated on having been the seat of a meeting which has rendered a veritable service to the profession and to the Association, and on having displayed the most energetic liberality and public spirit.

LAISSER FAIRE AND ITS RESULTS.

OUR recent observations on the debated question as to the control of prostitution, have had for their object not so much the advocacy of either side as the protest that it is absolutely necessary to examine the question more patiently and more widely than has yet been done. With the advocates for compulsory supervision we go unreservedly thus far, that it would be most unwise to repeal the enactments at present in force. No one can doubt that, as far as the army, the navy, and the merchant service are concerned, it is possible to considerably diminish the prevalence of venereal diseases. Their morality cannot probably be made worse; and whenever it comes to be the fact that a community of men takes unlimited licence in this matter, the supervision of the women with whom they consort is likely to reduce risks. It is precisely because the general public is not yet in the habit of taking such licence that we hesitate to do anything which might encourage it, in fear that at the same time we might make the danger more general. This is where the territories of the physician and the moralist overlap, and this is why it is absolutely impossible for the sanitarian, however specialised, to ignore morals. Syphilis is the product—accidental, we grant most willingly, but still the product—of immorality. Increase immorality, and you increase syphilis.

The advocates of new laws for the control of prostitution are in the habit of asserting that what they are pleased to call our *laissez faire* system of the past has, by common consent, proved a failure. It might perhaps not be amiss if they would explain a little what they mean by this form of expression, and next, to what extent their assertion is true. If by *laissez faire* is meant a careless let-alone policy, a refusal to meddle based upon indifference as to results, then it is, we think, hardly fair to bring such a charge against English society. In 1650, the Kirk session of Perth ordered one Janet Watson either to marry or go into service, since it was feared that by living alone and in idleness she might give cause for scandal. Before and since that time, and south as well as north of the border, society has with unceasing vigilance adopted precautions for securing its own safety on this score; and many have been the Janet Watsons who have experienced treatment not less definite in its intention, though possibly less explicit in its terms. Chastity has been in the highest esteem amongst us; and mothers and mistresses have looked keenly after the protection of those under their charge, whilst fathers have spared no pains to guard their sons from temptation. Minor offences against good order in this matter have been punished in the one sex with the sharpest rigour, and in the other also with as much sternness as has perhaps been safe. It is true that during the last century or two we have made no attempts to put down prostitution by law; but we have in this held our hands simply because all experience has shown the utter impracticability of the task, and we have meanwhile employed against it every species of moral force which we could bring into play. We have stood aloof from everything approaching to legal, or national, or social cognisance of those engaged in this trade, and that not from carelessness nor from prejudice, but from a rooted

conviction that to meddle would be to make worse. The very reluctance to discuss it with which we have been so much upbraided has sprung from the same motive, and not in the least degree from want of interest. If the charge of *laissez faire* be made in reference to prostitution itself, it certainly seems to us in no degree appropriate, for we have fought the enemy without ceasing with such arms as have seemed to us most likely to be efficient.

Nor is it, we think, true to assert that the British policy in this matter, whether *laissez faire* or not, has been a failure. Our estimate of success must, of course, be a comparative, and not an absolute one. We are bad enough, Heaven knows; but, in sober earnest, are we worse or better off than our neighbours? Monogamy is as yet, through the length and breadth of Britain, in high favour, and is still our prevailing custom; and deviations from chastity under its bonds are re-puted as disgraceful by all classes of society. Whilst Paris is happy, or even exultant, in a sort of reputation which ranks her as a *maison de joie* for the civilised world, London laments her state, and vigorously strives to amend it. Witness the willingness which all who believe that venereal diseases are the appropriate and efficient punishment for venereal sins shew as regards their perpetuation; witness, also, the storm of opposition which the proposal to legislate has roused amongst us—an opposition which would never have been thought of in Paris. Our English literature is as yet, although occasionally prurient, free from any actual complicity with sexual vice; and in this respect our novels and our theatres display marked differences from those of our neighbours. It is not for us to boast; but, when urged to change our conduct, it becomes our duty to make a reasonable comparison, so far as we are able. That comparison we in conscience believe to be in our favour in large and very important respects.

If, then, it be unreasonable to assert that, as regards sexual morality, the English people is worse than others, we may next ask how it stands in reference to the prevalence of disease. Is it true that our neglect has left us more than others the prey of syphilis? The data for an international contrast are, it must be confessed, very imperfect; and those who have glibly asserted that the balance is largely against us, have done so with but little real inquiry. The facts supplied by the army have been hastily assumed to be conclusive. Now we may admit that in the army of Belgium, and in that of France, the loss of service on account of "enthetic disease" is, in all probability, somewhat less than in ours. It is easy to see that the supervision of prostitutes may effect thus much; and, were the moral customs of the whole community on a par with those of our soldiers and sailors, there would be no difficulty in granting that it would be wise to extend the operation of the law. But whilst our habits and opinions remain what they are, and whilst chastity is as highly prized as it is, there is room for doubt. Much has been said of the ravages of syphilis in the English population. Let us glance for a moment at the other side of the picture. In doing so, we may state at once our conviction that a very exaggerated estimate is entertained by the laity, and has recently been studiously fostered by members of our profession. It is not uncommon to be asked by intelligent non-medical inquirers as to the Act, whether it is not true that "half the diseases met with are the results of immorality"; and others, who make more reasonable estimates, are yet far beyond what is probable. These mistaken notions have arisen in part from the random statements of individuals, and in part from the publication of statistics of certain institutions, which are to a large extent special. Of this nature is the amazing evidence given by Guy's Hospital. We suspect that it would be only a degree more absurd to quote the statistics of the Lock Hospital itself. The out-patients of Guy's are selected, and these by no means present a fair specimen of the poor of London. The same remark applies in some degree to most of our large hospitals. They all enjoy a reputation for the treatment of these diseases, and attract those who suffer from them in undue proportion. We appeal to the experience of Poor-law surgeons, and to those in general practice, for a common-sense estimate of the real facts. Many of these would, we believe, admit that from one year to another they often have little or

nothing to do with venereal diseases. Especially is this the case in country districts. In those places where statistics of sickness have been collected, the facts are most startlingly dissimilar from the general impressions; whilst, if we regard only the death-returns, these diseases shrink into insignificance. There are no two organs more frequently attacked by constitutional syphilis than the eye and the skin, and specialists in these departments ought to see much of its ravages; yet even in London, in the practice of those who diagnose syphilis very liberally, a proportion of one in five for the eye and one in seven for the skin has been shown to be the outside. Mr. Erasmus Wilson has recently published the statistics of ten thousand cases of skin-disease occurring in private practice; and, although his opinions are well known to be in favour of the belief that syphilis acts as a cause in many maladies not usually attributed to it, his percentage of suspicious cases is extremely low.

Although there is an impression to the contrary, yet recent discoveries and more accurate investigations, so far from extending the domain of syphilis as a cause of chronic disease, have decidedly tended to limit it. Many surgeons used formerly to believe that struma and allied diatheses were remotely in connection with it; and it was suspected as a cause of degraded health in many cases in which it could not be proved, and even in several successive generations. A few amongst us are still credulous enough to retain such opinions, or even to join the editor of the *Westminster Review* in suspecting a syphilitic parentage for such maladies as gout; but most of those who like exact evidence, have very materially limited their conceptions on this point. We know now what is syphilis and what is not; and although we have admitted as positively syphilitic certain maladies of a definite kind not formerly recognised, we have excluded a far larger number which were once under suspicion. We do not believe that syphilis is the cause of struma; we do not believe that it has anything whatever to do with the common constitutional forms of skin-disease; we do not, as a rule, believe that its influence is ever felt beyond the second generation. On these points we have now strong negative evidence. Although we now know for certain that a few diseases of the nervous system, previously referred to other causes, are really syphilitic, that various forms of visceral disease, aneurisms, etc., also stand sometimes in the same relation, we know also that these affections are peculiar in their characters, that they are quite distinct from the general run of chronic maladies, and that they are very rare. We can identify now the subject of severe hereditary taint by his teeth and physiognomy; but those who believe most firmly in the value of these signs, believe also that they are not displayed by one in five thousand of our population.

The best means of estimating the relative severity of syphilis in different nations will probably be found to consist in counting cases of hereditary disease. Here, however, other national habits may interfere with the result. As yet, we believe no statistical data in the least trustworthy have been obtained, and we are compelled to fall back upon the impressions left by observation. As the result of some investigation, we may remark that it will astonish us very much if statistics should ever show that constitutional syphilis is more common in England than in neighbouring countries. It is not uninteresting, in reference to this point, to note that most English surgeons willingly believe in a majority of cases those of their patients who assert that they have never had syphilis. A French surgeon, if he had thought it worth while to inquire, would, on receiving a denial, shrug his shoulders in the most absolute incredulity. It was a French surgeon who, addressing an English patient by whom the accusation had been indignantly denied, expostulated thus: "You need not be ashamed of it, my friend, every one has had it some time, more or less, more or less." We do not believe that this difference in general opinion can be explained on any other hypothesis than that there is a large basis of truth as its foundation. We cannot believe that English surgeons are in the least less observant as to facts than their neighbours.

Such being the facts and such the want of facts, it is, perhaps, within the limits of becoming modesty to assert that neither as regards prosti-

tution itself, nor as regards syphilis as its accidental consequence, is the British nation chargeable with *laissez faire* in comparison with others. In no country in the civilised world has more earnest attention been given to the vice on the one hand and the disease on the other. Nor has this attention been unproductive of results in either direction. Our knowledge of the diagnosis and treatment of syphilis is equal to that possessed by any nation; and if, in reference to its prevention, we still cling to the belief that it is most likely to be attained by encouraging the chastity of married life, and putting all possible impediments in the way of irregular sexual connections, we really cannot find in the greater success of systems which differ from our own any great reason for its abandonment. Again, we repeat, we have no wish to be dogmatic on a matter which is as yet far from ripe for solution; but we may admit that we entertain very considerable mistrust of many of the arguments of Mr. Acton and his friends. Their motives we most sincerely respect. It may be, however, that, in their urgent advocacy of general legislation, and in the reproaches with which they cover both opponents and neutrals, they are not in any very different position from that which enthusiasts would occupy who, in face of a smouldering fire, should try to rouse us to activity by such a cry as this: "You lazy good-for-nothing rascals, lend a hand to the buckets! What, do you allege that there is no water? At any rate, here is a big hogshead of good oil; come, lay aside your *laissez faire* excuses for idleness, and, in the name of charity and common-sense, help us to throw it on!"

WE understand that Mr. Sercombe, who has for many years filled with distinction the office of Dental Surgeon to St. Mary's Hospital, London, has resigned the post.

AN out-patient of the Royal Free Hospital was on Tuesday brought before Mr. Cooke, the police-magistrate, charged with having swallowed some poisonous lotion. It was labelled "Poison" in large letters. She stated that she had drank it in mistake, and was at once discharged.

THE defendants in the Brixton baby-farming case were indicted at the Central Criminal Court on Tuesday, before Mr. Baron Martin, for the wilful murder of four children. The trial was postponed, on application of counsel, till the next sessions.

METROPOLITAN HOSPITALS.

By the new Sanitary Act (33 and 34 Vict., chap. 53), all hospitals in the metropolis are held to be within the district of every one of the nuisance authorities in the metropolis.

MUNIFICENCE.

THE Baron F. von Diergardt has given the munificent donation of £10,000 to the Committee of the German Hospital at Dalston, for the purposes of the charity. A Special General Court of the Governors has been called for the purpose of giving the Committee power to invest the money.

MEDICAL EDUCATION.

THE recommendations and opinions of the General Medical Council on the subjects of preliminary examination, of registration of medical students, and of professional education and examination, have been brought under our notice in a separate and compendious form. Their substance has already been brought before our readers. We shall again have occasion to refer to them in the forthcoming educational number of the JOURNAL.

SPECIAL HOSPITALS.

WE observe that in the prospectus of the Westminster Hospital for the ensuing session it is stated that, in addition to the practice of the hospital, pupils are permitted to attend, without further fee, the practice of the Royal Westminster Hospital and that of the National Hospital for Paralysis. This is one method of rendering such special institutions available for the purposes of medical education, which seems worthy of attention.

A HINT FOR THE WAR.

PICKED oakum, such as that which Mr. H. Pownall has submitted to the Committee of the Society for Aid to the Sick and Wounded, is of multiform and very great use in hospitals. Especially is it of the greatest utility in camp, field, and military hospitals. Nothing does more to prevent the spread of hospital gangrene and erysipelatous affections, so fatal to wounded men, than the use of such a material as this, in lieu of sponges, etc. It is immediately destroyed after use in each case; while sponges, no matter how carefully cleansed, are apt to carry contagion.

OUTBREAK OF AN EPIDEMIC IN CHILE.

INTELLIGENCE has been received in Liverpool of the breaking out of an epidemic in Colchagua, on the coast of Chile, the effects of which are stated to be "as sweeping as those of cholera or yellow fever." The *Libertad*, which publishes the information, says:—"We do not desire to cause a groundless alarm, but, on the contrary, to point out the evil in order that a remedy may be sought with the necessary promptitude. The disease presents itself first in the form of a violent fever, and then, on the second or third day, appear on the face spots of a gangrenous character, which develop themselves in two days, and produce death in the midst of the most cruel sufferings. The ulcers especially attack the mouth and nose, which fall off in pieces." The journal concludes by recommending that experienced medical men should be sent to study the disease. It is also thought desirable that all vessels arriving from Chile should be strictly inspected by the Customs officials.

HOW SCARLET FEVER IS SPREAD.

THE enormous mortality from scarlet fever which appears in the Registrar-General's mortality-bills is now a constant and increasing quantity. It is assuming proportions which are alarming; not the less so, because they are largely increased by individual carelessness. It has always been a source of great mortality; and, in the absence of any means of checking its progress, such as we possess in vaccination for small-pox and by attention to the water-supply and drainage for cholera and some forms of pythogenic fever, it becomes the more necessary accurately to investigate the means by which it is spread. These may be summed up chiefly in a few words. It is spread by personal carelessness, by neglect, and by recklessness of individuals as to the public safety. Scarlet fever is propagated from person to person by culpable ignorance and criminal neglect. Cleanliness and general sanitary regulations are of use in mitigating the severity of the disease, but are no bar to its propagation. Let us take the experience of one London physician during the last week, and it will easily explain how scarlet fever is now being spread. He tells us that he has become cognisant of the following cases during that time. Travelling by rail, he was requested not to put down the window, as a little boy in the carriage was not very well. The boy was on his way home from a school where scarlet fever had broken out; and, on examining him, the eruption was fully evident. A clergyman brought into his room a lad, not to consult him about the lad, but inadvertently. He was about to take him into the country. This lad had just recovered from scarlet fever, and was in the desquamative stage of convalescence, shedding about those scales which are so highly infectious, and are enough to poison a whole population. His washer-woman had scarlet fever in her family; she ascertained that it was conveyed by the clothing of a scarlet-fever patient sent to the wash by the friends without any caution. These are all acts of the most culpable and dangerous negligence. Scarlet fever is one of the most intensely and continuously contagious diseases. From the outset of the disease till the completion of the subsequent process of peeling of the skin, the patient, his clothing and discharges, and the light scales which are diffused in the atmosphere from his peeling surface-skin, are pregnant with poison. Not only should he be carefully isolated; not only should his clothing and all that comes in contact with him be carefully and thoroughly disinfected; not only should his body be anointed, as Dr. Budd has recommended, with oil, to limit the aerial diffusion of the

epidermal scales; but the utmost care should be exercised by the persons attending him not to become carriers of this virulent and subtle poison. To send to the laundress garments fatal as those of Dejanira, to expose in a public carriage or a crowded waiting-room the fertile sources of a deadly and volatile poison, are terrible offences against the public safety. They are constantly and carelessly committed; and it is thus that scarlatina is spread.

INDIAN MORTALITY.

IN a letter from India we read:—"Never has the mortality in the British army in India been so great since the year 1861, the Punjaub cholera year, as in 1869, the year of sunstroke as well as cholera and fever. Dr. Bryden's figures, not yet published, reveal a death-rate everywhere, except in Madras and Bombay, of 42·89 per 1,000 among men, 41·4 among their wives, and 14½ per cent. among the children. The loss by death and invaliding together is 96·87 per 1,000, or nearly one man in every ten. And yet a cry has been raised against continuing the construction of those barracks which England demanded, and Lord Lawrence was the first to order, after the revelations of Lord Herbert's committee. The new barracks have been completed in Barrackpore, and the gunners and their wives rejoice in them and praise the Government which houses them in a much better style, for Bengal at least, than the officers are lodged."

VOICES OF THE NIGHT.

IF the voices of wailing thousands could be heard above the din of London, they would afford as wide a publicity to a caution against the Registrar-General's prophylactic prescription against infantile diarrhoea as he obtained by using the machinery of government and the publicity of the papers for the prescription itself. In the name of the babies and for the sake of peace, we protest against this recipe for sulphuric orangeade as a preventive of diarrhoea. That recipe appeared in our columns a few years since in a paper by the medical officer of the Post-office, in which he gave an account of the precautions he had adopted in a cholera year among the body of postmen, who passed through the epidemic very successfully. The use of this orangeade was one of these precautions. Whether *post* or *propter hoc* is a question very far from being decided. But at all events it must be remembered, that the great mortality from diarrhoea is amongst infants under one year old. Would any sane man think of giving a sulphuric acid drink to infants? Of his own accord, we presume, certainly not. He would rightly judge that it would gripe and torture them to death. The sounds of wailing which would issue from a neighbourhood in which the infant population were so treated would be so musical and so melancholy that they would constitute a most effective and overpowering protest against the cruel edict from Somerset House, which condemned innocent millions to such intense ventricular discomfort. We venture to become the interpreter of these voices of the night, and to submit that, although it may sometimes answer to treat the postmen as if they were babies, it will not be safe to treat the babies as if they were postmen.

THE CONTAGIOUS DISEASES ACT OF ST. LOUIS.

THE *Medical Gazette* of New York describes the new Police Act of St. Louis for the regulation of prostitution. This ordinance provides, in its first and second clauses, that the police shall report to the Board of Health all houses of ill-fame and of assignation within the city limits, with the names, ages, and former occupations of their inmates; and that the keepers of such establishments shall inform the Board of changes of control or of the number of inmates. Section third ordains that

"The said Board of Health shall divide the city into districts, and for each district shall appoint a physician, whose duty it shall be to visit, at least once a week, each of the houses of ill-fame, and rooms used or occupied by prostitutes, in his district; a list of these, together with a list of all prostitutes and their places of living, shall be furnished to him by the Board of Health, for his sole use and inspection. Such physician shall then carefully inquire into the sanitary condition of the

prostitutes, and, if necessary, subject them to an examination: shall make all necessary orders and give all proper directions for their sanitary management; he may order the removal of any of the inmates to the hospital hereinafter designated; and in any case where there is danger of infection he shall order such removal or such action as shall remove such danger. He shall furnish weekly a full report of his action, and of the condition of all such houses and their inmates, to said Board of Health. The keeper or person in charge of every such house shall pay to such physician the sum of one dollar for each inmate, weekly, which money shall be delivered to the clerk of the Board of Health, subject to the order of the said Board. Any person violating or disobeying the order of such physician, or obstructing, hindering, or preventing him from discharging his duties as herein prescribed, shall be deemed guilty of a misdemeanour, and be fined not less than twenty dollars; provided that any person may, within three days, in writing, after its issue, appeal from any order of said physician to the Board of Health, which shall thereupon grant a hearing to such person; and its action thereupon shall be final in the premises, and disobedience of any order therein made be punishable as in this section provided."

This repressive Act is open to every objection that can be urged against such measures. It is certain to fail, and opens the way to great abuse. It is especially objectionable to make the physician a tax-collector. The mere inspection of brothels is a very small part, and the less important part, of a sanitary measure for the repression of contagious disease. This ordinance places the medical officer in a peculiarly unpleasant position. Section fourth establishes a special house of correction and hospital for diseased prostitutes, and excludes the sexual contagious diseases of women from the City Hospital. Section fifth empowers the Police Commissioners, upon the request of the Board of Health, to suppress any designated house of ill-fame. Section sixth prescribes that

"Each physician appointed by the Board of Health, as prescribed by section three of this ordinance, shall, in addition to the examining-fee, collect such sum from each keeper of any house of ill-fame, and from each prostitute, as may be fixed or prescribed by the Board of Health jointly with the Board of Police Commissioners. Such fees shall be known as hospital dues, and shall be paid to the clerk of the Board of Health, who shall hold the same subject to the order of said Board."

Section seventh directs that all proper means be taken to reclaim prostitutes and lead them into the path of virtue. The three remaining sections provide for the salaries of the examining physicians, and for the technical powers requisite to carry the ordinance into effect. The absolute power of interference with the "liberty of the subject" taken in this measure is noteworthy. We fear that this ordinance would be condemned as at once arbitrary and imperfect by both the advocates and the opponents of a Contagious Diseases Act.

SOCIAL SCIENCE CONGRESS.

THE preparations for the Annual Congress of the National Association for the Promotion of Social Science, to be held at Newcastle-on-Tyne, from the 21st to the 28th of September, are in an advanced stage. His Grace the Duke of Northumberland will preside over the Association, and deliver his inaugural address on the first evening of the meeting. The Health Department will be presided over by Mr. Robert Rawlinson, C.E., C.B. The following are the special subjects proposed. 1. What is the best method of disposing of sewage and excreta? 2. What modifications are desirable in the existing sanitary laws and administration? 3. What legislative measures ought to be taken to prevent the adulteration of food, drink, and drugs?

A SANATORIUM AT CAIRO.

THE confusion and disorder incidental to a state of siege in Algeria, and the probable continuance of disturbance for some time yet to come, have inspired serious misgivings in those invalids who have been wont to look to Algeria as a safe and pleasant sanitary retreat and wintering-place. It is quite possible that some of the French winter-resorts may not this year be as easily accessible or as comfortable as of old. At a timely moment, therefore, we have brought under our notice what has indeed long been much wanted—a suitable establishment for giving to English health-seekers the comforts and luxuries of an English home in

the admirable winter climate of Egypt. Under the auspices of a considerable number of eminent physicians in London, Dublin, Edinburgh, and the provinces, to whom she is personally known, Mrs. James Appleton, Portsdown House, Clifton Gardens, has made arrangements for opening at Cairo an establishment which will occupy admirable premises, and will be contrived so as to obviate that want of comfort and attention which has till now rendered residence in an eastern hotel practically impossible for invalids and ladies unaccompanied, and have till now deprived them of the benefits of this most agreeable, healthful, and attractive winter-resort. From the commencement of October to the end of April, the climate of Egypt is admirable; its mean temperature in January is stated at 59 deg. Fahrenheit. An enterprise which will render Egypt thoroughly available for invalids will be welcomed by physicians as a great boon to many persons of delicate health, especially to those suffering from consumptive, rheumatic, or renal weakness. It fills a void, and we direct attention to it as one of considerable interest and utility.

POOR-LAW MEDICAL REFORM.

It is the intention of Mr. Brady, M.P., to introduce a Bill next session for the purpose of severing the existing relations between the medical service of the poor and boards of guardians, and to concentrate in a special medical staff those sanitary and social services which are now performed in Ireland by the dispensary staff. Mr. Brady will be thankful to receive from any gentleman statistics on the relation which exists between neglected sickness and excessive pauperism, or descriptions of the public medical service in foreign countries. Meantime, it will be seen that the Committee appointed by our Association in 1868, at Oxford, with a similar object, has been revived, on the motion of Dr. Joseph Rogers, the President of the Poor-law Medical Officers' Association.

DIRECT REPRESENTATION OF THE PROFESSION IN THE GENERAL MEDICAL COUNCIL.

THE following is the Report of the Committee appointed to obtain Direct Representation of the Profession in the General Medical Council, read at the annual meeting of the Association at Newcastle-upon-Tyne, on August 11th, 1870.

Your Committee, in presenting this their fourth Report to the Association, have the satisfaction to announce that, since the last annual meeting, held at Leeds, the one-portal system, involving a good preliminary education, and the passing of one fair but real and uniform examination, by every one entering the medical profession, has been accepted by the Government, the General Medical Council, and the various Medical Corporations of the United Kingdom.

Your Committee feel justified in attributing the recognition of this important principle, for which the Association has struggled from the earliest period of its existence, to the efforts of this Association, ably seconded by the *Lancet* and medical press. They have reason to know that the "Address to the Members of the Legislature and the General Public", issued by the "Direct Representation Committee" in 1869, by directing attention, amongst other matters, to the inadequate knowledge of many who entered the profession, contributed much to attainment of this end.

Your Committee, while fully recognising and appreciating the importance of this advance in medical reform, have, however, to regret that the composition of the General Medical Council was in no degree improved or modified by the proposed "Medical Acts (1858) Amendment Bill" of the present Government, although it was intended by that Act to give the Council enlarged powers.

Under these circumstances, the Bill of the Government having been introduced into the House of Lords, your Committee met in Birmingham on May 5th last, and, in accordance with the trust reposed in them by the Association, determined to oppose the Bill, unless the prayer of the Association for Direct Representation of the Profession in the General Medical Council, to the extent of one-fourth of its number, were conceded. In order the better to work to this end, your Committee decided on not actively interfering for the present with the mode of election of the Representatives of the Universities and Cor-

porations in the General Medical Council. On May 18th, a General Special Meeting of the Association, numerously attended, was held in London under the presidency of Dr. Cadwick, to consider the provisions of the new Medical Bill. At this meeting, resolutions were again passed, being for the fourth time at general meetings of the Association, demanding direct representation on the General Medical Council, in the proportion of one-fourth of its number, such representatives to be elected by the direct votes of the registered medical practitioners.

On the following day, a deputation waited on the Lord President and the Vice-President of the Privy Council. They laid before the Government the views of the Association as to the one portal—that it should be one in reality and not in name; as to the extent of the powers to be granted to the Privy Council; and, above all, showed how general was the demand on the part of the profession for direct representation on the General Medical Council. They concluded by placing in His Lordship's hands a clause for the admission of eight such representatives to the Council—four for England, two for Ireland, and two for Scotland.

Your Committee presented to the House of Lords, through the Marquis of Westminster, a petition embodying the prayer of the Association.

On June 28th, your President, your President of Council, and President of the Direct Representation Committee, again met other members of the Committee in London, in consequence of the Bill having passed the second reading in the Lords, and no notice of amendments in favour of direct representation having been given, as the Committee had been led to hope. Your Committee had interviews with several influential members of the upper house, who admitted the fairness and justice of the claim of the profession for direct representation; but no notice of amendments in that sense having been given, it was not considered possible, at that late period of the session, the Bill being down for consideration in Committee on the 30th of June, to give effect to the demand.

The Earl of Lichfield, however, after the Bill had passed through Committee of the Lords, gave notice that he should move the adoption of the prayer embodied in the petition of your direct representation Committee to their Lordships' House, on the bringing up of the Report. He justified himself in doing so by the facts stated in the petition, of its emanating from an Association of 4,000 members, of its representing the general wish of the profession, and of its being endorsed by several of the Corporations.

The Lord President admitted that if the subject had been mooted earlier he should not have opposed its consideration, apparently forgetting that the views of the Association had been fully laid before his lordship in 1869, at which interview his lordship assured the deputation that their representations should have every consideration, and that he would be no party to an imperfect Bill. Lord Lichfield withdrew his motion.

The Bill having passed the Lords, your Committee again met in Birmingham, and decided to request, through the JOURNAL, the support of the members of the Association in aid of their efforts in the Commons.

On July 13th the Bill passed the first reading in the House of Commons without the knowledge of your Committee, or, indeed, of the representatives of some of the Corporations, who were in London for the express purpose of watching the progress of the Bill.

On July 14, the next day, it was accidentally discovered by Mr. Hargrave, the representative of the Irish College of Surgeons in the General Medical Council, and Dr. Macnamara, ex-president of the College, and representing the interests of the College in connection with the Medical Bill, that the Medical Act (1858) Amendment Bill "was down for its second reading that very day."

Dr. Lush, through whom the discovery was made, immediately gave notice of motion that the Bill should be read that day three months, and the Vice-President of the Privy Council was then induced to postpone the second reading for a week.

On July 20th, the President of the Council and the President of the Direct Representation Committee again met in London, and availing themselves of a power granted by the Council of the Association, had clauses drawn up to be moved in Committee on the Medical Bill, whereby the objects of the Association, in respect to direct representation, were to be secured.

On July 21, in accordance with a suggestion from Mr. Graves, M.P. for Liverpool, your Committee summoned a meeting of members to consider the steps to be taken, and on the following day the meeting took place. It was decided that, if the Government would accept the amendments of the Association, the second reading would not be opposed. A deputation accordingly waited on the Vice-President, who

declined the proposal, but stated that if the second reading of the Bill were allowed to pass, he would not oppose the appointment of a Select Committee, next session, to inquire into the subject with a view to distinct legislation.

Your Committee, feeling that by acceding to this arrangement, so uncertain in its future accomplishment, they would be betraying the trust reposed in them by the Association, declined the proposition, and the Bill was withdrawn on the 25th.

This result was mainly attributable to the hearty response of the Members of the Association, and to the appeal of your Officers; and the thanks of your Committee are, therefore, due to them for their co-operation.

Your Committee thank the Members of the Legislature, in both houses, for their cordial and effective co-operation.

As another Medical Bill must be introduced during the next session of Parliament, your Committee recommend that a Medical Reform Committee should be appointed, with a larger scope and with full powers to secure the adoption of those principles for which the Association has always contended.

EDWARD WATERS, M.D.,
Chairman of the Direct Representation Committee.

REGISTRATION OF SICKNESS.

THE following is the Report of the Committee on the Observation and Registration of Disease, read at a General Meeting of the Association, held at Newcastle, August 12th, 1870.

In their last Report this Committee pointed out the necessity for a national registration of all cases of disease coming under treatment at the public expense, and in public institutions; and urged, that for this purpose, the existing districts for the registration of births, deaths, and marriages should be taken for a basis, and that the undertaking should be aided by the appointment of "Registration Medical Officers, according to the plan already approved by this Association at their meeting in Dublin in 1867".

At a general meeting of the Association held at Leeds, July 28th, 1869, this report was adopted; and in order to promote the object of the Committee it was resolved, "That it is desirable that the Report of the Committee, etc., be forwarded to the Right Hon. the Chairman of the Royal Sanitary Commission, accompanied by a request that the Commission would be pleased to examine a member of this Association, Dr. Sibson, F.R.S., or some other, on the subject, with a view to pointing out to the said Commission the great importance to the public and to science of the registration of disease."

We regret to state that, although the instructions of this resolution were fully carried out, and Dr. Sibson consented to be examined as a witness, no result has, as yet, followed the application. We trust, however, that the Association will not desist from its efforts until the recommendations of its Committee have been carefully considered.

The Committee notice with satisfaction, that an independent attempt to obtain the registration of disease has been made by a highly influential deputation, headed by Dr. B. W. Richardson, who waited upon the President of the Poor-law Board in November last.

Mr. Göschen is reported to have said "That, in spirit he was heartily with the deputation in its sense of the importance of these returns, and of the advantages of utilising them"; and, that he approved generally of the suggestions which had been brought before him"; but he pointed out that "care should be taken not to impose additional labour upon the Poor-law officers, and that the nomenclature of disease used should be uniform".

Your Committee recommend that a deputation from this Association should also seek an interview with Mr. Göschen, and that the gentlemen composing it should be instructed to state:—1. The importance to the public and to science of such a registration of disease. 2. The success of the scheme adopted by this Association, and its employment for ten years in Manchester and Salford and St. Marylebone; for five years at Birmingham; for four years at Newcastle-on-Tyne; and for fifteen months at Preston. 3. That the method of registration proposed provides for a uniform schedule of disease. 4. That it might be performed by the resident medical officers of public institutions and by the Poor-law medical officers, who should be fairly remunerated for this addition to their labours. 5. That the appointment of "Registration Medical Officers" would not only facilitate the registration of disease, but would greatly improve other services of State Medicine.

Your Committee regret that the returns of disease, now made every week in different places, are not published in the BRITISH MEDICAL JOURNAL. The publication would not only give useful information, but would promote the spread of the system throughout the country.

The principles of the scheme for the registration of disease, adopted by this Association, are as follows:—1. The collection, every week, of returns of new cases of disease coming under treatment in all the public institutions, whether charitable, parochial, or corrective (e.g., prisons), of a district. 2. The registration districts to be based upon those now used for the registration of births, deaths, and marriages. 3. The appointment, in each Superintendent Registrar's district or group of districts, of a "Registration Medical Officer", who, in addition to the collection of the above returns, and the supervision of the death-records, would, in doubtful cases, certify the fact of death, investigate and record its cause, and register still-births. He would also be available as a medical witness, or assessor, and might act as a medical officer of health in certain districts.

The Association consider that this scheme is most important, both in its bearing upon science and the welfare of the public. The returns would afford a means of comparing the relative healthiness of different districts, and would thus serve to direct sanitary and benevolent exertions. They would give plain and timely warning of the rise and progress of the various epidemics of fever, diphtheria, cholera, etc., so that preventive measures might be applied at their outset, when most likely to be effective. They would constitute a most valuable series of medical statistics, from which conclusions might be drawn respecting the causes of disease, the laws of epidemics and their relation to atmospheric changes, to seasons of plenty and scarcity, and many other interesting questions of medical science. They would also probably show in some respects the influence of the trade and manufactures, and of any other circumstances peculiar to a district. Stress is laid upon the *weekly* collection of the records of disease, because in this way the *time and place* of origin of disease is more distinctly shown. The death-returns, however valuable in other ways, give no information on these points. It is thought important, moreover, that the deaths occurring in the same public practice as the diseases, shall be recorded each week, and compared with the number of cases of disease. In this way the *intensity* of disease may be discovered, and an idea of its total *prevalence* may be formed from a comparison of the *total deaths* with the deaths in public practice. It will be observed that the returns thus proposed would be obtained from public practice only, the registration of diseases occurring in private practice would, in fact, be impossible at the present time. Moreover, if the areas, from which the regular returns of public practice are made, be fixed, and the constituency, so to speak, be always about the same, a very fair *representative* series of statistics would be obtained, which would give the *relative* prevalence of different diseases at any one time in different districts. In order to obtain a sufficient number of cases, it is desirable that all the public institutions of a district, and not merely its Poor-law institutions, should unite to make the returns. The scheme has proved practicable, and for a time entirely successful, wherever it has been tried, even upon a voluntary plan.

Weekly returns of disease and death have been made to the Manchester and Salford Sanitary Association for ten years by nearly thirty contributors, and during the whole of that time scarcely any of them have failed to fill up their report. At St. Marylebone, for the same period, monthly records have been given, and for several years weekly returns have now been made upon a uniform plan, and with a similar list of diseases, at Manchester and Salford, Birmingham, Newcastle-on-Tyne, and Gateshead.

PUBLIC MEDICINE.

THE following resolutions were passed at the Public Medicine Section, and read before the general meeting of the Association.

Poor-law Medical Service.—Proposed by Dr. JOSEPH ROGERS (London), seconded by Mr. MANLEY (West Bromwich).—

1. That, in view of the efficiency of the Irish dispensary system, as contrasted with the imperfections of the English mode of Poor-law medical relief, it is most desirable that the principles of the Irish system should be adopted in this country, as the best means of prevention, as regards both disease and pauperism.

2. That a Committee of this Association, appointed at Oxford in 1868, should be reappointed, for the purpose of considering the subject of medical relief in Great Britain and Ireland, and of co-operating with the Poor-law Medical Officers' Association.

Sanitary Legislation.—On the suggestion of the President, Dr. ARMSTRONG moved, and Dr. ROBINSON of Gateshead seconded, the following resolution, to be handed to the general body of the Association.

"That, in future sanitary legislation, the smoke-nuisance and other gaseous pollutions of the atmosphere must be dealt with by compulsory measures, to be carried into effect by authorities independent of the district, and instructed by competent inspectors, unfettered by local interests and feeling."

NOTES OF THE WAR.

THE AMERICANS IN PARIS.

WE learn by private letters that the American residents in Paris have shewn the most active sympathy with the country in which they reside during its reverses. Large subscriptions have been made, and a special and fully equipped American Ambulance Corps has been formed provided with all the *matériel* of hospital and field use. It has placed itself at the unreserved disposal of the French war department in a completely organised condition. The following is the surgical staff of the American Ambulance Corps:—Surgeon-in-Chief, Dr. J. Marion Sims. Surgeons, Dr. T. T. Pratt, Paris; Dr. MacCormac, Belfast, Ireland; Dr. May, Baltimore, Maryland; Dr. Tihlman, Baltimore, Maryland. Assistant-Surgeons, Dr. Aubin, Jersey; Mr. Haydon, Boston; Mr. Samson, Paris; Dr. Crane, Paris.

THE MEDICAL PROFESSION IN GERMANY.

THE letters which we receive from Germany from professional sources, describe the German medical men as overworked in the extreme, as they have to attend to the wounded of the enemy as well as their own. All the ablest men of the great towns are with the army moving, and without either much chance or inclination to correspond. Every large place either on or near the Rhine contains one or several lazarettos, and many private houses have been devoted by their proprietors to the reception of the sick and wounded during the time of war. Some of the pleasant watering-places of Nassau are now large hospitals, or rather consist of a series of temporary hospitals; and the medical men of the Spas give their assistance without remuneration. A subcommittee of German medical men in London advise the German Aid Society here as to medical matters; and we are informed that they have spent already over £4000 for water-cushions, waterproof-sheeting, lint, surgical instruments, carbolic acid, and chloroform. They have besides sent also twenty tents with two hundred beds complete, and are about to send the same again. Including relief in money, they have spent already about £19,000.

AID TO THE SICK AND WOUNDED.

THE medical men who have proffered their voluntary services to the National Society for Aid to the Sick and Wounded in War, and who have up to this time been forwarded to the scene of war, are Dr. Philip Frank, Dr. W. Ward, Dr. Duret Aubin, as surgeons; Mr. W. Pratt, Mr. C. A. Cooper, Mr. H. Millson, Mr. A. C. Horner, Mr. G. D. S. Thomas, dressers, who have gone to France in the service of the Society. Dr. Charles Mayo, Mr. J. C. Galton, Mr. Henry Rendle, M.R.C.S., surgeons; and Mr. Blennerhasset Atthill and Mr. R. W. Parker, dressers, have gone to Prussia. Miss Pearson, Miss Neligan, Miss McLaughlin, Mrs. Mason, and Mrs. Hottermann, have gone as nurses, with £500 in stores, to Prussia. Mr. J. Furley and Captain de Kantzow, R.N., were to start on Friday for Paris with £500 in stores. £500 in money has been given to the Central Committee (of each country) for Aid to the Sick and Wounded; and £50 for stores to the deaconess who started two days ago. The stores contain not only lint, bandages, and other surgical appliances, but also chloroform, chlorodyne, Condyl's fluid, extractum carnis, etc. Messrs. G. Sandeman and Co. have given the Committee a pipe of port wine; Messrs. Nicoll and Co., some new pattern stretchers; Messrs. Condyl and Co., a quantity of Condyl's fluid; the Australian Meat Company, some Liebig's extract of meat, etc. Although the stores are in full activity all day, they are cleared by each party going out to the Continent. The City of London has done nothing as yet. Meetings have been held at Windsor, Reading, Worcester, Morpeth, Cambridge, and other places. The necessities of the sick and wounded are already very great, and will for some time be constantly increasing. Liberal and prompt aid will well become the humanity of this country, which in such a case recognises only a common brotherhood with the suffering. Military and naval officers must of course first obtain permission to serve. The *Pall Mall Gazette* is informed that Deputy Inspector-General of Hospitals and Fleets, H. J. Domville, C.B., immediately after the first serious engagement between the French and Prussians, volunteered to proceed to the Continent, with a view of placing his services at the disposal of those who have charge of the wounded of the two armies, but the Lords of the Admiralty declined to give him leave. Several other eminent naval surgeons have followed the example set by Dr. Domville, with the same result. No such permission is of course necessary for civil medical practitioners; and those who desire to offer their services to the Prussian hospitals, and who speak the German

language, should apply at the North German Embassy in London, where they will be directed to the points at which their services are most required.

THE WOUNDS OF THE PRISONERS.

IT is stated that of the wounded who are received in the German hospitals, the least severely wounded are the French prisoners who have been hit by the projectiles of the needle-gun. Unless they strike full upon the body, these balls, in the majority of cases, inflict mere flesh-wounds. From their elongated forms, they turn readily upon striking a bone, and, consequently, the wounds are comparatively trifling. Far more serious are the ragged wounds inflicted by the Chassepot, which, at short distances, appear to hit extremely hard; but worst of all are the wounds of the mitrailleuse balls, which seem completely to smash any bone against which they strike.

THE PRUSSIAN FIELD ARRANGEMENTS.

A CORRESPONDENT of the *Daily News* writes: "The more I see of the arrangements of the army, the more I am impressed with their almost absolute perfection. There is a thoughtfulness and care which descends into the most minute detail. For example, each soldier carries in his knapsack some lint and a bandage, so that when he falls the surgeon can instantly run up, open the knapsack, and apply a bandage. A certain number of tourniquets are also carried by the non-commissioned officers of each regiment; and although in the heat of a pitched battle the non-commissioned officers could not stop to apply tourniquets to the wounded, yet, as a proportion of these also fall, the instruments are always at hand for the surgeons; and in the skirmishes, or in regiments not exposed to the full brunt of a conflict, there will yet be a certain number of wounded, many of whose lives, which would otherwise be lost, may be saved by the prompt application of a tourniquet or bandages. Round each man's neck as he goes into action also is a card, upon which is his name. As he falls, the surgeon who examines and binds up his wounds sees at once whether it is of a nature which will permit of the patient being moved to a distance or not. According to its severity, then, he writes on the card whether the man is to be taken to the field-hospital close at hand, or to the hospitals further in the rear. Accordingly, when the ambulance arrives, it is seen at once where the wounded man is to be conveyed. In the hospitals they have an admirable arrangement for keeping the wounds cool. Bottles, or rather bags made of very thin India-rubber, and with wide mouths, closing with corks, are filled about half-full with water, so that the bag lies loosely upon the wound."

DURING the continuance of the Franco-Prussian War, we request those of our Readers and Correspondents who have access to sources of information as to the Medical and Surgical details of the War on both sides, to communicate with the JOURNAL. Such details will commonly have a scientific and humanitarian interest for our Association; and in both interests it is desirable that the impressions and observations of those on the spot should be recorded while still retaining the living impress of actuality.

OUR VOLUNTEER MEDICAL DISORGANISATION.

At this moment it is certainly not inappropriate, as we read of the vast volunteer military force in this kingdom, to ask, What is the volunteer medical organisation? If this volunteer force were called on to fight, what field-equipment for the transport of sick and wounded has it? Has it any stretchers, wheeled litters, ambulance-waggons, etc.? All arrangements have been made for the transport of men, guns, ammunition, and everything necessary for wounding, to any part of the coast or country, in case of invasion, by road or rail. What arrangements have been made for the care and transport of the wounded? We should be very glad to hear that any arrangements exist, and what they are. Who are to carry off the wounded? On what system are they to be carried off? Who and where are the bearers who have been trained for this important duty? In the last volume of the *Army Medical Reports*, and in his treatise on the *Transport of the Sick and Wounded in War*, Deputy Inspector-General Professor Longmore gave full particulars of the arrangements not only in North Germany, where they are very admirable, but in most other countries, where they are far less efficient. Any one referring to this book will see how little progress we have made in this direction in England, even in our regular army. In our volunteer force we have made literally none. The medical department, as we have before pointed out, is without a semblance of organisation, and, in case of active service, must completely break down for want of it.

THIRTY-EIGHTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in NEWCASTLE, August 9th, 10th, 11th, and 12th, 1870.

THE Thirty-eighth Annual Meeting of the British Medical Association was held at Newcastle-upon-Tyne, on Tuesday, Wednesday, Thursday, and Friday, the 9th, 10th, 11th, and 12th days of August, 1870. The following members and visitors entered their names in the book provided for that purpose in the reception-room. Other members of the profession resident in Newcastle and the vicinity also, we believe, attended the meetings: but did not enrol their names.

Acland, H. W., M.D., F.R.S., Oxford
Adams, W., Esq., London
Aitchison, Andrew, M.B., Wallsend
Alexander, P., L.R.C.P., Earsdon
Allen, W. C., Esq., Willington
Anderson, William, Esq., Newcastle
Angus, Jas. A., Esq., Newcastle
Appleton, Henry, M.D., Darlington
Archer, S., Esq., 98th Regiment
Armstrong, Luke, Esq., Newcastle
Armstrong, H. E., Esq., Newcastle
Armstrong, Leonard, Esq., South Shields
Arnison, Charles, L.R.C.P.Ed., Stanhope
Arnison, W. C., M.D., Newcastle
Arras, W., Esq., Wetheral
Atkinson, James, M.D., West Hartlepool
Atkinson, G. P., Esq., Pontefract
Aveling, T. H., M.D., Rochester
Bagshawe, F., M.D., St. Leonard's-on-Sea
Banning, R. J., M.D., Gateshead
Barker, Robert, Esq., Bishopwearmouth
Barkus, Benj., M.D., Gateshead
Barnes, Henry, M.D., Carlisle
Barnes, Robert, M.D., London
Barrow, James, Esq., Sunderland
Barter, C. S., M.B., Bath
Bartlett, W., Esq., London
Bartrum, John S., Esq., Bath
Beatty, T. E., M.D., Dublin
Bell, Anthony, Esq., Newcastle
Bell, Rev. D., M.D., Goole
Bennet, J. Henry, M.D., London
Bennett, J. Hughes, M.D., Edinburgh
Black, D. C., M.D., Glasgow
Black, John G., M.B., Newcastle
Blackett, George P., Esq., Whickham
Blackett, Wm. C., Esq., Durham
Blandford, J. W., Esq., Coxhoe
Blumer, Luke, M.D., Sunderland
Bolton, A., M.D., Newcastle
Bolton, G., Esq., Sunderland
Bolton, John A., M.D., Leicester
Bolton, Wm. Thomas, Esq., Ebbw Vale
Bowes, Richard, Esq., Richmond, Yorkshire
Boyd, James, Esq., Newcastle
Brady, G. S., Esq., Sunderland
Brady, Henry, Esq., Gateshead
Brecknell, W. H., M.D., Newcastle
Broadbent, S. W., Esq., South Hetton
Broadbent, Lewis G., M.D., Bamborough
Brown, Colville, M.D., Bewick
Burke, William M., F.R.C.Q.C.P.I., Dublin
Burnup, Martin, M.D., Newcastle
Burton, J. E., Esq., Liverpool
Caudlish, Henry, M.D., Alnwick
Carr, Charles, Esq., Newcastle
Chadwick, Charles, M.D., Leeds
Chambers, Thomas, Esq., London
Charlton, Edward, M.D., Newcastle
Clark, A., M.D., London
Clark, Hugh, M.D., Ferryhill
Clarke, Richard, Esq., Newcastle
Cayton, M. H., Esq., Birmingham
Clouston, Thos. S., M.D., Carlisle
Collins, J. B., Esq., Durham
Cook, Robert F., M.B., Gateshead
Copeland, William, Esq., Staindrop
Corner, F. M., Esq., Poplar
Corrie, J. J., Esq., Leeds
Cossar, Thomas, M.D., Darlington
Couper, John, M.D., London
Crisp, J. Luke, Esq., South Shields
Crossby, J. Parker, M.D., Leeds
Cuming, James, M.D., Belfast
Currie, T., Esq., Amble
Curry, William, Esq., East Rainton
Davis, Robert, Esq., Wrekenton
Davison, W. J., Esq., Newcastle
Davison, R. S., Esq., Newburn
Denham, J. S., M.D., South Shields

Dill, R. F., M.D., Belfast
Dixon, W. H., M.D., Sunderland
Dodd, Thomas A. H., M.D., Newcastle
Dodgson, Henry, M.D., Cockermouth
Donnelly, Thom. John, Esq., Cramlington
Douglas, Mordy, Esq., Sunderland
Drury, C. D. H., M.D., Sunderland
Dunn, Robert, Esq., London
Easby, Wm., L.R.C.P., Darlington
Eastwood, J. W., M.D., Din-dale Park
Eddie, Wm. H., Esq., Barton-on-Humber
Embleton, D., M.D., Newcastle
Elliot, Robert, M.D., Carlisle
Ellis, Heber D., Esq., Poole
Ellis, Richard, L.R.C.P.Ed., Newcastle
Evans, John, M.B., Sunderland
Falconer, R. Wilbraham, M.D., Bath
Fawcus, H. R., M.D., Ford
Fenwick, J. C. J., M.B., Alnwick
Fielden, Samuel, L.R.C.P., Shildon
Fitzgerald, E. A., Esq.
Foss, Robert W., M.B., Stockton-on-Tees
Fothergill, J. Milner, M.D., Leeds
Fothergill, J. R., M.D., Darlington
Fothergill, T. P., M.D., Bedale
Foulerton, J., M.D., London
Frain, Jos., M.D., South Shields
Furniss, J. J., L.R.C.P., Castle Eden
Gammage, R. G., Esq., Bishopwearmouth
Gibb, C. J., M.D., Newcastle
Gibson, Charles, M.D., Newcastle
Gillard, R., Esq., Hovingham
Gourley, S., M.D., West Hartlepool
Gowans, William, Esq., South Shields
Green, Thomas, M.B., Kendal
Greenhow, T. M., M.D., Leeds
Greenhow, H. M., Esq., Bengal Army
Greenwood, John W., Esq., Ossett
Gregson, T. Leslie, Esq., Newcastle
Hall, W. M., Esq., Salford
Halliday, John, Esq., Leeds
Hardcastle, Nicholas, Esq., Newcastle
Hardy, Henry G., Esq., Byers Green
Harrison, Reginald, Esq., Liverpool
Hart, Ernest, Esq., London
Hawthorn, John, Esq., Newcastle
Hayden, T., M.D., Dublin
Haynes, Stanley, M.D., Laverstock, Salisbury
Heath, George Y., M.D., Newcastle
Hefferman, E., Esq., Spennymoor
Henry, Alex., M.D., London
Hewitt, Graily, M.D., London
Hill, James, M.D., Belfast
Hislop, G. B., Esq., Killingworth
Hope, John, Esq., Newcastle
Hope, Wm., M.D., Dublin
Hornby, Thos., Esq., Barmby Moor
Houseman, J., M.D., Newcastle
Hovell, D. de B., Esq., Clapton
Humble, Thomas, M.D., Newcastle
Hume, G. H., M.D., Newcastle-on-Tyne
Humphreys, J. R., Esq., Shrewsbury
Husband, W. D., Esq., York
Hutchinson, Jonathan, Esq., London
Hutchinson, Valentine, M.D., Bishop Auckland
I'Anson, T. F., M.D., Whitehaven
Jackson, E., Esq., Darlington
Jackson, John, Esq., Great Usworth
Jamieson, W. A., M.B., Berwick-on-Tweed
Jeaffreson, C. S., Esq., Newcastle
Jepson, E. C., Esq., Durham
Jobson, John, Esq., Bishop Auckland
Johnson, Christopher, Esq., Lancaster
Johnston, Augustus, M.B., Hawkshead
Jones, Samuel J., M.D., Chicago
Jordan, Furneaux, Esq., Birmingham
Keiller, Alexander, M.D., Edinburgh
Kelly, J., Esq., Jarrow

Kelly, Walter M., M.D., Crook
Kelly, William M., M.D., Taunton
Kendal, C. R., Esq., Wark
King, Kelburne, M.D., Hull
Knight, H. J., Esq., Rotherham
Knox, William, Esq., Felling
Lambert, W. O., M.D., Sunderland
Laycock, T., M.D., Edinburgh
Leak, Thos. M., L.R.C.P.Ed., Hemsworth
Leared, Arthur, M.D., London
Lee, Henry, Esq., London
Legat, Andrew, M.D., South Shields
Lewis, Waller, M.B., London
Lightfoot, R. T., Esq., Newcastle
Lomas, James R., Esq., Walker-on-Tyne
Longbotham, George, Esq., Seaton Carew
Longbotham, J., Esq., Seaton Carew
Lyle, Robert, M.D., Newcastle
Lynch, J., Esq., Blyth
Lynn, R. D., M.D., Newcastle
Macaulay, John, M.D., Newcastle
Maccoll, Malcolm, Esq., Hebburn
McCulloch, George, Esq., Ovington-on-Tyne
McCulloch, James M., M.D., Dumfries
Macdonald, John E. L., Esq., Haswell
Macgregor, D., Esq., Penrith
Mackay, W. Murray, Esq., Pickering
McKendrick, John G., M.D., Edinburgh
Mackenzie, W. M., M.D., Kelso
Mackenzie, Morell, M.D., London
Mackie, James, Esq., Darlington
MacLachlan, Alex., M.B., Newcastle
MacLagan, J. M., M.D., Mexborough
McLaren, Benjamin, Esq., Bedlington
MacLaren, Roderick, M.D., Carlisle
McLean, Daniel, M.D., Glasgow
McLean, Hugh, M.D., Corbridge
Macpherson, John, M.D., London
McVail, D. C., L.R.C.P.Ed., Alnwick
Maling, E. A., Esq., Sunderland
Manford, F. W., L.R.C.P., Newcastle
Manley, John, Esq., West Bromwich
Manson, R. Taylor, Esq., Witton-le-Wear
Martin, Wm., Esq., London
Martin, J. L., M.D., Melbourne, Australia
Massey, —, Esq., Carlisle
Matterson, William, M.D., York
Matthews, John, M.D., Tynemouth
Mellor, Thomas, Esq., Manchester
Miller, Hugh, M.D., Glasgow
Miller, James, Esq., Newcastle
Modlin, R., Sunderland
Morgan, G. B., Esq., Sunderland
Morgan, John Edward, M.D., Manchester
Morris, W. H., Esq., Darlington
Murray, John, M.D., London
Murray, John C., M.D., Newcastle
Myrtle, A. S., M.D., Harrogate
Napper, Albert, Esq., Cranleigh
Nattrass, Charles, M.D., Sunderland
Needham, F., M.D., York
Nesham, T. C., M.D., Newcastle
Newcombe, F. W., M.D., Gateshead
Newton, E. Clarke, Esq., Barras Bridge
Nicholson, R. H. B., Esq., Hull
Paget, G. E., M.D., Cambridge
Paul, J. H., M.D., London
Paxton, John, Esq., North Shields
Peart, R. S., M.D., North Shields
Phillipson, G. H., M.A., M.D., Newcastle
Piper, S. E., Esq., Darlington
Platt, Thos., Esq., Oldham
Power, Henry, Esq., London
Procter, William, M.D., York
Pyle, T. T., M.D., Sunderland
Ransome, Arthur, M.D., Manchester
Reeves, Wm., M.D., Carlisle
Reid, J. C., M.D., Newhiggin-by-Sea

Renfrew, Robert, M.D., Glasgow
Renton, Geo., M.D., Shotley Bridge
Renton, W. M., M.D., Shotley Bridge
Ridley, Herbert, Esq., Newcastle
Roberts, Wm., M.D., Manchester
Robinson, W., M.D., Gateshead
Robson, R. W., Esq., Durham
Robson, J., Esq., South Shields
Rumsey, H. W., M.D., Cheltenham
Russell, John, Esq., Newcastle
Sang, John, Esq., Newcastle
Sankey, W. H. O., M.D., Cheltenham
Sansom, A. E., M.D., London
Scatcliff, John Parr, M.D., London
Scattergood, Thomas, Esq., Leeds
Scott, James, Esq., Gateshead
Seaton, Joseph, M.D., Sunbury
Sell, Edward H. M., M.D., New York City
Shann, G., M.D., York
Sbiell, W. R., Esq., Chester-le-street
Sibson, Francis, M.D., F.R.S., London
Smallman, R. S., M.B., Hartlepool
Smeddle, Robert, Esq., Shildon
Smith, Robert, M.D., Sedgfield
Smith, James, Esq., Monkwearmouth
Smith, Protheroe, M.D., London
Smith, R. Ayre, M.D., Sunderland
Smith, T. Heckstall, Esq., St. Mary's Cray
Smith, W. H., Esq., Houghton-le-spring
Southam, Geo., Esq., Manchester
Stewart, A. P., M.D., London
Stewart, H. G., M.D., Newcastle
Stokes, Alfred William, Esq., Salford
Stoker, Wm., Esq., Durham
Stokes, Henry, Esq., Tralee
Stokes, W., M.D., Dublin
Stuart, J. S., M.D., Newcastle
Tait, Lawson, Esq., Wakefield
Taylor, Charles, M.D., Nottingham
Taylor, M. W., M.D., Penrith
Teevan, W. F., Esq., London
Tessier, W. F. C., M.D., Tynemouth
Thompson, R. Farrer, M.D., Jarrow
Thompson, T. Y., Esq., Newcastle
Thornhill, John, Esq., Bulman Village
Thwaites, Thos., B., Esq., Bishop Auckland
Tiffen, R., M.D., Wigton
Tilt, E. J., M.D., London
Trotter, Chas., Esq., Stockton-on-Tees
Turnbull, M. J., M.D., Coldstream
Underhill, Thomas, Esq., Tipton
Underhill, W. Lees, Esq., Tipton
Walker, Robert, Esq., Carlisle
Ward, H. D., M.D., Blyth
Waters, A., M.D., Liverpool
Waters, Edward, M.D., Chester
Watson, W. Spencer, Esq., London
Welford, George, Esq., Sunderland
Welsh, F. F., Esq., Saffron Walden
Wheelhouse, C. G., Esq., Leeds
Whipple, J., Esq., Plymouth
Whitely, G., M.D., Italy
Williams, T. Watkin, Esq., Birmingham
Williams, W., M.D., Swinton, Manchester
Williamson, James, M.D., South Shields
Wilson, John, M.D., Lancaster
Wilson, J. Mitchell, M.B., Jarrow
Wilson, Robert, M.D., Alnwick
Wilson, R. H., M.D., Gateshead
Wilson, Thomas, Esq., Wallsend
Wiltshire, Alfred, M.D., London
Winship, Wm., Esq., Newcastle
Witten, E. W., Esq., York
Wood, Samuel, Esq., Shrewsbury
Wood, William, M.D., London
Yeld, H. J., M.D., Sunderland
Young, Thomas, Esq., South Shields
Young, C. E., M.D., Leeds

TUESDAY, AUGUST 9th.

The Committee of Council met in the Council Chamber of the new Town Hall at 1.30 P.M.: and the Council assembled in the same place at 3 P.M., and agreed on the Report to be presented to the meeting.

At 8 P.M. the first General Meeting of the members was held in the Lecture-room of the Literary and Philosophical Society, and was very numerous attended. Dr. Chadwick, the retiring President, was accompanied by Dr. Edward Charlton, the President-elect; Mr. James Morrison, Mayor of Newcastle; Mr. T. L. Gregson, the Sheriff; Mr. R. Y. Green, the Under-Sheriff—all dressed in their robes of office, and preceded by the official mace and sword-bearers; the Very Rev. Dean of Durham (Dr. Lake); Sir William Armstrong, C.B., Jesmond; the Rev. Canon Whitley; the Rev. Mr. Thornton, Registrar of Durham University; Dr. Stokes, Dublin; and other distinguished visitors. Several ladies were also present.

Dr. CHADWICK, of Leeds, the retiring President, delivered the following address.

GENTLEMEN,—It is my duty in opening the business of the present meeting to surrender into the hands of my successor the post which, twelve months since, was committed to my charge. I am told, on very competent authority, that this year of office has, for your President, been more than ordinarily arduous. I have accepted the labour as the natural sequence of the high honour I have enjoyed, and I trust that in so doing I have not underestimated the dignity accruing to those who serve you in these more important offices. [Applause.] Truly there has been demanded some self-negation, but any sacrifice has been amply compensated in those happy friendships it has been my fortune to make during my official year. These, I trust, will endure long after the dignity, with all its pleasant reminiscences, shall have faded from the memory. [Applause.] There is one reference which I hardly dare trust myself to make, but, did I fail to do so, it would prove a source of lasting regret. You all remember that the year commenced in sorrow: a dark and threatening cloud broke upon me in its earliest hours. This cloud found its silver lining in your commiserating sympathy. Coming from men whose ordinary avocations are supposed to steel the heart and blunt its sensibilities, the kindness will never fade from my recollection. [Applause.] In this year I have seen much to impress me with the power which your Association is capable of exercising, provided that power be rightly and judiciously wielded. [Loud applause.] Witness the striking results of our efforts in opposition to the Government Medical Acts Amendment Bill. We had fearful odds against us—a powerful Government, the ear of the minister occupied by those who entertained hostile views; ourselves, to say the least, disappointed by the leaders of the promised opposition in the House of Lords. Through the influence, however, and by the indomitable energy of our Chairman of the Direct Representative Committee, an important stand was made, even at the last moment, which in my opinion materially influenced the result. [Applause.] And when the admirably concerted pressure upon the members of the House of Commons which you, properly responsive to our summons, so effectually brought to bear, became apparent, the Minister gladly availed himself of the lateness of the session to escape by the withdrawal of his very imperfect measure what would, I doubt not, have proved a signal defeat. [Applause.] Now let it be thoroughly understood, and it is for this object I anticipate the proper time of reference to this subject, that by this active and successful interference you have constituted yourselves the champions of medical reform. [Loud applause.] On no plea whatever can you shrink from the responsibility you have incurred. Pardon me for saying it, but at Leeds you made a signal mistake in limiting the action of your Committee to a single point of the great reform question. It was not worthy of a great and influential Association like yours to fail in grasping the entire detail. Another Committee, with the same invaluable Chairman, but with more comprehensive objects, must at this meeting be constituted; and it must be their duty, whether alone or in concert with others I care not, to prepare a Bill, which, whether passed under Government auspices or not, shall meet the entire requirements of the case and satisfy the ardent yearnings of a long expectant profession. Of this I am fully confident; that no single body, corporate or other, can so efficiently interpret the wishes of the profession as a committee emanating from this Association. [Loud applause.] But it is not in this only that I have seen the power of the Association; for any other object, professional or social, strictly scientific or more indefinitely practical, you are equally influential to promote success as to insure discomfiture. But to effect this you must be united. One Branch must echo what another has pronounced, and all must concur to support the line of action adopted by the general body after full discussion of the question. Individuals, too, must be content, having fairly brought forward their views, to abide by the will of the majority. Upon no other principle of action can an Association like ours successfully operate. [Applause.] The JOURNAL, too, upon these general questions, when once the will of the Association has been expressed, must speak that will emphatically, and give no uncertain sound. Neither personal indifference of an Editor, nor that of a JOURNAL Committee, can properly interfere with this. [Loud applause.] I do not inquire how it has arisen, but sure it is that much disappointment has been experienced on all hands by the apathetic attitude of the JOURNAL in this recent reform struggle. And this suggests the remark that the choice of Editor now to be made during this present meeting, must prove an important turning point in your history. It is fairly in your hands to determine what kind of JOURNAL you will have; and according with that resolve must be the selection of your Editor. Once appointed, he must have your complete and undeviating support in carrying out your wishes. [Applause.] I would gladly dwell upon other topics that have been suggested to me during my year of office, but I must seek other oppor-

tunities for these. I must not forget that my chief duty here is to introduce to you my excellent successor. [Loud applause.] In Newcastle it would be folly to attempt his praise, even though I speak with the authority of more than thirty years' acquaintance. [Applause.] He has made for himself a position here which warrants this great Association in accepting him as their President. He belongs to a class of medical practitioners well deserving consideration—a class doing much in the unostentatious exercise of their medical duties, to maintain the dignity of the profession and secure the esteem of every class of the community. [Loud applause.] Dr. Charlton is an honour to the profession of this district, and will, by the discharge of his duties as President of the Association, materially enhance his own reputation and bring credit to the body of which, for the next twelve months, he becomes the head. [Applause.] Bear with me for a moment whilst with loving and reverent hand I would lay a memorial wreath upon the recently closed graves of those who since our last anniversary have gone “to that bourne whence no traveller returns.” For the losses we have sustained by death, this year has been a remarkable one in our annals. *Facile princeps* is Syme, then follows Simpson, and, with an interval, Nunneley and Jeaffreson—men of mark, long familiar, not only to us, but to the whole world, with whom as associates we were privileged to hold sweet converse; these will meet us no longer in our annual gatherings. It is not for me to draw comparisons or to mete out the eulogy they each deserve. They are now beyond the reach alike of criticism and of praise; but their works endure, and by these they will be judged. It will long be for us a subject both of pride and pleasure that in their lives they were of us, and that our objects secured their sympathy and approval. [Applause.]

Gentlemen, my task is done. Were the office of President of our Association like that of the player, “to fret and strut his little hour upon the stage and then be heard no more,” it would be with deep and unfeigned regret that I resigned, even into the hands of so worthy a successor, the greatly estimated distinction I have enjoyed. But if I judge rightly, the President's chair should be rather preparatory to more active and influential work in the Association. With such objects, to the extent of my poor ability, and so far as time, health, and opportunity shall permit, I trust I may still be permitted to appear amongst you. Gentlemen, to use language applied to more august personages than ourselves, I will say, “The President is dead! Long live the President.” [Applause.]

The President-Elect, Dr. CHARLTON, then delivered his Inaugural Address, which was published at page 157 of last week's JOURNAL.

Vote of Thanks to Dr. Chadwick.—Dr. STOKES (Dublin): Mr. President,—The following resolution has been handed to me by our worthy Secretary—“That the cordial thanks of this meeting be given to Dr. Chadwick for his valuable services in the past year, and that he be elected one of our permanent Vice-Presidents.” [Applause.] I am quite sure that this resolution will be passed by acclamation. I would not be doing justice to my own feelings, or justice to this great meeting, if I were to sit down contenting myself simply with announcing this resolution. I stand here in a peculiar position. I have had the great honour of having been, as you, sir, now are, President of this great Association; and President upon a remarkable occasion, namely, the first visit of the Association to the kingdom of Ireland [Applause.] That meeting had a significance of great value, altogether irrespective of medical considerations. Then, sir, I am a member of the Medical Council. I do not know whether in that capacity I am welcome here or not [Laughter and cheers]; but I confess, sir, that I have some justifiable doubts of the matter. But I can tell this to the Medical Association; that, as a member of the Medical Council, I was one of the supporters of the Bill which has been rejected, and a supporter of those parts of the Bill which I believe the Association here altogether approve, namely, of the central examination. [Applause.] With respect to Clause 18, I declare to you that I voted in the Medical Council for its modification, not for its omission. And now, sir, permit me to say here that we should be cautious how far we are right in believing that the mere examination will carry out the ends which you have so properly enunciated in your address. [Hear, hear.] I have been President of the Court of Examiners of a very important body, and in one respect, Mr. President—I say it without self-laudation or without national laudation—the most remarkable body connected with medicine in the three kingdoms; and that is the University of Dublin. [Applause.] And the reason why it is the most remarkable body is this—that it is the body which refuses all medical qualifications whatsoever to any man who has not gone through his four years' study of arts [Applause]; so that the medical licentiate is placed on the same platform and in the same academical rank as members of the Church and members of the Bar; and the same academical rank bears the same social rank. [Applause.] Well, sir, as President or Chairman

of that Court, I, after more than a quarter of a century's experience, declare here to this great Association that I do not place that unlimited confidence in the results of any examination whatever. [Laughter.] The power of grinding, the art of grinding, has now arrived at such perfection, that the mere results of an examination is to be taken *cum grano salis*. Therefore, I think that the one portal is in itself hardly a remedy for the evils of which we complain. [Hear, hear.] And then there is another point which, I think, is very important. It is the great desire to have uniformity. How can you have uniformity? God Almighty has not made us uniform. We are not put every foot in one shoe. You cannot have uniformity; and therefore all the theories of medical education estimated upon presumed uniformity must be utterly fallacious. If you ask me in what I will place my hopes of the advancement of medicine, it will be in this: that the young men coming for medicine shall be educated in everything besides medicine. [Applause.] It may seem egotistical, but I may state this to you, that during the four years that I was a medical student, not until ten months did I ever attend to medicine. I attended to everything on earth except physic. [Laughter.] And these are important facts. Before I sit down I would simply wish to express my great regret at the throwing out of the Medical Bill. [Hear, hear.] I think that the duty of the Association—I am now speaking greatly against the feelings of my audience ["No"]—I believe the duty of the Association would have been to have taken this as an instalment. [Hear, hear, and cries of "No."] There was a great deal of what was good in the Bill, and it is quite absurd to suppose that the requirements of medical reform could be embodied in a single Bill or in a single year. We should have taken this as an instalment. I think the Council has made a great mistake in not doing so. [Cries of "No."]

Dr. PAGET (Cambridge): I have the honour, Mr. President, of seconding the resolution which has been moved by Dr. Stokes. To the resolution I need scarcely add anything; for all of you know better than I do—for I had the misfortune not to be present at the meeting last year—the services of Dr. Chadwick; and I know, from what I have heard, how active he has been in performing his duties during the whole of the year. [Applause.] I know also that he has most actively represented the views and wishes of the Association regarding the Government Bill. [Applause.] I shall not stop here, lest I might be misunderstood. I confess that part of what has fallen from my friend Dr. Stokes I feel myself. I believe that the Bill contained so much good, that it was a great misfortune that we have lost it. [Cries of "No."] With the desire of the Association to have an extended representation in the Council I sympathise and agree. [Applause.] I will not be misunderstood. I do not think, and I never did think, that the particular plan that has been brought forward by the direct influence of the Association is the best one; but I sympathise with the good and worthy feeling that the profession should be more represented than at present in the Medical Council. I think it is a misfortune that we have lost this Bill, and I will tell you why. Your President stated some of the disadvantages under which the profession now labours; and I will go further, and say that there are disadvantages under which the public labour. But it is unfortunate that, notwithstanding all the Medical Council has done—and it has done a good deal for the medical profession and for education—notwithstanding all, it is impossible that the Medical Council should be able to prevent the entry into our profession of, and the obtaining of the right to practise, by some that may not be well qualified for it. It is quite certain, from the evidence of Dr. Parkes, the examiner for the army medical service, and others, that some enter our profession, and have what is called a double qualification—a qualification in both surgery and medicine—who are not qualified in the right sense of the word. These are men in whose hands patients are not safe; and this is a grave state of things. [Hear, hear.] It is impossible that this can be remedied under the existing powers that the Medical Council possesses. The Medical Council could very well regulate the scheme of examination; but it could not be present at every examination. Men might pass who were not fit to pass. Nothing but such a scheme as was proposed in the last Bill, which was lost, could possibly remedy this great evil. This is an important question. The admitting of men into our profession, with the right to practise, and in whose hands patients were not safe, was a question affecting lives and sufferings, and could not be prevented by the present state of things. This would have been remedied by this Bill. [Cries of "No."] Everybody who studied the Bill—and I, unfortunately, have had to study it very much—will be certain that it would. Even as to the eighteenth clause, about which so much had been said, and rightly said, there was no doubt that, if it had remained in the Bill, the Bill would have been more complete and more easily worked. But, even without this clause, I am satisfied that the Bill could have been worked. I am satisfied that no one could have practised under a diploma which did not give him a right to practise.

If he called himself a doctor, or a surgeon, or anything else, and practised, then he would have been liable to be prosecuted, and subject to a penalty of £20. He could not hold any surgical or medical office whatever, and could not sign any medical or surgical certificate of any kind, without being liable to a penalty of £20. Would a man subject himself to these penalties? I hold that, without the eighteenth clause, the Bill could have been worked; and it would have saved hundreds of lives yearly. The Bill contained other matters. The profession has been long desirous—

Mr. HUSBAND (York): I think that Dr. Paget, on reflection, will consider that he and Dr. Stokes are now adopting a course which is not at all in order this evening. [Applause.] If we are to discuss now questions of medical reform, then it is right that afterwards the views which have been put forward should receive a complete answer; and some of us will be dragged into a course which we will be sorry to adopt. The question of medical reform will come up afterwards before the meeting, when many will dispute the reasons put forward, and will be fully and fairly ready to meet any member of the General Medical Council. [Cheers.] I will ask Dr. Paget whether, in moving a vote of thanks to our late President, it is fair to make these remarks, which we do not consider ourselves justified in answering this evening. I therefore ask Dr. Stokes and Dr. Paget to reserve their remarks until we can answer them. [Applause.]

Dr. PAGET: I quite concur in the remarks which have been made by Mr. Husband, and I will end with seconding the vote of thanks to Dr. Chadwick for his great zeal and energy and exertion on behalf of the British Medical Association. [Applause.]

The resolution was agreed to unanimously.

Dr. CHADWICK: Mr. President and gentlemen, you, as members of this Association, will sympathise with me in the very difficult position in which I am placed. There is an old saying, which I have no doubt is known to the gentlemen resident in this northern part of the kingdom, that it is not fair to look a gift horse in the mouth. Gentlemen, do not misunderstand me. The cordial reception which you have given the proposition, as distinguished from its introduction, warrants me in thanking you most heartily, and in cordially accepting at your hands the compliment and honour you have paid me. [Applause.] I regret exceedingly, having known something of the conduct of public affairs, that an opportunity should have been taken, when the proposition was purely social and complimentary, to introduce a question which was quite irrelevant. I say that, if I had been asked to propose a vote of thanks to any member of this Association, however venerable I might have been, I would not have taken the opportunity of finding fault with him for having been the mouthpiece of the Association. [Applause.] The duty of a President, as he finds out or can read it, is to give effect, tone, and character to the voice of the Association. [Applause.] In conducting the opposition to the Bill, which I maintain was, in its ultimate result, an imperfect Bill, I merely carried out my office and the high duty imposed on me, and was not only carrying out the wishes of the Association, but of a very large majority of the profession of this country. [Cheers.] I care not, Mr. President, how I am told that the Bill was a perfect measure. If it be imperfect in the eye of the Association, it must be presumed to be imperfect. [Applause, and cries of "Chair, chair."]

The PRESIDENT: The only difficulty is, that we have but little time to spend upon anything to-night, and we have a great deal before us; and we do not want to occupy more time than necessary. I regret this discussion. [Applause.]

Dr. CHADWICK: I quite agree; but it is a personal discussion. [Cries of "No" and "Chair."]

Dr. PAGET: I can assure you, Sir, on the part of Dr. Stokes and myself, that it never for a single instant entered into our minds to blame Dr. Chadwick.

Dr. CHADWICK: I feel that the meeting is with me, and I accept the kind proposal which you have passed in my behalf. [Applause.]

Vote of Thanks to the Mayor of Newcastle.—The PRESIDENT: Allow me to break for once through the rule of the meeting, because for the first time we have been honoured by the official presence of the Mayor of the town at our first meeting. I regard this as a high honour, that the municipal authorities have thus shown, as the Government has tardily shown, that there is such a thing as power in the medical profession, and that they recognise it as such. I propose therefore a vote of thanks to the Mayor for his presence here to-night. [Applause.]

Dr. FALCONER (Bath): I have much pleasure in seconding the vote proposed from the Chair. I believe it is a usual custom for a vote of thanks of this kind to be carried by acclamation; and although there is, perhaps, no necessity for a seconder, yet I do not the less cordially support the motion. [Applause.]

The MAYOR OF NEWCASTLE (Mr. James Morrison): Mr. President

and gentlemen, I accept the compliment paid to me as an individual; and I likewise accept the compliment as paid to the town of Newcastle, in which we are assembled. I can quite assure you, gentlemen, that the town most cordially reciprocates the kind compliment paid to it. For myself, I must say that I have gathered a great deal of instruction from the opening part of the President's address; and I sincerely trust that what he has said, and said so ably, will not be lost upon the governing body of this town. There is much in the address which ought to be considered, and especially with regard to the water. I was particularly struck with the remarks made upon the evil effects arising from the impurity of water, and on the present system of sewage, which tends so much to pollute the water, which ought to be the source of health and comfort to all. I beg to thank you on my own behalf, and on behalf of the town, for your kind and cordial reception. [*Applause.*]

The PRESIDENT: I beg to say that the vote of thanks includes the Sheriff of Newcastle, who is a member of our body. [*Applause.*]

Report of Council.—The GENERAL SECRETARY (Mr. T. Watkin Williams) read the following report.

"Your Council offer their congratulations to their fellow-members of the British Medical Association, on holding their thirty-eighth anniversary in the town of Newcastle-upon-Tyne, a locality remarkable for its historical associations, its manufactures, and its commerce. The great increase of members in the Northumberland and Durham Branch, and their distinguished position, have induced the Association to accept their cordial invitation to meet in this town. The number of members in Northumberland and Durham in 1866 was 33, since which time it has increased to 234, a result chiefly attributable to the formation of the Northern Branch, and the indefatigable zeal and energy of its Secretary, Dr. Philipson.

"Soon after the last annual meeting, the President of the Medico-Psychological Association applied to the Committee of Council, on behalf of that Society, that a Psychological Section might be formed at the next annual meeting of the Association, to which the scientific work hitherto transacted at the annual meeting of the Psychological Society might be transferred. The Committee of Council have complied with the request, and this year a Section will be specially devoted to Psychological Medicine under the Presidency of Professor Laycock.

"Your Council have the pleasure, again, to report the continued increase in the number of members of the Association.

"At the annual meeting in 1869, there were on the list 4066 members, of whom 62 have died, 96 resigned, and 64 have been removed for non-payment of subscriptions: 414 new members have been elected this year. There are now 4258 members on the books.

"The Treasurer's accounts, audited by Mr. Church and Dr. E. L. Fox, are appended to this Report.

"Your Council desire to express their grateful acknowledgment to the President of the Council for the great attention he has given to the business of the Association, which this year has been unusually heavy, for, besides six ordinary meetings of the Committee of Council, six meetings of Subcommittees and a special meeting of the Council have been held; at all of which they have had the advantage of his presence.

"All the Branches are reported to be in a very satisfactory condition, and are doing much good work.

"To the Secretaries of the Branches your Council desire to offer their warmest thanks, for without their efforts it would be impossible for the executive to carry on the work of so great an Association.

"Your Council regret to announce that Mr. Hutchinson has resigned the Editorship of the JOURNAL. Mr. Ernest Hart has been unanimously elected as the future Editor by the Committee of Council, who have been influenced, not only by their experience of his successful management of the JOURNAL during his former editorship, but also by strong testimonials in his favour from Sir Jas. Alderson (President of the Royal College of Physicians), Sir W. Jenner, Dr. Gull, Mr. James Paget, the Rev. Professor Haughton, Sir Henry Thompson, Dr. Parkes, Dr. Rumsey, and other distinguished members of the profession.

"The Association has lost by death during the year several very distinguished and highly valued members. Among them must be named Sir J. Y. Simpson, Bart., Professor Synge, Mr. Nunneley, Mr. C. H. Moore, and Dr. Jeaffreson (a Vice-President of the Association, and President in 1865, when the annual meeting was held at Leamington).

"*Hastings Medal.*—The Committee of Adjudication on the essays for the Hastings Medal have been unable, in consequence of the number and great length of the papers received in competition, and the very short time allowed for their perusal, to come as yet to any decision. Their award will be duly published in the JOURNAL.

"*Medical Reform.*—The Report of the Direct Representation Committee will give in detail the efforts of the Association and the Committee to secure the adoption of the two great principles of Medical Reform so long advocated by the Association; viz., one uniform quali-

fication for all, and the direct representation of the profession in the General Medical Council. The Council cannot forbear acknowledging the unwearied exertions of the President of the Association, the President of the Council, and Dr. Waters of Chester (the Chairman of the Direct Representation Committee), who brought the influence of the Association to bear so powerfully upon the Houses of Parliament and the Government, that the latter was compelled, at the last moment, to withdraw from the House of Commons a Bill, which was found to be very generally condemned by the profession. To Dr. Waters especially the Association is deeply indebted for a sacrifice of time and an amount of labour which materially contributed to a renewed recognition, for the first time, of the influence of the profession, and its right to have its wishes considered in medical legislation.

"Your Council would suggest that, as another Medical Bill will most probably be introduced during the next session of Parliament, the Direct Representation Committee should be merged in a Medical Reform Committee, which shall have more extended powers, and thus be enabled more effectually to contend for the adoption of the principles advocated by the Association, which can alone secure a satisfactory solution of the question of medical reform.

"Your Council recommend that Sir William George Armstrong, C.B., be elected an Honorary Member of the Association.

"Your Council have to express their gratification at the extension, during the present session of Parliament, of the superannuation allowance to the Poor-law medical officers of the whole of the United Kingdom, through the action of Dr. Brady, to whom the best thanks of the Association are due.

"The only business that has engaged the attention of the State Medicine Committee during the past year was an application to the Home Secretary to reconsider his decision as to the area to be included in the inquiry of the Royal Commission. The result was a renewed negative to the request preferred by the Committee. The Council suggests to the Association the propriety of reappointing the Committee, of which Dr. Rumsey has been appointed the Chairman.

"Your Council feel that a great future is before your Association; whose influence has been felt by the Legislature and the Government; whose JOURNAL is everywhere recognised as an able exponent of medical science, and a firm upholder of the just rights and claims of the profession; and whose long roll of members, increasing year by year, comprises the most eminent of our brethren in this extensive empire."

The Treasurer's Report was also presented, as follows.

Receipts.

Subscriptions.....	3471	12	0
Advertisements and sales	1842	13	10
		5314	5 10
Balance in Treasurer's hands (last year)		201	0 9
		£5515	6 7

JOURNAL EXPENSES: *Payments.*

Printing, Mr. Richards	3626	9	8
Engraving and Charts of Diseases	38	17	6
Editorship, Mr. Hart and others.....	203	10	7
Sub-editorship, Dr. Henry and Dr. Murray.	86	18	9
Contributors	590	10	3
Work at office, Dr. Henry	50	0	0
Office clerk	150	0	0
Office expenses	215	9	1
		4961	15 10

EXECUTIVE EXPENSES:

General Secretary, salary	364	9	0
" " petty cash	43	9	6
Branch Secretaries and Collectors	28	14	1
Reporting proceedings at Leeds	44	0	0
Stationery, printing, etc.	25	19	4
Advertising	5	11	6
Sundry other expenses	12	19	5
		525	2 10

SCIENTIFIC AND OTHER GRANTS:

Parliamentary Committee	5	0	0
State Medicine Committee	10	0	0
		15	0 0

Balance in Treasurer's hands (this year).....		5501	18 8
		13	7 11
		5515	6 7

Dr. BEATTY (Dublin) proposed, "That the Report of the Council be received and adopted, as now read."

Mr. HECKSTALL SMITH (St. Mary Cray) seconded the resolution. He said: In the course of that report, which takes far too wide a range to allow even a most cursory notice of it, the question of our action on the future of medical reform is alluded to; and I will only say this—not to reintroduce any controversy which may have been before us in the earlier part of the evening—that I am very much pleased, and I am sure the Association will be gratified, that in the report it is proposed that we shall assert, through our Committee, the principles that we have for so many years advocated. [*Applause.*] I go far with what has been said in reference to the good that was to be found in the Bill, which has been withdrawn; but I state unhesitatingly that I lent the utmost of my feeble power and a large portion of my time deliberately to get that Bill rejected. And why? Because we were called upon to pass a Bill which had been approved of by the Medical Council, and promoted by the very bodies that we wished to be reformed: and were we to submit the carrying out of a measure into the very hands of the representatives of those bodies who are by the very Bill pronounced as requiring to be very extensively and deliberately reformed? [*Applause.*] But this Association will reject that and any other Bill which does not enable the body of the profession to have a voice in the general Medical Council. [*"Question."*] I submit it is the question. I am calling upon you to confirm the report of the Council; and in that report you affirm this—that you will appoint a Committee, and that Committee is to have large powers to represent you in the great controversy which is still to come, and for which they and we must gird up our loins. And therefore, I submit, it is the question. However, I will simply second the motion. [*Applause.*].

The motion was adopted.

Appointment of the General Secretary.—Dr. CHADWICK: Mr. Chairman, I have very great pleasure in proposing that Mr. Watkin Williams be reappointed Secretary to this Association. I know quite well that the office which Mr. Williams fulfils amongst us is one of great difficulty. It is one which tries the energies, and I doubt not sometimes the patience, of the holder of it; and I believe that we have those duties discharged very efficiently and very capably. [*Applause.*] I do not mean to say that Mr. Williams, in the strict discharge of his duties, may not sometimes fall foul of the preconceived notions of some of us; but he is in some sense in an executive position, and it is his duty to carry out the rules of this Association without reference to the feeling of anybody; and that, in my belief, for I have had some opportunity of judging, Mr. Williams does; and it is, therefore, upon that ground that I have great pleasure in making the proposition before you. [*Applause.*]

Mr. HUSBAND: I have great pleasure in seconding the resolution just now proposed. No one knows better than the President of the Council how the Secretary is performing his duties, and the amount of work he has to do. During the last year we have had much more work, from various causes, and, as far as the Association is concerned, much more than I ever remember; and I think the Secretary has had extra duties imposed upon him, for which he deserves our best thanks. I have very great pleasure in seconding his re-election. [*Applause.*]

The Rev. Dr. BELL (Goole): Might I venture to ask what is to be the stipend of the General Secretary for the ensuing year? Am I right in saying that the appointment is in our hands at the general meeting?

Mr. HUSBAND: Last year this matter was gone most carefully into by the Committee of Council. They considered well the duties of the office, with which they are quite conversant; and they thought that the Secretary should receive a fixed sum yearly, instead of as before (a plan which was objectionable) receiving a sum of money for every member of the Association. After giving the matter the fullest consideration, they thought the sum of £300 a year was that which the Secretary ought to receive, and was that which they could conscientiously recommend to the Association. [*Applause.*]

The Rev. Dr. BELL: I would ask the question, whether it would not be well to announce what was the salary when the resolution was put to the meeting. I am myself, as you all well know, very antagonistic to the Committee of Council. I do not like those Committees of Council. They seem to be very secret, and to have something of the *imperium in imperio*; and I really begin to feel, it may be, more strongly on the question, and would like very well to see them vanish. [*Laughter.*] I do not want to enter into this question, and I would only now ask, Mr. President, whether you would prefer my moving an amendment at the present time, or bringing it forward afterwards.

Mr. CLAYTON (Birmingham): May I explain to Dr. Bell? There was a Finance Committee appointed; and we went into the several accounts, and we put the finances of this Association in a better and

clearer position. We also have considered and discussed the secretary's salary, and we decided to recommend his reappointment, at the fixed salary of £300 a year, to the Committee of Council. The recommendations passed to the General Council, and thence to the general body; and this is the recommendation of the general body. [*Applause.*] I am sure that Dr. Bell will agree with me when I say that it is not convenient that this question should be brought forward year after year.

The Rev. Dr. BELL: It will be of no use bringing on a motion to reduce the salary, after the present resolution is passed. The action taken stultifies the business of the meeting. It is no use giving notice of a motion. It is very well known that the salary might have been fixed at £400, if I and other people had not interfered. [*Cries of "No, no."*] Where is the mistake?

A MEMBER: The Committee of Council had moved in the matter, and determined, before you mentioned it.

Dr. BELL: I see that there is a resolution to come on with regard to the stipend of the General Secretary. If this resolution be passed, the other must fall to the ground. I ask whether the President would allow an amendment to this now, and let the other motion drop.

The PRESIDENT: You are entitled to propose an amendment; but, as Dr. Styrax is not here, his proposal cannot be entertained.

The Rev. Dr. BELL: Well, I will propose an amendment, carried or not carried. I am an old member of the Association; I have fought for it, and I will cling to it in adversity and in prosperity. I move as an amendment that the stipend—and I hope that the General Secretary will not think me too hard upon him—be £250 a year.

The amendment not being seconded, fell to the ground.

The motion that Mr. Watkin Williams be re-appointed General Secretary at a salary of £300 a year, was then carried.

Mr. WATKIN WILLIAMS: I have not been in the habit of thanking you for my re-election; and when I saw the notice of motion, I really was rather curious to know the grounds. No grounds having been given at all—for I do not think that any could be found—and I therefore simply thank you very much for the confidence bestowed upon me in again electing me. I can only say that I will try my best to deserve the £300 a year. [*Applause.*]

Vote of Thanks to the Auditors.—Dr. ROBT. BARNES (London) moved—"That the thanks of the meeting be given to the auditors (Mr. Church and Dr. E. L. Fox) for their valuable services, and that they be elected auditors of the Association."

Dr. WALLER LEWIS (London) seconded the resolution, which was carried unanimously.

Order of Sections.—Dr. BARNES (London) said he did not know whether he was in order, but he wished to ask a question. He had not the honour of being a member of the Council of the Association, and was not aware of the manner in which their proceedings were conducted; but he had received the distinguished honour of being asked to be the President of a section of the Society. In noticing this, he could not help taking notice of the rank in which it was placed. The order of the sections was medicine, surgery, physiology, midwifery, public medicine, psychology. He did not know upon what principle physiology intervened between surgery and obstetrics. He should have thought that, logically, physiology should have stood first. If it were intended as a compliment to obstetrics that physiology was put before it on the ground that obstetrics was essentially a physiological subject, and dependent upon physiology, medicine and surgery being independent of it, he accepted that position [*laughter*]; but he could not understand the logic of the proceeding. He had heard that the Royal Medical and Chirurgical Society—in reference to a motion to separate medicine and surgery from the obstetric section, had argued that medicine and surgery rested upon the same physiology. The section did not feel properly represented in the Society if separated from medicine and surgery by an intervening section.

After some remarks from Mr. Heckstall Smith, Mr. Watkin Williams, and others, the subject dropped.

Committee of Council.—The Rev. Dr. BELL said he had the old complaint to make—that they were kept there always to do the most important business after ten o'clock. He had been told that that was the custom in the House of Commons, and that therefore he had no reason to find fault. He was afraid he was always unfortunately in opposition to many of his respected friends. He respected all the members of the Association, but some more than others. [*Laughter.*] He was afraid that they always thought him in a peculiar position. [*Laughter.*] But even if it were a peculiar position, a singular position, or whatever name they might give it, it was a conscientious, straightforward position; and, as he hoped he showed his courage on the recent resolution in not being afraid to stand alone, he had not lost that courage, and now returned to the charge. The motion which he had to lay before the meeting on this occasion was—"That a committee be appointed for the purpose of in-

quiring into the present constitution and operation of the Committee of Council; and whether it might not be better to have only one well-constituted Council, consisting of a limited number, to be elected by the general body of the members through the medium of voting papers, or in any other way that might be thought better; and that the committee report to an ordinary general meeting or to a special general meeting convened according to law." He had already hinted that he had strong suspicions in regard to the Committee of Council. He would not repeat those suspicions; and whatever he said, he did it with honest and kind feelings. He had nothing but kind feelings towards every one connected with the Association; but he did think that so many individuals were continually returned to that Committee and always held office—in fact, one might always guess successfully who would be returned to the Committee of Council—that it was a body over which the Association had no power whatever. The Committee were not responsible to them [*oh, oh*]; and he would like very well that something were done by the members of the Association generally to put an end to this. His idea would be to have a General Council elected in a different manner from the present one, and that that General Council should be responsible to the general meetings of the Association for all its actions; that it might have—as is done in corporations and other public societies of this kind—its special committees for special business. These would report to the General Council, and the General Council would report the proceedings to the general body of the members, and in that way they would have something like a check upon their actions. But in the present state of things he did not think they had this check. [*Yes, yes.*] He was merely showing his views, and he meant to carry them out by proposing the resolution. But he had a strong idea that he had not matured his plans sufficiently (*hear, hear, and laughter*, and a cry of "*Next year*"); and that it would be for the greater advantage of the Association and he would be more likely to be successful with regard to his motion if he were to delay it for another year [*laughter and applause*]; and therefore he begged to withdraw the resolution for the present, and to bring it forward next year if he were spared to be present.

Mr. HECKSTALL SMITH seconded Dr. Bell's motion; and he did it for one single purpose, which was to remind the Association that it was true that many members of the Committee of Council had been elected again and again. He for one had had that honour; and he was always ready to respond to it when elected. Never did he ask any man, never would he permit any friend of his to ask any man, to put him into that position; but he would not refuse it. He thought no man worthy of the name would refuse it if the Association put him into the position. But he wanted to remind the members that it was in their hands, and that with them rested the choice, whom they would have as members of their Council, and upon that Council was placed the responsibility of electing the Committee; and if they chose to re-elect the same men, he did think it should not be thrown in the teeth of the men who were elected that they were so. [*Applause.*] They were not self-elected, but they were in the hands emphatically of that great Association [*applause*], and they ought to be ashamed of themselves if they, having the time and the opportunity, refused to do the duty imposed upon them. [*Applause.*]

Dr. STEWART wished to impress upon the meeting that it rested with the members themselves to make the Committee of Council what it ought to be. He wished the matter had come before them before so many members had gone away. Those members who were elected by the Council annually were, he was happy to say, exemplary in their attendance. But there was one class of members of the Committee of Council who were very far from exemplary in their attendance; he meant those who might be most useful and most influential—the secretaries of the Branches. [*Applause.*] If the Branches would urge their secretaries to attend the meetings of the Committee of Council, that Committee would be faultless, because it would be one of the most properly constituted Committees there could be in any large association. If the secretaries would attend, they might give most important information to the Committee at its three or four meetings in the course of the year, which would enable it perhaps very probably to adopt measures for the extension of the Association throughout the country such as no other means could possibly contribute. He stated this last year; he stated it again this year; and if, unfortunately, the attendance of the secretaries of Branches should be so small as it had been during the past year, he meant to repeat it next year and the next, if he were spared, until some effect was produced. He was perfectly sure that in this particular lay the fault of the Committee of Council. The blame was not at all with those who were elected year by year, because the attendance of those gentlemen was beyond all praise. [*Applause.*] They came up from all quarters of the country from great distances, at great expense to themselves, to attend the meetings, the attendance at

which averaged now, he thought, about twenty or twenty-five, whereas formerly, when he was first a member of the Committee of Council, there were not above six or seven who attended the meetings; and he was perfectly sure that they might be ready to confide the interests of the Association to that body, because a more self-denying set of men it had never been his lot to witness. [*Applause.*] He stated this because he himself was a secretary. [*Laughter.*] His expenses were paid as such: he insisted upon that as a matter of principle. But the greater part of the gentlemen who came to the Committee of Council had not their expenses paid, and yet they came; and the business of the Association was attended to in a manner, he ventured to say, in which the business of no other great Association such as that was attended to. [*Applause.*]

Mr. W. MARTIN (Hammersmith) would have seconded the motion, as approving of it. He thought the constitution of the Committee of Council by no means satisfactory.

Mr. HUSBAND was sorry that any one should be found from conscientious motives to second a resolution which, the author of it told them, was not matured; and yet the proposer came there to occupy the time of the Association and make a covert attack upon the Council. They were told that this was to be brought forward another year. Dr. Bell said he wanted to have a Committee to report to the Association. What had they now? The members of the Council were elected by the members of the Association in their respective Branches. There was no favouritism there. The General Council met; and then by voting papers, over which there could be no control—it was done in the most secret way, almost by ballot—the members of the Committee of Council were voted in by that Council: and he knew that for years a seat in that Council had not been an object of ambition, but the difficulty had been to get men to serve, on account of the onerous duties imposed upon them. [*Cheers.*] He said it was so; and that time after time they had been anxious to get those who would give their time and attention to the duties, and whose business-talents would enable them to do it. They had had year by year a body of men who had given a large amount of time and spent a great amount of money in attending the business of the Association, and this had been very much to the advantage of the Association; and he said, having worked with these men for many years, that he knew no body of men who had been more disinterested and who had given more time—especially some of them during the past year—than the members of the Committee of Council, who had been attacked in that covert manner by Dr. Bell. [*Applause, and "No, no."*]

Dr. BELL: No, no; that is too strong language, and it is language I do not deserve.

Mr. HUSBAND: Dr. Bell said distinctly he was strongly antagonistic to the Committee of Council. He could not help stating that, when he opposed the election of the secretary, he stated it again; and he did not state what was the fact when he said that the Committee of Council were not responsible to the Association. The Council first was elected by the members of the Association; the Committee of Council was then elected by the Council. The Committee of Council was a strictly representative body; and it was inconsistent in Dr. Bell to say they were to have a Council of fifty, and that the Council was then to elect the Committee who was to manage the affairs of the Association.

The Rev. Dr. BELL: Committees.

Mr. HUSBAND: Still this was only further dividing the responsibility, and making them less responsible to the Association. He said that a gentleman had no right to take up the time of the Association there and threaten it for another year, when he had no plan to propose, but simply the same system under another name. He trusted they would be spared such another infliction. He hoped they would not separate until they had done this unpleasant business, and then go to the proper objects of the Association—the scientific business, and the improvement of the position of the profession.

Dr. SIBSON had not the satisfaction of being present when the subject was mooted; but, as a past President of Council, he should not do what was right if he did not say that a more disinterested body of men and a more laborious body of men than the Committee of Council he did not know. They devoted their time in attending the meetings time after time; they spent their money upon it; and they did the business of the Association to the best of their power; and, besides that, they were elected from the Association. Every Branch sent its members to the Council; and it was for the Council, which would meet the next day, to appoint the Committee of the Council by ballot; and he did hope that that was the last time upon which time precious and reputation great would be injured by such motions. [*Applause.*]

Dr. SEATON (Sunbury) had not had the slightest intention of speaking upon this subject, which was an exceedingly disagreeable one; but

he could not allow that meeting to labour under the impression which it appeared to have as to the mode in which the Committee of Council were appointed, and the working of the present system. He would adopt the words of Dr. Sibson, that a more honourable, hard-working set of men than those forming the Committee of Council could not be found. But the question was, the system upon which the Committee of Council was appointed. There were men, he believed he was safe in saying, on the Committee of Council, who had been fifteen years members of the Committee; and, if they lived, they would be so fifteen years more. [*Laughter, and Hear, hear.*] Dr. Stewart had told them what their labours and sacrifices were. Would it not be more merciful to distribute the services a little more extensively, so that those duties should not be so very hard work? [*Applause.*] Now, he would tell them what the system was. [*"To-morrow morning."*] To-morrow morning, the Council which they had appointed would assemble, and their first duty would be to appoint the Committee of Council. They were told that the election was taken by ballot. No doubt it was; but they would see that the same men were elected, although it was a new Council which elected them. Very well, what happened? The moment that Committee of Council was appointed, the functions of their General Committee ceased until that day twelve months. The Council would create a Frankenstein, over which it had no possible control, for it would never be called together; and that was the Council which they returned to govern the Association. Now, this was a fact not known to the generality of the members. [*Oh, oh!*]

Mr. HUSBAND: The Council is called together on any emergency.

Dr. SEATON: I am not directing my observations against any men, but against a system. I am attacking no man. There had been many on the Executive Council for whom, he might safely say, he had the highest respect; and there was no man who could by any possibility be replaced by another who could do his duty better. [*Applause.*] But he was speaking against a system which was essentially corrupt, and not such a one as should obtain in an Association like that. That it might be altered, had been pretty well demonstrated at Leeds; and that it could not be much longer sustained, he was satisfied. But the great misfortune was, that it answered the purpose of some persons to try to make it appear that, when these motions were brought forward, they were attacks upon individuals. They were not. He himself repudiated anything of the sort in any observations which he made. He declared again emphatically and without reserve, that it would be impossible to replace any of the members of that Executive Council by any men more honourable, or who would serve the interests of the Association better; but it must be a corrupt system which perpetuated men in office for five, ten, or fifteen years, or any such period. There ought to be a limit to holding office more than a certain number of years. It was already proposed in his own Branch.

The PRESIDENT asked the Secretary to say whether it was in the power of a certain number of members to call a meeting of the General Council whenever required.

The GENERAL SECRETARY said there seemed to be some misunderstanding as to how this was done, and he would read the law. Having read Law 8, he said that he did not like to take up the time of the meeting; but, as a paid officer, he thought he ought to say, on behalf of the Committee of Council, that an unwarrantable attack had been made upon them. [*"It is on the system."*] He had answered several gentlemen, when they talked to him of this and said he ought not to allow it; he had told them he had nothing to do with it. If he wished to have a Council that he could handle, he would have a fresh set of men every year, and then he would have a Council with whom he could do what he pleased. But, from his experience of twelve or fourteen years, he said it would be the greatest misfortune which ever happened the Association if they turned out the old members, who had learnt their duties thoroughly well, and were willing to make great sacrifices of time and money to attend to the work of the Association. [*Applause.*]

Mr. BLACKETT (Durham) said that was the first time he had attended the annual meeting of the Association, and he complained that Dr. Bell had put on the paper a notice of motion which he did not intend to propose. He moved a direct negative to the proposition of Dr. Bell, which he did not think at all necessary.

Dr. BANNING (Gateshead) seconded the amendment.

The SECRETARY, in reply to a question, said the number of members of the Committee of Council was forty-five. One or two had died lately. About twenty-three of these were Secretaries of Branches.

The amendment was then put, and carried *nem. con.*

Proposed Volume of Transactions.—Dr. ELLIOT (Carlisle) proposed—"That a volume of *Transactions* be annually published by the Association, to contain such essays or communications as are either too lengthy for admission into the JOURNAL, or may be deemed worthy of a more permanent record than a hebdomadal serial can

secure." At this very unreasonably late hour, he really must say that he considered the qualms of conscience—"No, no; go on." It was drawing to eleven o'clock, and he was afraid he should be strongly inclined to follow Dr. Bell's example and withdraw the motion, or leave it over to next year. He thought that the interests of the Association urgently demanded a step of the kind. He believed that the quality of the papers contributed would be very much improved if it were only known that the papers over which a certain amount of pains was taken would find some more permanent record than was given to them at present. [*Applause.*] The JOURNAL of the Association could only find space for very short abstracts; and the same argument applied to the plan adopted by the other medical journals. He believed that if any gentleman contributing a paper from that Society were to send for insertion in a weekly medical newspaper an abstract longer than would fill a page of note-paper, he would find that they would not be able to include his paper. [*Applause.*] Now, when they looked at the variety and importance of the papers which were from time to time produced by the Association, of which they were all members, and when they considered the value of those contributions, he thought they ought to have some better record than they now had; and he should be very glad to take the opinion of the meeting on the subject, as it was one which he believed of considerable importance. He thought it a very great pity that their valuable contributions should be kept abroad and sent elsewhere. He concluded by moving the resolution. The question of how it was to be done would come on afterwards, and he himself should not be afraid of being called to suggest a mode of carrying it out provided they agreed upon the principle.

Dr. HILL (Belfast) seconded the motion. It had long been his opinion that the JOURNAL ought to be reserved for the contributions of local branches, and that the *Transactions* of the annual meetings should be in a separate form, the papers being of a higher character, being in fact selections from the branches, and worthy of being preserved in a form somewhat like the *Medico-Chirurgical Transactions*. If they had such a volume it would be the interest and the desire of the leading members of the Association, and of the members generally, to bring forward their best papers at these meetings. Of course he only now spoke of principles: the details with regard to the members' subscriptions and the number of copies printed would have to be carefully considered.

Dr. SIBSON (London) was an old enough member of the Association to remember when the annual volumes of *Transactions* came out; and some of the members would agree with him that they did contain matter of some importance now and then and, when they considered that the Association met in every part of England, and that each part of it had its peculiarities, and that the physicians and surgeons of each could give great information, these volumes might and did become a body of knowledge for the profession in regard to these points. Unquestionably it would be very important for them to publish *Transactions*, provided they kept to that class of matter which was peculiar to the Association. There was another thing. There were now meetings of the scientific sections. For these reasons, he hoped the meeting would not give a direct negative to Dr. Elliot's proposal. At the same time, he would be very sorry if they passed it in the form put by him; and he was sure that Dr. Elliot himself would not wish it. He thought that, if Dr. Elliot were to modify the resolution to the effect that it was desirable, and that the Committee of Council and the Council should be requested to say whether funds could be provided, it might be of service. But the immense difficulty was in providing for the publication of two works by one Association. The means were not at hand, and to have a bad JOURNAL and a weak volume of *Transactions* would be a mistake. The great societies in London and elsewhere had only *Transactions*. The Association had the JOURNAL; but it might not be amiss if they were to put to the Committee of Council whether, now and then, a volume of *Transactions* might be published.

Mr. S. WOOD (Shrewsbury) was sure that there were very valuable and interesting papers, which were worthy of preservation; and that they would do well to publish a volume of *Transactions* occasionally; but he did not think an annual volume at all practicable or desirable. In the first place, there were no funds in the Society for the purpose; and he did not think that matter would be forthcoming to form a volume worthy of acceptance.

Dr. HENRY (London) said the publication of *Transactions* would relieve the JOURNAL of the pressure of some of the long and excellent papers which were presented to the Association. There was sometimes a great difficulty in inserting both these and other matter, which the members expect to have presented in the JOURNAL every week. The question, however, was one which he did not think they ought to decide at that meeting. They might pass a resolution referring it to the Committee of Council. They had power given them already in the laws to publish *Transactions* occasionally, if the funds of the Association allowed

it. The members might leave the matter to the Committee of Council and the Treasurer.

Mr. HECKSTALL SMITH had the honour of belonging to the Association when the volumes of *Transactions* were published. Those transactions contained most valuable scientific records of their proceedings in those days; and he would venture to affirm that every member of the Committee of Council was fully alive to the desirability of resuming them whenever the funds would admit. He did not think it could be expected that anything more could be done with the guinea than they did now; but if the members were prepared to give additional funds, then the time had arrived when they ought to have *Transactions*, and those of the highest and most valuable description, seeing how their members were scattered over the length and breadth of the land, and how they included not only the rising talent, but a very large proportion of the established talent of the whole of the united kingdom. He would suggest that the proposer of the resolution should deliberately consider the question, and bring it forward upon its merits as a pecuniary matter next year, and propose at the same time that there should be an addition to the subscription commensurate with the outlay which they would be called upon to make.

The TREASURER said that, as had been stated, it was entirely a question of money. He might state, as a fact, that the JOURNAL was delivered to the members of the Association considerably under its actual cost. In the next place, the branches would not allow of any increase of the subscriptions; the members had not only to pay their subscriptions to the Association, but also had to meet their branch expenses. As a proof how heavily even an ordinary subscription pressed upon the members of the Association, he stated that there was hardly a single year in which there was not £500, £600, or £700, or even more in arrears; and it was not at all impossible that at the end of this year there would be something like £1000 in arrears of subscriptions to the Association. Under these circumstances, if it was to be considered a purely financial question, he could not advise the Association to publish a volume of *Transactions*.

Dr. TURNBULL (Coldstream) heard with very great surprise that there was such a large deficiency in the subscriptions. Measures ought to be taken to get them in. It was an anomalous position for the Association.

Dr. ELLIOT, in reply, said there was an old proverb, that where there was a will there was a way. As to raising money, there seemed to be a great difficulty at present. He did not think there was any serious obstacle in the way of publishing a volume of *Transactions*; and he thought those who wished for it would be very glad to pay for it. As the meeting was thin and the hour extremely late, he would follow the example of Dr. Bell, and allow the motion to lie over.

The motion was then withdrawn by permission.

Cash Account.—The Rev. Dr. BELL asked why a report was not made on his Oxford Committee to the general meeting last year by the Committee of Council, and if it would be made this year.

The TREASURER replied that the matter was all over and done: there was a report.

The Rev. Dr. BELL said the fact was, that the Committee of Council did not like suggestions for any other quarter. He complained that they came at the late hour of eight o'clock to begin the important business of the meeting.

The SECRETARY read the resolution to which Dr. Bell's question referred, and it was to the effect that in future the General Secretary's cash account be included in the audit of the account of the Association.

The TREASURER said that had been thoroughly carried out.

The meeting then separated.

WEDNESDAY, AUGUST 10th.

The Sheriff's Breakfast.—At half-past 8 o'clock this morning, the Sheriff of Newcastle (T. L. Gregson, Esq., Surgeon) entertained the members of the Association at breakfast in the Town Hall, Newcastle.

The SHERIFF, on taking his seat, said:—Mr. President and gentlemen, as Sheriff of this most ancient Corporation, and in its name and my own, I bid you most heartily welcome. [Applause.] I am sure this town has just reason to be proud that the President for the ensuing year should have been chosen in one of its most distinguished physicians, and that within its walls are now assembled so many gentlemen distinguished by profound research and practical experience from distant parts of Great Britain and Ireland, all united and animated by the same motive—all able and willing to impart the fruits of their experience in the noble art and science of curing and alleviating the "ills

to which flesh is heir." [Cheers.] I trust that this town may reap the first fruits of your labours. For the present I will only say

"May good digestion wait on appetite,
And health on both."

Again I thank you for your presence this morning. [Cheers.]

At 11 o'clock, the Second General Meeting of the Association was held in the lecture-room of the Literary and Philosophical Society. The President occupied the Chair.

The Meeting of 1871.—The GENERAL SECRETARY: I have to report that the Council recommend that Plymouth be appointed the place of meeting in 1871. There is here a requisition from Plymouth: I think you will see the number of signatures, and I need not read them. They also recommend that Mr. John Whipple, Consulting Surgeon of the Plymouth Hospital, be appointed President for 1871. The Council also recommend that Sir William Armstrong be elected an honorary member of the Association. [Applause.] I have to announce to you that the following gentlemen have been elected the ten members of the Committee of Council; viz.—Alfred Baker, Esq.; M. H. Clayton, Esq.; Thomas Littleton, M.B.; F. Sibson, M.D., F.R.S.; T. Heckstall Smith, Esq.; G. Southam, Esq.; W. P. Swain, Esq.; A. T. H. Waters, M.D.; C. G. Wheelhouse, Esq.; M. A. E. Wilkinson, M.D.

Mr. HUSBAND: I have been requested to propose what I am sure will meet with the cordial approbation of the members of the Association. We are a migratory body, and we endeavour as far as we can to bring the influence of the Association, and the interest which is felt in it, on different parts of the kingdom. We met last year at Leeds, and we meet now in this great and influential town. The Council have felt it desirable, if possible, to break ground in the west; and I am happy to say that to-day a most numerous signed requisition—not only numerous but influentially signed—was presented to the Council, asking them to meet in the important town of Plymouth. The Council advise you to accept the invitation; and when you consider the importance of Plymouth, and the interesting works in its neighbourhood, which perhaps in the time of war may be more valued by the country than they have been—I say when you consider the character of the locality, and the interesting nature of the place itself; and, above all, when you know that the gentleman to be proposed as President is one whom we esteem and respect, and who is still more highly esteemed and respected in the neighbourhood where he lives, then I am sure there will be no division of opinion this morning, but that we will all join cordially in agreeing that the next annual meeting be held in the important town of Plymouth, which I now have the greatest pleasure in proposing. [Applause.]

Mr. CLAYTON (Birmingham): I have very great pleasure in seconding the resolution which has been proposed by the President of the Council. It is right and proper that, having been entertained so kindly and hospitably in the northern counties, we should give an opportunity to the southern division of amicably competing with the north in the field of hospitality and science. [Applause.] I but express the feelings of those who come from the south, when I say that nothing could exceed the kindness and hospitality which has been shown to us at Leeds and Newcastle. We cannot hope to rival you in the handsome manner in which we have been received here; but I am sure we will endeavour not to be behindhand. [Applause.] I have great pleasure in seconding the motion that the next meeting be held in Plymouth.

The motion was carried unanimously.

President-elect.—Dr. FALCONER (Bath): Our next duty is to select a gentleman to fill the important office of President of the Association at the anticipated meeting in Plymouth. There can be no hesitation in naming the gentlemen whom the Council has this morning determined to propose for your acceptance. He is a gentleman well known for many years in the district of Plymouth, and I may say in the whole of that part of the west of England. He enjoys the uninterrupted confidence of his professional brethren; and I am sure he will do everything that lies in his power to meet the professional requirements, setting aside any question of social entertainment. [Applause.] I therefore have very great pleasure in proposing that Mr. Whipple be appointed the President-elect to fill the chair at Plymouth at the next annual meeting.

Mr. WHEELHOUSE (Leeds): After what has fallen from Dr. Falconer, there can be little for me to do beyond seconding the appointment of Mr. Whipple. I have very great pleasure in seconding the nomination.

The motion was then put and carried unanimously.

Mr. WHIPPLE: Mr. President and gentlemen, I come from Plymouth as the representative of a large body of men who have honoured me by recommending me to your consideration. That recommendation has been cordially received. I thank you for the high honour done me in electing me as President for the ensuing year; and I

would beg to assure you for myself and the members of the profession at Plymouth, that nothing shall be wanting, so far as industry can go, to make the meeting an agreeable one to you all. [*Applause.*] We feel highly the compliment paid to us in coming so great a distance, for we are in the far west; yet with express trains and express hearts, I am sure you will find no difficulty in finding your way thither; and, when there, the beauty of the locality, our fortifications, the great naval arsenal, our back scenery of moors, etc., our beautiful rivers—I hope these will in some way repay you for the trouble and the honour you have paid us. [*Applause.*] All I can say is, gentlemen, that our best endeavours will be put forward to make the visit an agreeable one, and to do everything for the comfort of so large and influential a body.

Election of Sir W. Armstrong as an Honorary Member.—Dr. BEATTY (Dublin): I have agreed to second a proposition. As the proposer is not present, I will move the resolution. It is one which will confer honour on the Association, instead of conferring honour on the individual whom we wish to compliment. It was announced in the Report of the Council, which was read last night, that it recommended the Association to elect Sir W. Armstrong as an honorary member of the Society. [*Applause.*] Although any man may be proud of being elected an honorary member of an Association like this, still I repeat what I began by saying, that an honour will be conferred upon the Association by his accepting the appointment; because to be connected with a name so distinguished, and with an individual of so extended kindness, benevolence, and generosity, as I understand Sir W. Armstrong to be, particularly in this locality, will make it an honour to us to have his name enrolled upon our list; and I, sir, with the greatest possible pleasure, propose “That Sir William Armstrong be elected an honorary member of the British Medical Association”. [*Loud applause.*]

Mr. HECKSTALL SMITH (St. Mary Cray): I have very great pleasure in complying with the request made to me to second this nomination. The name of Sir Wm. Armstrong will be hailed everywhere where the English tongue is spoken, as a representative man; and to say one word in praise of such a man in his own locality would be utterly superfluous. [*Applause.*]

The resolution was then put and carried unanimously.

The meeting then separated for half an hour, and resumed at twelve o'clock.

The Address in Medicine was read by FRANCIS SIBSON, M.D., F.R.S. It was published at page 160 of last week's JOURNAL.

Dr. HUGHES BENNETT (Edinburgh): It is with very great pleasure that I rise to move that the Association record its thanks to the author of this very valuable communication. I quite agree with what Dr. Sibson said at the commencement of his address; namely, that medicine now partakes of that desire for precision which characterises the great advance of art and science in every direction; and it is remarkable that the address which we have heard to-day, instead of being a *resumé* of past occurrences, mixed with more or less brilliant sentences and grand perorations, partakes to a great extent of that desire which he intimated at its commencement. There can be no question, I think, in every thinking mind amongst us, that the great point which we have to determine is the natural progress of disease. That is the question; and we must regard all contributions in that direction as being of excessive value. How far the communication of Dr. Sibson partakes of that precision which we all require, can only be determined by careful study of his facts; and I will not say that we are scarcely in a position to enter upon this study of figures and tables that have been placed in our hands. Discussion on this paper is at this moment of course quite out of question. I confess that, on looking into these figures, I am not at all prepared to say whether they are correct or not. That is the question at issue. I do not understand the figures that I see; and it will require, I think, a great deal of study for all of us to do so. We have, therefore, to put these tables in our pockets, and to study them very carefully when we go home. I trust that when we come to read in print the valuable communication of Dr. Sibson, we shall all pay that careful and critical attention to the subject which its importance unquestionably demands. [*Applause.*] I am quite assured, however, that in the meantime we must accord our most grateful thanks to Dr. Sibson for the care he has taken in the collation of that paper. I will only say, in conclusion, that probably there are very few amongst us—and certainly those only who are very much of the opinion of myself as to the necessity of carrying out precision and exactitude in our inquiries—who can appreciate the labour and trouble that must be taken before 101 cases of any disease can be carefully studied and carefully collated and recorded; and I presume we shall all agree that any clinical physician who has taken the trouble to carry out such a great work is deserving of the commendation and gratitude of the entire profession. [*Applause.*]

Dr. EMBLETON (Newcastle): I have great pleasure in seconding the proposition. I am sure the whole of the meeting must have heard with the greatest pleasure the address with which Dr. Sibson has favoured us on the subject of gout and rheumatism. He seems, as far as his means have gone, to have exhausted the subject; but I quite agree with Dr. Bennett, that this is a paper to be studied at home, in the hospitals, and at the bedside. Observations should be made by ourselves and compared with the results arrived at by Dr. Sibson; and in the course of time, after a few years—I was going to say the grain of truth—the great body of truth in this address would prove itself one way or the other. I think that the observation of cases, extended over only one season, is hardly sufficient; because we know that one year differs from another in various ways, and it requires successive observations in different years—as years differ much in temperature, moisture, and other conditions—before we can arrive at a thoroughly satisfactory conclusion as to the nature and treatment of gout and rheumatism. So far as the present paper has gone, I am sure our thanks are due to Dr. Sibson for the labour and great pains he has taken in the investigation of the subject. [*Applause.*]

The resolution was carried unanimously.

Dr. SIBSON: Might I just say one word in thanking you? But this is not so much my object, although I feel your kindness, as to say a word in entire accord with those of Professor Bennett and Dr. Embleton. I have given you, here, the means of testing my inferences, and I shall be grateful to any man who may discover that the inferences may be shown to be other than those which I have given you. [*Hear, hear.*] More than that, I shall be grateful again and again to any of you who will follow out the investigations, and bring in whatever results they may gain. I have aimed on making these observations as accurate as I could; and I never in one single instance trusted to another pair of ears, but took the observations myself. I have taken observations myself for two and a half years, and I have another year and a half to add if needful. Let me thank you, Mr. President, for the kindness and patience with which you have listened to me, and say that I am sure I shall have your ingenuous confidence in the consideration of those cases which I have brought before you, and in following up that method of treatment in other cases that may come before me.

The meeting then broke up.

The business of the section commenced at 2 P.M. The following papers were read.

Section A.—*Medicine.* President—D. EMBLETON, M.D.

Introductory Address by the President.

Embleton, D., M.D. On the Shoulder-Tip Pain in Liver-Diseases.

Hovell, D. De B., F.R.C.S. On the Treatment of Paralysis.

Sansom, A. E., M.D. The Sulpho-Carbolates; and the Antiseptic Method in Medicine.

Oliver, George, M.B. The Therapeutics of the Sea-side.

Section B.—*Surgery.* President—JOSEPH LISTER, Esq., F.R.S.

Adams, W., F.R.C.S. On the Subcutaneous Division of the Neck of the Thigh-bone, as compared with other operations for rectifying extreme distortions at the hip-joint with bony ankylosis. Illustrated by a successful case of the subcutaneous division.

Russell, John, M.R.C.S. On a case of Femoral Aneurism cured by rapid pressure.

Gibb, C. J., M.D. On a successful case of Ligature of the superficial Femoral Artery in Popliteal Aneurism, on Lister's Plan.

Bell, Anthony, M.R.C.S. Notes of a case of Epilepsy of Sixteen Years' Duration, from Parietal Depression of Cranium: Trephining: Recovery.

Waterhouse, F., M.R.C.S. On a New Form of Elevator for Depressed Cranium in Childhood.

Walker, R., L.R.C.P.Ed. Operation for the Relief of Contracted Toe.

Section C.—*Physiology.* President—A. CLARK, M.D.

Elliot, Robert, M.D. Lobelia Inflata; its Action as a Poison: evidence and autopsies at eighteen inquests.

Fothergill, J. M., M.D. On the Preservative Agency of Lowered Vitality.

Bolton, J. A., M.D. The Naked Man and his Photograph, in *re* the Turkish Bath.

Section D.—*Midwifery.* President—ROBERT BARNES, M.D.

Bennet, J. Henry, M.D. On the Influence of Inflammation in the production of Uterine Displacement.

Tilt, E. J., M.D. On Uterine Pathology at the Change of Life and after the Menopause.

Barnes, R. M.D. On a case of Retro-Uterine Hæmatocele: with Illustrations.

Barnes, R. M.D. A New Operation of Embryotomy by the Wire Ecraseur.

Gibson, Charles, M.D. 1. Uterine Leucorrhœa; 2. Polypus Uteri.

Section E.—*Public Medicine*. President—H. W. RUMSEY, M.D.

Ransome, Arthur, M.D. On the Registration of Disease and Meteorology in Manchester and Salford, during the Ten Years 1861-1870.

Philpson, G. H., M.A., M.D. On the Health and Meteorology of Newcastle and Gateshead during 1868 and 1869.

Armstrong, Leonard, M.R.C.S. Difficulties in applying Sanitary Laws.

Section F.—*Psychology*. President—THOMAS LAYCOCK, M.D.

Address by the President.

Laycock, Thomas, M.D. On the Practical and Scientific Investigation of the Relations of Body and Mind.

Laycock, T., M.D. Case of Epileptic Chorea of Right Arm.

Wickham, R. H. B., L.R.C.P.Ed. Case of Rhythmical Chorea of the Right Arm and Palsy of Leg.

Banquet by Sir W. G. Armstrong, C.B.—In the evening, at six o'clock, Sir W. G. Armstrong, C.B., gave a banquet to about two hundred of the members of the Association. The banquet took place in the Hall at Jesmond Dene. It was served up *à la Russe*; and during the repast there was music on the grand organ by Mr. W. Rea, organist to the Corporation. Colonel Peyton, 98th Regiment, the Rev. Canon Whitley, and the Rev. Rowland East, were amongst the guests.

After dinner, the CHAIRMAN proposed "The Queen," and "The Prince and Princess of Wales, and the rest of the Royal Family."

The CHAIRMAN, having referred to the importance of the medical profession, said he was proud on that occasion to entertain them. Their Association was presided over by his old and accomplished friend and fellow-townsmen, Dr. Charlton, whose address last evening justified him in saying that the Association might be congratulated on having so able and accomplished a person as its President. He had great pleasure in proposing "Prosperity to the Association, and the Health of the President." [*Cheers.*]

Dr. CHARLTON responded. He said it had fallen to his lot to return thanks for the British Medical Association; and he did so with the more pleasure from their having met at that festive board, the remembrance of which, he was quite sure, would be long cherished by those who had partaken of Sir William's hospitality. [*Applause.*] The meeting had been a source of no small anxiety to those in Newcastle; but gradually, as they had worked on, they had seen the ground smoothen before them; but they scarcely dreamt to have looked upon such pleasant places. There was no solicitation on their part which had induced Sir William Armstrong to give them that splendid feast. It was Sir William Armstrong's spontaneous good-heartedness. It was his desire to uphold the character for hospitality for which Newcastle had been famous by one of its leading citizens; and, from the way in which the British Medical Association had been received both by the members and by the citizens of Newcastle, they would, he was sure, carry away with them the recollection that here, in these northern regions, there was no coldness at least in the hospitality which was shown. [*Applause.*] He wished the Association might have another meeting in a hall like that; but it would be long before they got one. He proposed the health of their host. [This was received with three cheers, and one cheer more for Lady Armstrong.] Sir William Armstrong had always been growing in the esteem of his fellow-citizens. He had always made it his one great pleasure to assist mankind in their improvement, to help the sick, and to aid those who were willing to aid themselves. It had been a pleasure and joy to him to witness Sir William Armstrong's life. Time was, when they were both young together. They were very ardent fishers together, for trout and salmon and other things; and at that time Sir William's discrimination and judgment showed a way of snaring trout that he (Dr. Charlton) never dreamt of: it proved his genius, and was a *prestige* of his future greatness. Then came the hydraulic machine, and then the instruments of war. Though Sir William had honours thrust upon him by the whole world, he was the same man as when they worked together in early life; and the same he would ever be, so long as it pleased God to allow him to remain upon earth.

Sir W. ARMSTRONG, in responding, said that, as a citizen of Newcastle, he was bound by the interests of a large population, and had pleasant duties to perform. Amongst those duties was that of showing hospitality on the occasion of great assemblages such as the present. The performance of such a duty was generally a pleasure, and he assured them that the duty of entertaining them on the present occasion had been most amply repaid by the pleasure it had given him. [*Applause.*]

Mr. HUSBAND proposed "The Mayor and Corporation." The Mayor and Sheriff responded. The proceedings then terminated.

President's Soirée.—After the company returned from Sir William Armstrong's at Jesmond, the President gave a *soirée* in the Town Hall. In addition to the members of the Association, a very large number of ladies and gentlemen residing in the town and neighbourhood were present.

THURSDAY, AUGUST 11th.

Temperance Breakfast.—This morning, at eight o'clock, a breakfast was given by Mr. BOWLY, the President of the National Temperance League, to the members of the Association. About eighty gentlemen accepted the invitation, and the breakfast took place in the Queen's Head Hotel. Mr. Bowly occupied the chair.

The CHAIRMAN said that the object of the organisation of which he was President, was to endeavour to remove, as far as possible, the evils of drunkenness, which all admitted to prevail to a great extent in this country; and their system was that of moral suasion. It must be a matter of conviction and belief how they could best attempt the cure of any great evil, and nobody knew more of this special evil than medical men. All present must have arrived at the conclusion that it was almost impossible to train the masses of the people to drink in moderation. The working men themselves began the total abstinence movement thirty years ago, and he himself had adopted the same principles for as long a period. He joined the movement contrary to his own interest. The experience of medical men showed that a very large number of people fell victims to drink. The present generation of drunkards had become so since he (the speaker) had become an abstainer. They had become drunkards in spite of themselves, and they knew the evils of drinking better than any one could tell them. Some people seemed to think there was a broad line between temperance and intemperance, but it was impossible to say when the safe line had been passed. One employer of labour had told him that out of the 150 men in his establishment, 50 were total abstainers; and that these were the best men he had. At the period when he (Mr. Bowly) adopted total abstinence principles, he had been told to take wine to quicken a languid circulation. But he was now a total abstainer of thirty-five years' standing, and he was a stronger and heartier man at the present time than when he left off the use of intoxicating liquors. The insurance office with which he was connected had a membership of 30,000. Of that number 10,000 were total abstainers, and 20,000 moderate drinkers; but the total abstainers' section enjoyed greater pecuniary advantages than the other. He knew that many medical men prescribed alcoholic liquors to ailing people, but there was no occasion for people to take that medicine all their lives. Temperance advocates said, therefore, that the medical question ought to be left a good deal in the hands of medical men themselves. Most people deplored the evils of drunkenness; but there were thousands of persons who had done an immense amount of injury to their health by drinking, who were never drunk. It seemed to him, therefore, that total abstinence was the only remedy that would fully reach the evil of drinking. How far the medical gentlemen he saw around him were prepared to accept that opinion he did not know, but he and his colleague might ask them how far they were prepared to help in getting rid of this great evil. If they would not go all the way with total abstainers, perhaps they would go half way. Mr. Bowly concluded by remarking that he and his friends had ventured to ask the guests assembled to meet them, in the hope that one another's hands might be strengthened thereby. He did not believe himself that this temperance question would do everything for the regeneration of the people, but he appealed that day to medical men, and invited a friendly discussion on the merits of total abstinence. [*Applause.*]

Dr. W. WOOD (London) said he felt really gratified at the kind way in which he and his brother practitioners had been treated by their hosts, and at the very temperate and philosophical manner in which Mr. Bowly had spoken on the subject of temperance. He was Physician to St. Luke's Hospital, and at a former period of his life had been professionally connected with Bethlehem Hospital, and consequently had had opportunities of knowing the evils resulting from intemperance. He must confess that at the present time it was his habit to take a glass of wine daily at dinner. Of course he knew he could do without it, though he was also bound to say he could not do so well without it. He admitted that there was a great deal of force in what Mr. Bowly had said about there being no middle course. The same might be said with respect to the abolition of restraint in cases of insanity. He could not say, indeed, that there were not cases in which restraint was desirable. He believed it would be an evil to abolish the use of strong drinks; but he acknowledged it would be a greater

evil to continue them. With regard to a certain class of persons, he believed there was no alternative but to press them to abstain altogether. The question might be asked, Could not medical men set an example with respect to the disuse of intoxicating liquors? Medical men were frequently oppressed with labour and fatigue, and but for an occasional glass of wine would flag and not be able to do their duty. All that ought to be taken into account. The speaker concluded by remarking that, after what they had all heard from the chairman, they would be more disposed to promote the interests of the League. [Applause.]

Dr. J. P. SCATLIFF (London) believed that all medical men were agreed that every person in a state of perfect health did not require alcoholic drink. That being so, it was imperatively necessary that medical men should be careful to let their patients know that such drinks were only to be continued for a certain time. The better plan would be for medical men to supply the doses of alcoholic drink themselves to patients, labelling the bottles with the exact dose. But medical men generally said to their patients, "Take a glass of wine a-day"; and they found that people were very ready to follow that advice. But was the latter policy for the people's good? He remembered having had at one time four cases of disease under his care, all brought on by the habitual use of intoxicating drinks. He could bear his testimony to what could be done without drink. Alcoholic prescriptions, he considered, ought to be very carefully defined. [Hear, hear.]

Dr. STANLEY HAYNES (Salisbury) said that, during the last session of Parliament, a Bill entitled "The Habitual Drunkards Bill" had been read for the first time in the House of Commons. Next session it would be brought forward again. The Bill was, in his opinion, a good one; and his chief reason for broaching the subject was to ask the members of the Association to study the Bill carefully.

Mr. UNDERHILL (Tipton) had been much among the working classes, and though he acknowledged that the evils of intemperance were many, yet, as a rule, temperance advocates were the most bigoted men in the world. Some said that if a person were not a total abstainer he was worse than a drunkard. He cordially thanked Mr. Bowly for the very moderate terms in which he had introduced the subject.

Mr. BOWLY deplored as much as anybody the violent advocacy of the cause. A good cause was often as much injured by friends as by enemies. But they must bear in mind that many of the advocates in question had been educated in public-houses, and had suffered a great deal through drink. Besides, that kind of advocacy had much decreased of late years. He thought the medical profession was bound to do all it could to prevent the great evils of the drinking system.

The SHERIFF of NEWCASTLE (Mr. Gregson) proposed a vote of thanks to the chairman for his entertainment, and for the able, eloquent, and amiable terms in which he had discussed the question. He endorsed the sentiments of almost every speaker, and gave instances of people deceiving themselves with the belief that they were moderate livers, while they took three or four glasses of brandy and water in a day, and sometimes, also, a glass of porter. He had spent a number of years in the East, and found there was hardly an operation from which a patient who was a total abstainer would not speedily recover; while in the case of drinkers, it was found that gangrene and other diseases set in.

The vote of thanks was carried by acclamation, and the CHAIRMAN, in reply, said they had given him great encouragement, and he would go on with renewed energy in the cause.

The Rev. THOMAS MCCALL, Principal of Hackney College, said that strong drinks were not necessary to health and strength, and might be disused with safety and advantage. He asked the medical profession to reconsider their position in regard to this question. It would be better, in his opinion, that medical men should leave the cure somewhat incomplete by the disuse of alcoholic prescriptions, in order to keep patients at a safe distance from what might be a temptation to them. He asked his hearers, when persons came to them suffering from exhaustion and lassitude, to urge their patients to try what pure air, wholesome diet, and regular hours would do.

Dr. DE MEY (Newcastle) thought the last speaker had carried his point too far. Medical men would shrink from their duty if, in a great number of cases, they did not recommend a certain quantity of stimulants; and in a great number of cases it would be impossible to effect a cure without them. The moderate use of wine, even in healthy persons, did an immense amount of good; and the right course, as rational creatures, was to use these gifts of Providence. There were a great many total abstainers who took laudanum daily.

Dr. RUTHERFORD and Dr. SCATLIFF denied that temperance

people were in the habit of taking either laudanum or morphia.—The proceedings then ended.

The third general meeting was held in the Lecture Room of the Literary and Philosophical Society. The President took his seat at ten o'clock.

Dr. WATERS (Chester) read the report of the Direct Representation Committee (see page 197).—Mr. HUSBAND (York) proposed, and Dr. STEWART (London) seconded, the adoption of the report. After some discussion, it was resolved that the report should be at once printed, and that the discussion of it should be resumed the next morning at eleven o'clock.

[We are obliged to defer till next number the report of the discussion.]

The Address in Surgery was delivered by GEORGE V. HEATH, M.D. [It was published at page 163 of last week's JOURNAL.]

Mr. SOUTHAM (Manchester) proposed—"That the cordial thanks of the meeting be given to Dr. Heath for his valuable address." Newcastle, it was well known, afforded excellent opportunities for the study of surgery, surrounded, as it was, by many manufactories and collieries. The surgeons of Newcastle had ably and admirably done their duty in the pursuit of surgical science. They had been great and able contributors to surgical literature; they had contributed most valuable records, and consequently it was not simply for the address heard that day that the members present were thankful; it was for the information given to the medical world, through their periodicals, from a field of instruction which was so fertile as that particular locality. With regard to the address that had been delivered, it possessed great force, and its only fault was its brevity. He hoped that it was but an abridgment of Dr. Heath's views, and that, when printed, they would find it enlarged with additional information. When they looked at the casts on the table, they had an instance of conservative surgery, as perfect, he would venture to say, as they could see in any part of the kingdom; they were beautiful specimens of what surgery could do. They had an example before them on the table of how an injured limb could be preserved when it came under the notice of a practical surgeon.

Mr. WHEELHOUSE (Leeds) had unfeigned pleasure in seconding the motion. If he were to occupy the time of the meeting by labouring to express the feelings of pleasure which he had experienced in listening to the eloquent address of Dr. Heath, or to take note of the great range he had taken in surgical science, he should only be wasting time. The members owed a deep debt of gratitude to the author of the address for having placed the subject of operative surgery of the present day before them in such a clear and comprehensive manner. [Applause.]

The motion was carried with acclamation.

Dr. HEATH thanked the members for the patience and attention they had paid him during the progress of his remarks.

Visit to Newcastle Lunatic Asylum.—At the conclusion of the general meeting, about twenty-five members proceeded by omnibus to the Newcastle Borough Lunatic Asylum at Coxlodge. On arriving at the asylum, the party were met by Dr. Stewart, the surgeon of the institution, and Aldermen Dodds, Hedley, and Pollard, visiting justices. The members inspected the asylum. The party were entertained to luncheon by Dr. Stewart. Alderman Hedley occupied the chair, the host being in the vice-chair. At the conclusion of the repast, Dr. Laycock proposed the health of Dr. Stewart, speaking in praise of that gentleman's abilities, and congratulating the committee of the institution in having so good and so cultivated a gentleman to preside over their institution. He wished him continued success in the management of the institution, the admirable arrangements of which they had all seen for themselves that afternoon.—Dr. STEWART responded.—Dr. LAYCOCK proposed the healths of the visiting justices.—Alderman HEDLEY responded, and proposed the health of Dr. Laycock, who likewise responded.—Dr. DE MEY proposed the health of Mr. John Hancock, who responded.—Dr. WOOD's health was next drunk; and the health of Mrs. Stewart having been duly honoured and acknowledged, the party broke up.

The Sections met at 2 P.M., when the following papers were read.

Section A.—*Medicine.*

- Rcnfrew, R., M.D. On the Treatment of Scarlet Fever.
- Murray, J. C., M.D. On Snuff-taking; its utility in preventing Phthisis, Bronchitis, etc.
- Allbutt, T. Clifford, M.A., M.D. On Functional Hemiplegia in Child-bearing Women.
- Whitehead, Walter, F.R.C.S. Ed. On Mucus Disease.

Section B.—*Surgery.*

- Hutchinson, J., F.R.C.S. On Xanthelasma Palpebrarum as a Symptom of Diathesis.
- Teevan, W. F., F.R.C.S. On Spermatorrhœa.

- Teevan, W. F., F.R.C.S. Twenty cases of Stone in the Bladder.
 Watson, W. Spencer, F.R.C.S. On the use of the Seton in the Treatment of Vascular Ulcers of the Cornea, with illustrative cases and drawings.
 Watson, W. Spencer, F.R.C.S. Cases of Traumatic Ophthalmitis.
 Clarke, W. Fairlie, M.A., F.R.C.S. On some rare forms of Opacity of the Cornea.
 Jordan, Furneaux, F.R.C.S. On the Treatment of Enlarged Cervical Glands.

Section C.—*Physiology.*

- Richardson, B. W., M.D., F.R.S. On Anæsthetics.
 McKendrick, J. G., M.D. Exhibition of New Spirometer, by Bergeon and Kastauss.
 Couper, John, F.R.C.S. The Diagnosis of Astigmatism by the Ophthalmoscope.

Section D.—*Midwifery.*

- Meade, R. H., F.R.C.S. On a case of Ovariectomy, in which the Tumour was removed by Enucleation, without the necessity of the application of either Clamp or Ligature to the Pedicle.
 Aveling, J. H., M.D. On the Advantages to be derived from curving the Handles of Midwifery Forceps.
 Hewitt, Graily, M.D. On a New Instrument for securing the Pedicle in Ovariectomy.
 Hewitt, Graily, M.D. On Strangulation of the Uterus.

Section E.—*Public Medicine.*

- Eastwood, J. W., M.D. On Intemperance in its Medical and Social Aspects.
 Taylor, C. B., M.D. On the Forcible Introspection of Women by Government.
 Drysdale, C. R., M.D. On the Contagious Diseases Acts.
 Fox, Tilbury, M.D. On Entire Wheat Flour.
 Black, D. Campbell, M.D. On Certain Circumstances which Contribute to Impede the Progress of Scientific Medicine and Surgery.
 Taylor, M. W., M.D. On the Transmission of the Virus of Fevers by Fluids.

Section F.—*Psychology.*

- Stewart, H. Grainger, M.D. On Syphilitic Insanity.
 Clouston, T. S., M.D. The Use of the Thermometer in the Diagnosis and Treatment of Insanity.

Excursion.—In the afternoon, a large number of the members visited Tynemouth Priory and the Prudhoe Convalescent Home, and at the latter place were entertained at a sumptuous luncheon by Dr. Philipson. A party also visited Sunderland, and were very hospitably received by the members of the profession resident there.

The Annual Dinner took place in the Town Hall, at 6 p.m.

FRIDAY, AUGUST 12th.

The Sections met at 9 a.m. At 11 o'clock, the discussion on the Report of the Direct Representation Committee was resumed. An amendment moved by Dr. ACLAND, and supported by the members of the Medical Council who were present, was lost by an overwhelming majority. The motion for the adoption of the Report was carried; and a Medical Reform Committee was appointed.

With the transaction of some final business, including votes of thanks to the Mayor and Corporation of Newcastle, Sir W. Armstrong, the Sheriff, the President, etc., the session of the Association came to an end.

Visit to Durham.—At 1.30 p.m. a large number of members proceeded by special train to Durham, and, on arriving there, proceeded to the Castle, where the degree of Doctor of Civil Law was conferred on Dr. Charlton, Dr. Chadwick, Dr. Falconer, Dr. Sibson, Dr. Acland, Dr. Paget, and Dr. Stokes. At 4 o'clock, a full choral service was held in the Cathedral, and a brief but very appropriate sermon was preached by the Very Reverend the Dean. At 5 p.m., the Warden and Senate entertained the visitors at a collation.

Visit to Alnwick.—On Saturday, a number of members visited Alnwick, where they were shown over the Castle, and were afterwards hospitably received at luncheon by Drs. Wilson and Fenwick.

[In our next number we shall give a more detailed account of the proceedings of the last two days of this very interesting meeting.]

IN reference to a statement which has appeared in some papers that Sir Edwin Landseer is lying seriously ill at Stoke Park, we are happy to learn that Sir Edwin, who has been unwell, is now much better, and on the road, it is hoped, to early and complete recovery.

CORRESPONDENCE.

SULPHURIC ACID FOR DIARRHŒA AND CHOLERA.

SIR,—The Registrar-General having adopted the very unusual course of prescribing for diarrhœa and cholera, it may be well to inquire whether the remedy which has received the sanction of this great authority is trustworthy. His statement is that, "under the advice of the Medical Officer of the Post-office, Dr. Waller Lewis, a sulphuric acid orangeade was distributed in 1866 as a prophylactic against diarrhœa and cholera with good effects."

What is the evidence that has satisfied the Registrar-General of the good effects of the sulphuric acid drink? Did the postmen escape diarrhœa entirely, or did they suffer in a much less proportion than men in about the same class of life who were engaged in an active out-of-doors occupation? I know of no facts which tend to show that the habitual use of a sulphuric acid drink is a prophylactic against diarrhœa and cholera. The chief sufferers from diarrhœa at the present time are infants and very young children. Does the Registrar-General believe that for these delicate subjects a wineglassful or a smaller dose of sulphuric orangeade is a suitable remedy or prophylactic? I have carefully studied the effects of dilute sulphuric acid, with especial reference to its action in cases of diarrhœa; and I will, in the fewest possible words, give the chief results of my inquiry.

Choleraic, or summer diarrhœa, as a rule, has a much shorter course when treated by dilute sulphuric acid than when chalk and opium have been given; but when the acid treatment has been employed, the patient is often tortured by griping pains after the diarrhœa has ceased. I have observed this myself; and a most intelligent friend who has largely employed the acid confessed to me that he had often witnessed this unpleasant result. Dilute sulphuric acid is usually looked upon as an astringent; and, in a certain sense, this is true, but it is also a most decided gastro-intestinal irritant. What says Pereira of its physiological effects? "Dilute sulphuric acid is a thirst-quenching refrigerant spanæmic. It sharpens the appetite, checks profuse sweating, and not unfrequently reduces the frequency and volume of the pulse. *Under its use the milk of nurses frequently acquires a griping quality.* After the use of the acid for a few days, especially if it be exhibited in full doses, patients frequently complain of abdominal pain and griping. If its use be persevered in, these effects augment, heat and pain in the throat and stomach are experienced, the digestive functions are disturbed, and sometimes purging with febrile symptoms occurs." The treatment of diarrhœa by repeated doses of sulphuric acid without opium, whatever the result may be, is certainly not an astringent treatment, and the griping pain which frequently attends the employment of this medicine renders it, in my opinion, a very undesirable remedy in this class of cases.

Every practitioner who has given the acid to check the perspirations in phthisis must have observed that it not unfrequently causes colic and diarrhœa. With reference to this point of practice, Sir Thomas Watson remarks: "If the bowels are costive, or if the bowels have not, as they often have, a tendency to be relaxed, then the sulphuric acid may be freely given, and will often have very good results. But when this fails, or when the bowels are irritable and will not bear it, we must have recourse to other means." The facts to which I have referred afford conclusive evidence as to the irritant action of medicinal doses of sulphuric acid upon the alimentary canal. If, under its use, "the milk of nurses frequently acquires a griping quality," what would be the effect of introducing sulphuric orangeade directly into the sensitive stomach of an infant? It may be that neither Dr. Waller Lewis nor the Registrar-General considers this acid treatment suitable for infants; but the general readers of newspapers are not likely to exercise a wise discrimination, and therefore it is to be feared that the wide publicity and the high sanction given to this supposed prophylactic may tend to cause a great increase of infantile suffering and mortality.—I am, etc.,

Savile Row, August 1870.

GEORGE JOHNSON.

LONDON INSTITUTION.—Dr. J. P. Gassiot, F.R.S., last week distributed the prizes awarded and certificates granted to students who passed the recent examinations in physics, chemistry, and botany, based upon the educational courses of lectures delivered by Professors Guthrie, Bloxam, and Bentley. Dr. Gassiot stated that Professor Odling would open the coming session with a course of eight lectures "On Chemical Action", and that Professor Huxley would give a course after Christmas "On the First Principles of Biology."

MEDICAL NEWS.

UNIVERSITY OF EDINBURGH.—Candidates who received the degree of Doctor of Medicine under the New Statutes.

Peter Buchan, Scotland; *James Spottiswoode Cameron, Scotland; William Hodgson Carruthers, England; ***Richard Caton, England; William Craig, Scotland; *Alexander Crombie; James Dunsmure, Scotland; ***David Ferrier, Scotland; *William Alexander Finlay, Scotland; *James Forrest, Scotland; Thomas Silvester Gell, England; Charles Bailey Glenfield, England; Robert Bruce Low, Scotland; *Richard Lowther, England; Robert Lucas, Scotland; *William Paton Mackay, Scotland; *Harrison Mitchell, England; *Francis Walter Moinet, Scotland; Philip Henry Mules, England; Williams Nicholson, England; Walter Hugh Paterson, England; **John Wilson Paton, Scotland; Michael Weldon Rice, England; **Henry Sydney, England; Robert Shand Turner, Scotland; Yldefonzo Victor Watlington, Puerto Rico; Alexander Christy Wilson, Scotland; *Peter Alexander Young, Australia.

Candidates who received the degree under the Old Statutes.

William Chapman Grigg, England; *Edwin Hinchcliff, England (First Class Honours); *Charles Julian Jackson, England; James Alexander Menzies, Scotland.

Three stars indicate those who have obtained Gold Medals for their Dissertations; two stars, those deemed worthy of competing for the Dissertation Prize; and one star, those commended for their Dissertation.]

Degrees of Bachelor of Medicine and Master in Surgery.

Walter Duret Aubin, Jersey; John Bishop, England; Robert Blair, Scotland; Archibald Breloch (M.A.Glasg., Dr. Sc. Edin.), Scotland; James Pitcairn Bookless, Scotland; James Brasseley Brierley, England; William Brown (M.A.Aberd.), Scotland; Alexander Chambers, Scotland; William Copeland, England; John Archibald Cowan, Scotland (Second Class Honours); James Denholm, Scotland; Edward Harriman Dickenson (B.A.Oxon.), England; George Tait Dickson, Scotland; Walter Dixon, Australia; Richard Wright Dodds, Berwick-on-Tweed; James Williamson Edmond, Bengal (Second Class Honours); John Nicholson Fleming, England; Edward Flint, England; Arthur Edward Wellington Fox, England; John Fraser, Scotland (First Class Honours); George Western Gipps, England; Alexander Gordon, Scotland; John Gibson Gordon, Madeira; Peter Macpherson Grant, Scotland; John Brodie Henderson, Scotland; William Balme Hepworth, England; Henry Walter Hill, India; Thomas Irvine, England; Walter Robert Spence Jefferiss, Scotland; William Gregory Keith, Ceylon; William John Kennedy, Scotland (Second Class Honours); Alexander Macdougall, Scotland (Second Class Honours); Duncan M'Gregor (M.A.Aberd.), Scotland; Robert M'Kerchar, Scotland; Hugh Marriner, England; Henry Charrington Martin, England; Thomas Dickenson Nicholson, England; John Nivison, Scotland; John Cunningham North, Wales; David Page, Scotland (First Class Honours); Arthur Perigal, Scotland (received the Degrees of M.B. and C.M. on November 19th, 1869); James Reoch (M.A.Edin.), Scotland; James Turnbull Richardson, England; John Lloyd Roberts, Wales; Thomas Rutherford, Scotland; Henry Salt, England; Robert Spence, Shetland (First Class Honours); William Thomas Wood, Scotland; Thomas Allan Wotherspoon, Scotland; William Wylie, Scotland.

Degree of Bachelor of Medicine.

John Drysdale, Scotland; Henry Ambrose Lediard, England; Roderick Fraser M'Kenzie, Scotland.

Degree of Master in Surgery.

John Brown Buist, Scotland, M.B. 1867.

The Ettles Prize of £40, to the most distinguished student for the year, has been awarded to David Page.

INDIAN MEDICAL SERVICE.—The Military Secretary, India Office, presents his compliments to the Editor of the BRITISH MEDICAL JOURNAL, and begs to enclose a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination at Chelsea in February 1870, and who have undergone a course of instruction at the Army Medical School, together with the total number of marks obtained at the examinations at Chelsea and at Netley. [Maximum number of marks, 6,900.]

Order of Merit and Name.	Studied at.	No. Marks.
1. M'Connell, J. F. P.	London and Aberdeen	5855*
2. O'Brien, J.	Dublin and Cork	5215
3. O'Donnell, J. O'M.	Galway	4878
4. Reid, J.	Glasgow	4683
5. Mackenzie, G. P.	Edinburgh	4418
6. Sibthorp, C.	Dublin	4119
7. Laing, J. A.	Edinburgh	4065
8. Cook, H. D.	Edinburgh	3988
9. Peterson, R. A.	Dublin and Galway	3941
10. Weir, T. S.	Dublin	3681

* Awarded the Herbert Prize.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, August 11th, 1870.

Roberts, Richard Lawton, Ruabon, North Wales
Thornton, Philip, Dock Yard, Chatham

The following gentlemen also on the same day passed their first professional examination.

Briggs, George Chapman, King's College
Fenn, Charles Draper, Guy's Hospital

As an Assistant in compounding and dispensing medicines.
Waring, Albert Wynne, Walworth Road

MEDICAL VACANCIES.

THE following vacancies are announced:—

BILLERICAY UNION, Essex—Medical Officer for the Great Burstead District.
BRIGHTON AND HOVE DISPENSARY—Resident Medical Officer and Dispenser for the Western Branch: applications, Sept. 5th; election, Oct. 4th; duties, Nov. 1st.
BRISTOL GENERAL HOSPITAL—Assistant House-Surgeon: applications, 23rd; election, 31st.
CHESHIRE LUNATIC ASYLUM, Upton—Assistant Medical Officer.
CLAYTON HOSPITAL AND WAKEFIELD GENERAL DISPENSARY—House-Surgeon: applications, 29th.
COTON HILL LUNATIC ASYLUM, Stafford—Assistant Medical Officer: applications, 24th.
DERBY GENERAL INFIRMARY—Compounder: applications, August 27th; duties, Sept. 20th.
DUDLEY DISPENSARY—Resident Medical Officer: applications, 23rd; election, September 7th.
ERPINGHAM UNION, Norfolk—Medical Officer for the North Walsham District.
HOLLINGBOURN UNION, Kent—Medical Officer for the Lenham District: applications, 30th; election, Sept. 15th.
JERSEY GENERAL DISPENSARY—Resident Visiting and Dispensing Officer: duties, October 1st.
MAIDSTONE UNION—Medical Officer for District No. 2: applications, 25th.
MIDDLESEX HOSPITAL—Lecturer on the Principles and Practice of Surgery; Surgeon; Assistant-Surgeon: 25th.
MILFORD UNION, co. Donegal—Medical Officer for the Rathmullen Dispensary District: 26th.
NORTH RIDING INFIRMARY, Middlesborough-on-Tees—House-Surgeon: applications, Sept. 1st; election, October 6th.
NORTH SHIELDS AND TYNEMOUTH DISPENSARY—House-Surgeon and Dispenser: applications, 22nd.
PUBLIC DISPENSARY, Stanhope Street, Clare Market—Resident Medical Officer: applications, 20th; Committee, 22nd; election, Sept. 5th.
QUEEN'S COLLEGE, Birmingham—Medical Tutor and Demonstrator of Anatomy: applications, 27th.
ST. GILES-IN-THE-FIELDS AND ST. GEORGE, Bloomsbury—Assistant Medical Officer: applications, 22nd.
STAFFORDSHIRE LUNATIC ASYLUM, Stafford—Assistant Medical Officer.
STRONSAY, Orkney—Parochial Medical Officer and Public Vaccinator: applications, 24th.
SWANSEA HOSPITAL—Medical Officer for Out-door Patients: applications, Aug. 31st; election, Sept. 2nd.
WESTHAMNETT UNION, Sussex—Medical Officer and Public Vaccinator: applications, Sept. 1st; election, 5th.
YORK COUNTY HOSPITAL—House-Surgeon: applications, 27th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*ALLEN, Peter, M.D., Aural Surgeon to St. Mary's Hospital, appointed Aural Surgeon to the Royal Society of Musicians, *vice* the late J. Yearsley, M.D.
*DAVY, Richard, Esq., appointed Demonstrator of Anatomy to the Westminster Hospital Medical School.
*RENDEL, Richard, Esq., appointed Surgeon to the Royal Infirmary for Children and Women, *vice* *J. Cooper Forster, Esq., resigned.
SMITH, H. Alder, Esq., elected Resident Surgeon to Christ's Hospital, in room of Thomas Stone, Esq., resigned.

BIRTH.

ARGLES.—On August 14th, at Hermion Lodge, Wanstead, the wife of *F. Argles, L.R.C.P., of a daughter.

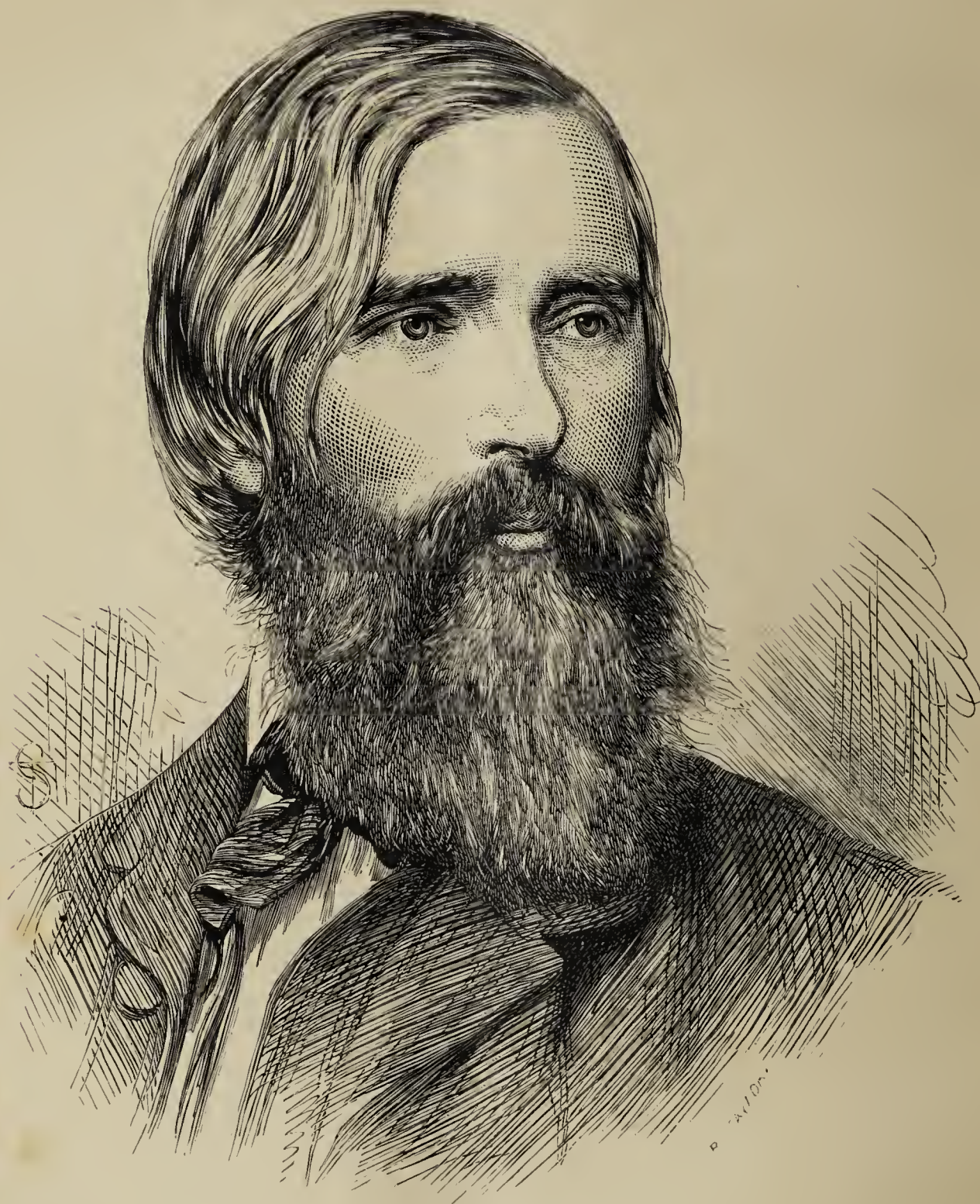
MARRIAGE.

*ADDENBROOKE, Edward H., Esq., Surgeon, Kidderminster, to Marianne, eldest daughter of the Rev. H. Downing, M.A., at Kingswinford, on August 4th.

FRIENDLY VISITS.—On the Norfolk Circuit, at Bury, on August 4th, in the Nisi Prius Court, before Mr. Justice Keating and a common jury, was heard the case of Wedd *v.* Mecklenburg. This was an action to recover £54:19:6, the amount of medical charges for attendance and medicine. Mr. Metcalfe and Mr. Cherry appeared for the plaintiff; Mr. O'Malley, Q.C., and Mr. Merewether, for the defendant. The plaintiff's case was, that in the year 1869 he was asked to attend the defendant's niece during a severe illness, which resulted in her death. He paid her many visits, and prescribed and sent medicine to her from January to October. In January 1870, having asked the defendant's wife to make some payments for his visits, she demurred, and then his bill was sent in, amounting to £54:19:6. It appeared that the plaintiff had been in considerable practice in Maidstone some years ago, but had retired from practice, and had been residing at East Bergholt, in this county, from the year 1867 to the beginning of 1870, when he went to live at Croydon. The defendant's case was, that the visits of the plaintiff were entirely unprofessional, and of an ordinary friendly character; and that, except on one or two occasions, no medicines were supplied by him; while, as to the prescriptions, they were voluntarily given. The jury, after some deliberation, found a verdict for the defendant.

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A. v. Graefe.

INTRODUCTORY ADDRESS

DELIVERED IN

THE SECTION OF MEDICINE,

*At the Annual Meeting of the British Medical Association,
in Newcastle-upon-Tyne, August 1870.*

By D. EMBLETON, M.D.,

Physician to the Newcastle Infirmary; President of the Section.

THIS being the first meeting of the British Medical Association in the North of England, I take the opportunity of heartily welcoming this Section to Newcastle-upon-Tyne. We have been long, perhaps, in casting in our lot with the Association: it may be that there exists among us a tinge of that caution the full development of which is best seen north of the Tweed; but, once convinced of the advisability of joining the body, we have rapidly entered into the main spirit of it, and the development of the Northern Branch has been rapid, steady, and continuous.

Last year, at the Leeds meeting, it fell to my lot to have the pleasure of inviting the Association to meet here this year; but I did so with diffidence, fearing that we might fail to receive this influential body in a befitting manner, recollecting its reception in previous years at Dublin, Oxford, and Leeds. Now, however, I feel sure that you have met, and will meet, with the same friendly hospitality with which we have been greeted elsewhere.

In this ancient town you will find a type of the present time—new buildings and streets jostling and thrusting aside the old and inconvenient, what is worth preserving being repaired and restored; demolitions, reconstructions, and new works, going on simultaneously in various parts; our population—shrewd, intelligent, independent, somewhat rough, and rapidly augmenting—having in my life-time quadrupled itself by immigration from most parts of the United Kingdom, and of the north and west of the continent.

The practical application of science to the arts of life is the chief characteristic of our district. Our coal and iron are the basis of our industry and commerce. A long array of names, however, illustrious in classics, mathematics, theology, and law; in the different departments of engineering, as applied to agriculture, mining, the construction of bridges, ships, and cannon, of locomotives and railways (of the present system of which this immediate neighbourhood was the cradle); in chemistry and its application to the manufactures of iron, lead, the alkalis and their salts, pottery, glass, etc.; in antiquarian research, and in the fine arts, might be given to show that Newcastle has not been behind in the march of intellect and of improvement. It may suffice to mention Eldon and Stowell, the Stephensons, the Hawthorns, and Sir W. G. Armstrong, as names well known to the whole English-speaking race. In medicine, also, we have had names of worth in these northern parts, as witness Mark Akenside, the physician and poet of Newcastle; Dr. Armstrong, author of a celebrated work on fever; Dr. Clanny, the improver of the Davy lamp for coal-mines; and Dr. Brown, all of Sunderland; Dr. Trotter of Morpeth, physician to the navy, and author of *Medicina Nautica*, and *A View of the Nervous Temperament*; the benevolent Dr. Winterbottom of South Shields, founder of hospitals and schools for seamen; Dr. Addison, the skilful physician and eloquent lecturer of Guy's Hospital, who will always be remembered in *Morbus Addisonii*, and whose native place, Long Benton, is not three miles distant. The sciences accessory to medicine, as botany, natural history in its various divisions, comparative anatomy, and palæontology, have been greatly enriched by the labours of Thomas Bewick, the justly celebrated engraver on wood; of William Hutton, Joshua Alder, Albany and John Hancock, Daniel Oliver, Richard Howse, George and H. B. Brady, Thomas Atthey, and others, members of the Tyneside Naturalists' Field Club.

There has been a school of medicine here since 1834, of which Sir John Fife was the principal founder. In 1851, it was broken up, but immediately two schools arose, which in 1858 were amalgamated. Very recently, the College of Medicine has been erected into the Faculty of Medicine of the University of Durham.

Our Infirmary of Newcastle enjoys in the northern counties a similar reputation to that enjoyed in the West Riding by the Leeds Infirmary. The University of Durham, in conjunction with the College of Medicine, was among the very foremost of the medical bodies to require that practical examination and clinical testing which is now becoming imperative upon all the medical educating and licensing bodies. Our

regulations for the year 1856-57 attest the truth of what I have here advanced.

In this time of change and progress, when everything, even the groundwork of religious belief, is being examined, tested, and proved, when everything must show its *raison d'être* or be passed by, we strive to advance with the progress of the age, examining all things, holding fast that which is good; and we are persuaded that from this great gathering we shall receive a new and powerful impulse in our progress, which we shall not readily allow to die. We shall have your new cases and views; your new facts, the result of experiment and research. We shall listen to, and take part in, your discussions, adding what we can to the common stock of knowledge; examine the specimens in the Annual Museum, of healthy and diseased parts, of medicines, of foods and drinks, of instruments and various appliances, of drawings, and of new books; and shall have good reason, I doubt not, to thank you for your acceptance of our invitation to meet in Newcastle.

It is not for me here to attempt to trace the progress of medicine even during the past year; but I may be allowed briefly to mention a few points that seem to be characteristic of the present medical epoch.

In the first place, we have the discovery and successful application of anæsthetic remedies—ether, chloroform, chloral, bichloride of methylene, nitrous oxide—remedies which not all “the old vegetable neurotics,”

“Not poppy, nor mandragora,
Nor all the drowsy syrups of the world,”

can approach in their beneficial and blessed operation—remedies which have been ordained to blunt the sting of the primeval curse.

Secondly, there are the intricate and deeply interesting researches into the origin of life, with the view of solving that *crux* of philosophers, the question of equivocal generation; and most intimately connected with this is the question of the origin and mode of propagation of zymotic diseases. The great question of equivocal generation is as yet *sub judice*; but the able contest between Pouchet and Pasteur, and the more recent researches and writings of Bennett, Bastian, and others, appear to bring us back more and more nearly to the ancient belief, though under widely different conditions and circumstances. The modern investigations into infusions of animal and vegetable substances, whether natural or “selected”—into the dust from the most varied localities—into the very motes of the sunbeam—into the air of every possible region—into the solar spectrum of light and heat—into the blood and other fluids of the body—by means of practically educated observers, in whose hands are the modern microscope and a most subtle chemistry, will yet wring from reluctant Nature a plain answer to this most important question—an answer fraught with the happiest consequences to the ease, health, enjoyment, and longevity of man. Inquiry in the proper spirit must and will proceed, in spite of all opposition and anathema. The latest results of such researches we may hope to hear during this meeting of the Association.

In the third place, there is, as every one must have remarked with astonishment and delight, the wonderful rapidity and extent of the advance of medical knowledge. Those who can look back some forty years, to the time when the curriculum of education was gone through in two years; when the original *Dublin Dissector* was almost the only manual of anatomy; when Milligan's translation of Magendie gave a scanty physiology, but more than was required by any examiner; when Thomas's *Practice of Physic* was almost the sole *vade mecum* of the practitioner; when most of what was known of medical botany and chemistry might have been put almost into a nutshell; when the stethoscope was beginning to penetrate the hospitals of England, and the microscope in its present form was unknown; when the lancet, the stomach-pump, and the enema-apparatus were about the only medical instruments; when the old treatment, ridiculed so keenly and justly by Molière, was still in vogue; those only can realise and estimate the vast changes which in forty years have revolutionised our profession.

At the present time a student learns, or ought to learn, in his four years, many times more than a whole staff of medical teachers taught at the period of time alluded to. Now, diseases are being all studied anew, and a microscopic anatomy has succeeded to that of the scalpel and forceps; we want to know the natural history of diseases, and how they affect the fluids and the minute elements of the body chemically and pathologically; we have daily, teeming from the press, a flood of excellent books, all of which it is impossible to read; we have instruments of precision for examination of the body and for treatment, such as former ages knew not; and every day our art and science are becoming more rational, exact, and reliable, and the diffusion of our knowledge throughout the profession of the world by means of the medical press resembles that of newly liberated gases through the atmosphere.

The division of labour very generally established is a great aid in the advancement of medicine, though there is perhaps danger of specialties becoming too special. On the other hand, it is to be hoped that the mediæval and antiquated fashion of combining the clerical and the medical professions in one person will never find favour with the profession or the public.

Much has been achieved; more yet remains to be done. Many and great rewards for medical labour have been obtained; more and more valuable lie in the dark future, awaiting the labour and the daring of the intellectual. As, however, our science advances, the veteran heads of our columns of workers fall off one by one, worn out by the ceaseless conflict with the unknown, and the work falls on younger, but not less ardent, or, let us trust, less capable heads. *Ars longa, vita brevis.*

During the past twelve months, we have had to deplore the loss of several of our best men: Dr. Jeaffreson of Leamington; Sir James Y. Simpson, the warm-hearted and open-handed, the versatile, the tireless, the inventor of the use of chloroform, with the motto *dolore victo* ascribed to him; Sir James Clark, the physician and friend of our beloved Queen; Dr. James Copland, the amiable and laborious author of the *Dictionary of Medicine*; Mr. Nunneley of Leeds, a worthy successor of the Heys in surgery, and the giver of the Address in Surgery to the Association in his native town last year. Peace to their ashes! glory to their names! May we who remain have the spirit to emulate their bright examples!

And now, I must not keep you longer from the business of our Section. Let us listen with attention and courtesy to the numerous communications that will come before us; let us freely, openly, and boldly, but temperately and fairly, discuss them, and, as those whose only desire it is, rising above all petty and unworthy considerations, loyally to discover the truth, award to each and all the communicants English fair play and due meed of praise. Of blame there will be no need, for I feel that all the members of this Association, increasing in numbers, and more prolific of work, will always do their duty with a single eye to the advancement of a profession whose grand object it is to do as much good and as little harm as is possible to the great army of martyrs to disease and death. May this meeting be as successful as its predecessors!

INTRODUCTORY REMARKS

DELIVERED IN

THE SECTION OF PUBLIC MEDICINE,

*At the Annual Meeting of the British Medical Association,
in Newcastle-upon-Tyne, August 1870.*

By HENRY W. RUMSEY, M.D.,

President of the Section.

THE PUBLIC RELATIONS OF MEDICINE.

Now, for the third time, this Association has recognised "State-Medicine" as a subject for separate treatment in a special department of our Annual Congress.

When, at the Meeting in Dublin, I suggested the formation of this Section, our leaders at once admitted the propriety of such an addition to the usual scheme. Accordingly, at the following meeting in Oxford, Mr. Simon, and last year in Leeds, Dr. Farr, occupied this chair, to the great furtherance of the cause to promote which we here assemble.

At the kind request of our President, I accepted the honour now conferred on me,—not, indeed, without misgivings as to my fitness for the post, yet anxious to do what I could to aid your deliberations, and conscious that I should be supported by many able fellow-workers.

Without waste of words, I proceed to our business—the Public Relations of Medicine.

The State, even in this country, has availed itself of medical knowledge and skill in many ways; not, however until laws had been enacted and Royal Charters granted—all since the 15th century—for the purpose of incorporating the several orders of the profession in the three divisions of the kingdom: thus improving the *status* and raising the qualifications of each. In 1858, for the first time, the State began to provide for the more uniform education of the whole profession, and for its complete registration. And now, at last, Parliament has been asked to provide for a single State Licence, which may supersede the licences of the several corporate bodies, whose diplomas have been permitted so long to perplex the profession and mystify the people.

But the State has for some time recognised the profession as a whole by making use of it, through public authorities, for public purposes.

Thus, many of us are occupied in an organised system for the medical relief and sanitary care of the destitute classes in districts and workhouses. To us is officially committed the health and sickness of classes still more helpless—the inmates of asylums and of prisons. Even the hospitals and dispensaries of this kingdom are to some extent employed and protected by the State: in Ireland, they are entirely under public control. The Government also provides for the medical requirements of certain public bodies, the police, some departments of the civil service, and the labourers in public works.

Above all, the State, through its War Departments, secures, under exact regulations, the due examination of those entrusted with the medical charge of sailors and soldiers; thus acknowledging that the wisdom of the sons of Machaon and Podalirius avails more than many thousands of combatants in the bloody conflicts of a yet uncivilised, unchristianised humanity. It was in this department of the public service that the earliest, and (next to those of Howard, the prison Reformer), the most signal efforts of preventive medicine were made. It was under our Pringles, our Linds, and our Blanes, that the foundations of a scientific hygiene were laid; and here still it is that important sanitary experiments are being constantly made, which may ultimately be extended for the benefit of the whole population.

By medical agency, again, the State protects the children and youth of the working classes in factories, workshops, and mines, where the keenly contested race between Labour and Capital requires continual and vigilant supervision.

It is men, medically educated, who have to determine in many cases the capability of persons to fulfil civil duties, social and family responsibilities, and labour contracts.

In the administration of justice, it is the physician or surgeon who has to ascertain and report facts which can be discovered and described by him alone, and to deliver opinions which he only is supposed to be competent to form, for the furtherance of right, the redress of wrong, and the detection of crime.

All these matters show the reality and the existence of State Medicine. It has *not* to be formed: it has only to be re-formed. What is now done imperfectly, irregularly, distractedly, may be done normally and efficiently. To reduce this chaos into order is a work in which we may heartily co-operate with the Government and Legislature.

To some, no doubt, the necessary reforms will seem objectionable innovations. Every movement of the kind in this country is said to pass through three stages—that of ridicule, that of discussion, that of adoption. State Medicine has probably passed the first of these stages, and has gained strength in the encounter. We are now happily discussing the methods of its better organisation. It may yet be a work of years to complete the machine, and a still longer process to regulate its action.

I recollect a party of earnest men meeting in January 1853, at the late Dr. Marshall Hall's. Sir Ranald Martin was a moving spirit on that occasion. Mr. Pollock acted as our Secretary. Here, in this prospectus of the Society of State Medicine, is the result of the deliberations of that meeting. We received no support either from the profession or from the public. Excellent as were our objects, and well-considered our scheme of inquiry, the subject was too novel—perhaps, I may say, too high—for popular approval at that time.

In promoting the cultivation of State Medicine and its proper application to the public service, we are, in fact, building upon the physical sciences as the foundation of our work, just as medicine in general began to comprehend them during the revival of learning in the Middle Ages. The nascent Universities then claimed for Medicine a wider and more philosophical meaning than that of the healing art, and assigned it a place under physics. It was long after the fall of the Roman empire that the higher order of medical practitioners became, and were first called, *physicians*. When Pliny the Elder wrote of *Empedocles physicus*, he did not mean *medicus*. The epithet "physicus" then denoted a follower and observer of Nature. The words "Physiker" in Germany, and "Physician" in England, do not appear, I think, until the thirteenth century;* and they are perfectly distinct in original meaning from the Greek *ἰατρός* and the Latin *medicus*. Nor do I know that any other nation has employed this designation of a professor of physics to mean a healer of the sick.†

The "Kreis-physikus" of Germany, I hardly need say, is the type of the State medical officer, whom we are endeavouring to establish in England. Here, however, not only did the word physician come to mean simply a therapist, but a further and still more curious pervers-

* Chaucer's "Doctour of physike" must have been a graduate of some university.

† When the late Professor Whewell said "Medicine, in its original and comprehensive sense, as one of the great divisions of human culture, must be considered as taking in the whole of physical science," he probably referred to the revival rather than to the origin of medicine.

sion of *physis* took place, when the word "physic" was used for any nauseous medicament, of which perhaps the composition, perhaps the administration, could not always be reconciled with any known laws of physical science.

In opening the proceedings of this Section, I may be expected to notice a few of the principal events of the past year bearing on our subject. I cannot wholly exclude from our consideration the most exciting professional topic of the day—the Medical Acts Amendment Bill—which has just been withdrawn by Government in consequence of a widely spread medical opposition. Preferring a single Examining Board for the United Kingdom to three separate concentrations of existing authorities, and admitting fully the incompleteness of this measure, I would have accepted it as fundamentally correct in principle, simple in form, statesmanlike in design, and capable of effecting an enormous improvement in the framework of the profession. If the rejection of this Bill should cause Lord De Grey and Mr. Forster to abandon the conduct of medical reform, our loss will be great.

Of the Medical Council, which is the connecting link between the profession and the State, it is not meet that I should say much. The work that it has accomplished during the last twelve years will be judged of more fairly and accurately by a succeeding generation than it is by the present. The complaint that the Council does not directly represent the whole medical profession may or may not be founded in reason. There are no facts to show that a purely representative body would have done more. The future may, perhaps, supply an answer.

The real desideratum is, I suppose, to have a working body—a body which will do the business committed to it by the Legislature with as little circumlocution as possible. It may be very desirable that every medical man should be represented in *some deliberative* assembly. Every branch of the profession, for instance, ought to be represented in its own college. But, from my experience as a member of the Medical Council, I should say that an *executive* body, elected, even in part, by a majority of the practitioners whom it has registered, and therefore liable to be swayed by every breeze of medical politics or feeling, would be likely to prove a greater failure than the present. Moreover, if the Medical Council is to be made, as it doubtless might well be made, more accurately than at present representative of the Classes and Institutions for whom it is appointed to act—what may the public have to say on the matter? If medical practitioners are to be directly represented on the Council, may not Parliament require that the various public bodies and authorities which employ us shall also be represented by the addition of eminent laymen to the Council?

The leaders of this great Association have pronounced, definitely and energetically, against the Government Bill as it left the House of Lords, not only because of the absence of any provision for direct representation, but also because it would not prevent the Universities from granting their ancient degrees in medicine to any but those licensed to practise by the proposed Medical Examining Board. Now, if highly educated men are content *not* to be converted into practitioners, if they consent to forego all the material advantages of registration, are they not to be allowed to take a degree in medicine without also obtaining a State licence? I regret much to differ on this point from many good friends; but, in my opinion, to compel every member of a college, still more every graduate of an university, to obtain a State licence, whether he requires it or not, would be simply an act of tyranny. The State may reasonably refuse all legal rights to the mere graduate, who may remain legally incompetent to perform any medical act, to sign any certificate which would be accepted in a court of law or by any public authority; powerless also to claim any professional privilege or exemption. But all this does not satisfy our theoretical reformer. The candidate for a degree must, *volens volens*, be driven into the practising body through the one portal.

It appears to me that, on grounds of abstract justice, the State has no more right to prevent the university graduate from taking his place among other *unregistered* persons, than it has to require a Government licence for admission into the Royal Society or the Athenæum Club.

Was it not a sufficiently sweeping change that a single State licence was to be substituted for a medley of legalised portals in the profession? Perhaps the extent of this concession on the part of the universities and corporations has hardly been appreciated. It is quite another question whether those learned bodies ought ever to have been permitted to employ their certificates of qualification—their degrees of bachelor and doctor—as *licences to practise*. The licence was originally the act of the State, as all other licences are. The Act 3 Henry VIII, constituted a learned body to examine, approve, and admit physicians and surgeons, some years before a charter was granted to any medical college. When the function of licensing, that is, of granting a public and legal permission to practise, was delegated to the professional corporations, *it was doubtless done for a consideration*. From that time, the

qualification, at least in England, has meant the licence; the licence has supposed the qualification. Two essentially different authorisations were united in one document.

Now, we were ready to change all this, and I believe rightly. The State was to resume its inherent and original powers. The State examination was to precede the State licence. Here, then, as I said, we were about to enter on a new order of things.

But this examination would necessarily be for a *minimum* qualification. The licence could only declare the least amount of knowledge with which the licentiate might safely be turned loose on the public. The State could go no farther, unless it should provide higher qualifications for various branches of the Civil Medical Service, or declare that, for public employment, a man should possess a particular university degree, or a higher qualification granted by some medical college.

One feature of recent discussions is, in my opinion, unfortunately too clear. However earnest may have been the claims or forcible the appeals in behalf of professional *interests*, or corporate *privileges*, or university *rights*, no notice has been taken of the fact that this Medical Bill entirely omitted to provide for the exercise of Public Medicine. Thus, one which ought, I think, to have been a leading object in legislation, was ignored.

When Sir James Graham proposed, now nearly thirty years ago, his Council of Health and Medical Education, he intended to form a body which the Government might safely consult on all questions relating to public hygiene, to the causation and prevention of disease, and to legal medicine. We hear of nothing of the kind now. Hence the question of further qualification for the higher offices of State Medicine has been deferred, if not slighted. I have heard of but two excuses for this omission.

The first is, that general regulations for medical education would be made so comprehensive and so stringent, that every future candidate for the licence, at twenty-one years of age, would have been thoroughly instructed in all departments of medical knowledge and art,* even those which outlie the ordinary practice of his profession, and which he may seldom or never have occasion to utilise in life.

Now, I appeal to those around me, men of experience, some of whom, like myself, have grown grey in the battle with disease and mortality, and who may have learned far more after the completion of their student-life than during it—I ask whether you think it possible, by the most ingenious scheme of medical education, by the most refined process of tuition, even by the most artistic coaching, to convert any average student, by the time he reaches his legal majority, into an authority on matters affecting the health and safety of the community, and in medico-legal cases—a man fully equipped for all branches of the public service. If this really be possible, why do the authorities of the Army and Navy require for their surgeons further study and a crucial examination?—one which has hitherto supplied no bad test of the validity of the examinations of the licensing bodies. Do we believe that the proposed Examining Boards can alter a natural law, can render special and prolonged preparation for the higher walks of the profession unnecessary, and turn out an order of juvenile if not Admirable Crichtons?

But a second excuse has been pleaded for the omission of any provision for a high and special qualification—viz., either that it may be made the subject of a supplementary enactment, a sound basis having been laid in the principal measure; or that the question may be settled by an administrative act of Government, which might, *suâ sponte*, require candidates for public appointments to appear before a Board of Examiners for the Civil Medical Service, or for the Army and Navy. Much may be said in favour of such a course. Perhaps this might prove the readiest solution of the difficulty. But it is well to recollect that, by such a measure, the dependence of the Civil Medical Service on the State would be made complete. No Medical Council, however reformed, would then exercise the slightest control in the matter; the opinions of the Government advisers for the time being would decide all questions concerning the standard of fitness for every kind of public medical duty.

To revert to the conditions of admission into the medical profession. In striving zealously for the "one portal", as it is called, we cannot forget that membership of a college, or graduation in a university, secures certain objects of high *moral* importance, which no State licence can secure. To belong to a learned body is, or ought to be, a guarantee of personal respectability and morality. To be expelled from that society, is understood to be a declaration that the guarantee has been forfeited. To deprive a mere licentiate, under any future Act, of his legally acquired rights, would, I imagine, be possible only in cases of

* "A complete qualification to practise every department of medicine and surgery." See the recent *Statement of the Scottish Colleges*.

convicted crime, or infamous conduct; but to strike an unworthy name off the rolls of a college is comparatively a simple proceeding, applicable to a greater number of cases, and ought to be an inevitable consequence of moral or professional delinquency.

A high standard of medical ethics can never be expected from the mere one-portal system; but the maintenance of that standard is essential to the character of a college. Here, then, is another reason for treating the collegiate qualification as totally distinct from the State licence. The one is esoteric, regulating its internal mysteries and dignities—the other exoteric, determining its public relations. The former is the *sacramentum* of honour and fidelity, the latter a security of civil rights and duties.

When the young Greek was admitted among the sacred *Asclepiadæ*, he pledged himself to a severe canon of ethics, by that wonderful "Ορκος, which has remained more or less in force during twenty-four centuries, and has formed the basis, or supplied an element, of probably every engagement which has been required, at different times and places, for admission on the rolls of the Faculty.

In taking that oath, the scholar of old declared his loving and filial reverence to the teachers from whom he learned the art,—promised gratuitous service, and the like instruction to their descendants, equally with his own sons and disciples,—vowed to consider before all things the benefit of the sick who might seek his aid,—repudiated all immoral practices,—refused to work any abomination, however solicited,—dedicated himself to purity and holiness of life,—engaged to refrain honourably from undertaking a separate branch of the art,—and pledged himself to inviolable secrecy as to matters of private life which might come under his observation in practice.

This oath of the Coan sage may perhaps be called a piece of mere heathen morality. Then, at all events, *our* standard should be a higher one. Is it so? Wider and deeper thought may remind us that all true morality has but one source—that "every good gift and every perfect gift is from above, and cometh down from the Father of Lights."

How can we profit by this noble Hippocratic legacy? It cannot, I think, be made a condition of a State licence; but it might be required for the diploma of every medical college. In fact, an oath to demean himself honourably in the practice of his profession, and to maintain the respectability of his college, is still administered to candidates for admission into some of our collegiate bodies. And, to the honour of the College of Physicians of London, I may say, that body has laid down some excellent rules of conduct for its fellows and members. I am not aware that any other body provides with equal minuteness against breaches of a professional code.

We are often tempted, perhaps unfairly, to apply the term "quackery" to the practice of medical novelties or heresies. Now, I would suggest that the utmost freedom of judgment and action in the selection of means for the prevention or relief of sickness may be allowed by the authorities, and may be enjoyed by members, of the profession, without incurring an unmerited or degrading nickname. There are quacks, as regards their conduct, who may be most orthodox as regards their theories of medicine. On the other hand, there are learned medical sectarians, to my knowledge, who, in the exercise of their calling, are honourable and upright.

That real quackery which is to be found even among the ranks of the "regulars", and which consists in loud pretension, unwarrantable assumption, pomp of equipage, and extortion, may be checked, if not repressed, by two methods. The one is in our own power, but it requires the cordial assent of the authorities and members of the profession to some definite code of ethics. The other depends on the view taken by the Government and Legislature of our relations with the State.

A very instructive illustration of the latter method of remedying abuses is afforded by the history of medical practice in the Roman empire. When, under the first Cæsars, the ancient virtue of that great people was so rapidly decaying, that society became morally putrescent, then also flourished the most shameless quackery. In vain did Juvenal and Martial lash it; in vain did Pliny the Elder expose it with humorous yet indignant simplicity. No mediæval or modern quack—no Paracelsus, no Louthembourg, no St. John Long—has ever exceeded the audacity, the imposture, and the venality of the leading Roman Practitioners; such, for instance, as Thessalus or Charmis. No mountebank or charioteer of three horses, said Pliny, paraded the streets with a more numerous retinue than the astrological doctor, Crinas from Marseilles. Even the more respectable *clinici*, as Symmachus, were followed by troops of pupils to the bedside, not always, as Martial (v. 9) tells us, to the benefit of the patient.

Then, according to Pliny, their miserable conflicts around the sick; their professional use of the Greek tongue to enhance their authority among the vulgar; their crafty dealings in the matter of wills; their

poisonings for reward; their rapacious marketing with impending mortality; their securities for payment taken from the dying,—all showed how completely the religion of the *Asclepiadæ* and the philosophy of the Greeks had disappeared from the fashionable medicine of that day.

In fact, the profession of Rome and its dependencies had no means of internal purification; so the State was compelled to step in and to organise the faculty, for the public safety. Colleges of "*Archiatrî Populares*" were established in all the great cities of the empire—consisting of five, seven, ten, and in Rome of fourteen members. These provided the poor with all the care and succour which the art could then afford. The civil law then interfered, not only to secure them fair salaries for their public duties, and reasonable remuneration for their private services, but to prevent that horrible corruption and extortion which Pliny so mercilessly laid bare.

The true principle of professional duty, then sanctioned and enforced by the law, showed the advance of a truer and deeper element of civilisation. The statute of Valentinian and Valens thus refers to the *Archiatrî*, whom it confirmed and regulated:—*Qui scientes annonaria sibi commoda a populi commodis, honestè obsequi tenuioribus malint quàm turpiter servire divitibus. Quos etiam ea patimur accipere quæ sani offerunt pro obsequiis, non ea quæ periclitantes pro salute promittunt.* (Cod. Theod., lib. xiii, tit. iii, lex 8.)

Why do I recall these remarkable facts, but to illustrate my proposition that a low standard of professional morality may be elevated, not only by the profession itself; but by the government of the country, which may legitimately interfere for the public protection.

It is the more important that the relations of Medical Ethics and State Medicine should be fully recognised; for it is in the matters of hospitals and workhouse and sanitary appointments, and of evidence in courts of law, that breaches of high professional morality are, I am loth to say, most apparent.

Have none of us witnessed the humiliating spectacle of a brother practitioner pandering to the greeds of vestry patronage, or to local board jobbery, or to hospital cliquery? Have not appointments been canvassed for while the holder was *in articulo mortis*? Has the worth of a rival candidate never been indirectly depreciated, or damned with faint praise? Have the blandishments of the fair sex never been enlisted in behalf of the domestic favourite? Did no aspirant for office ever rush into authorship for the sake of a reputation not based on research or experience?

Again, does the medical witness, to quote from Dr. Stokes,* always "go into court untinted by partisanship with the plaintiff, with the defendant, *with himself*?" Is he there to give his opinion careless of how it may tell?"

Whether from a defect of conscientiousness, or from the waverings of an unsettled judgment, or from the want of a strict rule of preparation,—have not statements been made under the pressure of examination which, on calm reflection, and perhaps after the delivery of an utterly erroneous verdict, the witness silently and bitterly regrets for the rest of his life?

Here it is for the legislature or the courts to interpose and protect public morality, to help the weak, to silence the unscrupulous, and to confirm the true.

As Mr. Simon replied to our State Medicine Committee: "I think it immeasurably to be desired, not exclusively as regards our profession, but as regards all skilled opinion evidence required in aid of justice and legislation, that the system of giving such evidence on one-sided retainers—a system which has even led to such evidence being publicly stigmatised as 'traffic testimony'—should, as far as practicable, be exchanged for some well-considered system of impartial reference."

Among other events of the year which bear on the work of our Section, I may notice a remarkable series of observations which Professor Mantegazza has reported to the Institute of Lombardy. The experiments were not made under the dull sky of Britain, but in sunny Italy. We have all heard how Acron of Agrigentum, and other followers of Empedocles the physicist, employed aromatic and balsamic herbs as preventives of pestilence, often burning them, sometimes planting them round their cities. So also Herodian records (*Langius Jo. Florilegium. Morbus*, p. 1854; Lugduni, 1648) that, in a plague which devastated Italy in the second century—the counsel of the doctors having been taken—strangers crowding into Rome were directed to retreat to Laurentum, now San Lorenzo, that by a cooler atmosphere, and by the odour of laurel, they might escape the danger of infection. Some of us may have smiled at the latter part of the advice. Could the scent of herbs and flowers do more than conceal the presence of infectious mat-

* The "Discourse" delivered in November last by Dr. Stokes, I believe to be the most valuable contribution to medical ethics of the last decade.

ter in the air? Mantegazza now replies in the affirmative. He says that in the oxidation of the essences of odoriferous plants a large quantity of ozone is evolved, at least as much as is produced by phosphorus or electricity; also that, in the greater number of these cases, ozone is developed only by the direct rays of the sun, although in others the action, commencing in solar light, is found to continue in darkness. Some details of these interesting experiments have appeared in the scientific periodicals, so I need only mention that among the plants which largely develop ozone on exposure to the rays of the sun, are cherry-laurel, clove, and lavender; among flowers, the narcissus, hyacinth, and mignonette; and among perfumes, similarly exposed, eau-de-Cologne, oil of bergamot, and some aromatic tinctures. Flowers destitute of perfume are said *not* to produce ozone. The Professor, therefore, recommends the cultivation of herbs and odorous flowers *in marshy districts, and in places infected with animal emanations.*

This destruction of the demon Malaria, by a spirit begotten by sunlight out of flowers—if it be confirmed by subsequent observation—not only explains the good effects of what might seem to have been merely speculative or empirical advice, but also affords a beautiful confirmation of an ancient myth by modern science. When Apollo the Healer (*Ἀπόλλων Ἰητρός—Hippoc.*), by his life-inspiring and health-restoring rays, penetrates the loveliest objects in creation, and draws forth from them a mysterious purifier, a mighty but invisible disinfectant,—the god of Medicine may be said to administer to a plague-stricken people a most potent remedy concealed in the most grateful and attractive forms.

I am compelled to turn to a very different subject—the controversies which have deluged and defiled the public press on the prevention of Syphilis.

It is not for me, in this chair, to pronounce upon the amount of benefit effected by what are called the "Contagious Diseases Acts". I cannot deny that the public recognition of any disease, the direct propagation of which depends on immorality, has a twofold, if not a doubtful aspect. I may also admit that there may have been some statistical fallacies and pardonable exaggerations on both sides of this hotly contested question.

But I should not satisfy my sense of duty on this occasion, were I not to protest against the indecency and violence of language, the shamelessness of unfounded assertion, the perversion of authentic reports, the suppression of facts and the invention of fables, which have characterised the proceedings of a party busily engaged in stirring up many thousands of ignorant and prejudiced persons to petition Parliament for a repeal of those Acts. This fanatical movement has been promoted even by ladies of delicate breeding and high reputation, some of whom, I regret to say, have not shrunk from addressing mixed audiences of men and women on this dirty subject. The uproar has also been instigated and supported by ministers of religion. These are among the saddest signs of the times. The moral evil of the discussion, carried on as it has been, far exceeds that which might possibly have been the effect of an erroneous working of these regulations.

That some abuses should occur in the administration of any corrective law is no wonder, no exception to the general course of human affairs. Some persons, no doubt, have been imprisoned for theft, some hanged for murder, who were as innocent as infants of the crimes for which they suffered. But, happily for the Acts in question, it is a remarkable fact, which I think deserves particular attention, that every allegation of abuse, every charge of cruel indignity to innocent women, which have been so industriously circulated, have turned out, on thorough investigation, to be *without foundation*.*

These mendacious and absurd charges have been generally disposed of in the last full, clear, and judicious Report, prepared by the indefatigable Secretary of the Association for promoting these Acts.

Perhaps one of the most dishonest attempts of the repeal party was to make people believe that the English regulations are identical with the French; the fact being that the two systems are essentially different on three main points. Here there is *no authorised registration* of prostitutes, as in France. Here they are in *no way licensed* to their trade, which is still illegal, and liable to prosecution under existing statutes. *No certificate of cure* is here placed at their disposal, as in France.

Arguments of some eminent authorities—at least those of Mr. Simon—against the *extension* of the Acts to the whole civil population, whether valid or not, have been unscrupulously employed by the advocates of the *repeal* of those Acts—a course which Mr. Simon has deprecated, guarding himself distinctly against any disapproval of such regulations as applied to military and naval stations.

* For example, Professor Newman, who took a leading part in the first turbulent attack upon these Acts, at the Bristol Congress of the Social Science Association, afterwards narrated, in the public prints, a horrible story, for which, when pressed, he was unable to give the slightest authority, and which turned out to be a pure fabrication. Yet for this he made no public apology.

It would, indeed, be a disgrace to our civilisation if this irrational and discreditable opposition should induce the Legislature to abandon the course it has hitherto so cautiously pursued, or (what would be a public calamity) to repeal the Acts; although I share a very general opinion that they require some amendment and modification before they are extended to the civil population. As followers of a divine calling, it must surely be our duty, without listening to any pharisaical scruples about interference with the penalty of sin, to support cordially every well-considered measure for the cure of disease and the arrest of contagion. To effect these objects, it may be necessary to isolate the sufferers by every lawful means for the double purpose of curative treatment and of protection to society. In order to isolate justly and effectually, inspection becomes necessary. In particular, from this loathsome and often fatal contamination, it is of paramount importance to guard the innocent and the unborn.

A few words may not be out of place respecting the labours of the Royal Sanitary Commission, which may be said to owe its existence mainly to a movement originated by this Association. The change of ministry in the autumn of 1868 necessitated a reconstruction of this Commission. The loss of Lord Northbrook as chairman was a matter of much regret to those who knew his remarkable qualifications for the post; but its arduous duties were happily accepted, and are being very thoroughly performed, by Sir Charles Adderley. As might have been expected, some members of our profession animadverted on the reduction of the number of Medical Commissioners from seven to five; and certain changes in the objects and limits of the inquiry led, perhaps excusably, to some not very mild expressions of disappointment. But if the scope of inquiry and the methods adopted for obtaining information were not, in every respect, such as were sought for by the Joint Committee of this and the Social Science Associations, enough, I think, has been obtained from Government to secure very important results; and alleged deficiencies in the scheme of the Commission may be supplied by a future investigation, for there is no probability of this being the last. Let me express a hope that you will rely on the excellence and reality of the work which is being done by this Commission—containing, as it does, some of the best men in the profession, some of our most honoured associates. May I also offer a word of caution against impatience under what may appear to be needless delay in the completion of this great work? Believe me, that the various, and often conflicting, statements and suggestions on a wide range of topics, which have been made to the Commission, demand the most careful analysis and comparison; and that anything like hasty conclusion would impair the value of the forthcoming report. In the absence of any power to conduct local inquiries, or to determine by personal inspection the sanitary condition of the large towns and other districts, it seems desirable that the labours of the Royal Commission should be supplemented by some such returns as were contemplated in 1868 by our Joint Committee; which has, in fact, authorised the printing of a very comprehensive category of questions—due to the untiring energy of Dr. Stewart. Whether these excellent forms may ever be utilised, or whether they are to make their public appearance as wrappers for cheap grocery, may depend partly on the readiness of the organised branches of the British Medical Association, aided by the Social Science Association, to collect the information for which their Joint Committee asks; and partly, again, on the contents of the final Report of the Royal Commission.

In the first Report, recently published, is to be found, as doubtless you are aware, some very important information respecting Newcastle, to which I now refer only for the purpose of expressing my hope, that the medical gentlemen appointed to report on the sickness and health of the poor of this town will favour us with some further explanation as to their manner of action; for it seems that Newcastle is an almost exceptional instance of cordial co-operation between the various local authorities concerned in the care of the public health.

Why should I allude to an event of the past year, deplored not less by the medical profession than by the public at large? What had Charles Dickens to do with State Medicine? I might, indeed, reply by asking—to what form of physical suffering, to what project of relief or prevention was *he* indifferent?

It is, however, a fact to be noted, that he was a fellow-worker with us in not the least important portion of the business of this Section. In 1860 he advocated the Public Registration of Sickness: and I cannot do better than remind you of the memorable words with which he concluded a remarkable paper on that subject:—"It is most true that we have never studied, and are still neglecting to study, with any accuracy, the statistics of sickness and health, to which the statistics of death, even if they were perfect, afford no clue. So far as care of the body goes, it concerns a man more to know his risks of the fifty illnesses

that may throw him on his back, than the possible date of the one death that must come, and of which the time is to him personally—in spite of libraries full of statistics—utterly unknown and uncertain. We join, therefore, in the demand for a registration of sickness that has not a fatal end, as well as for a more effective registration even of the births and of the causes of deaths themselves. Let us have lists of the killed, and of the wounded too.”—(*All the Year Round*, No. 86, pp. 227, 228.)

In Newcastle, where so much has been effected with such care and pains by the Medical Society and Dr. Philipson, it is needless for me to enlarge on the advantage of an official registration of all sickness attended at the public expense. The best methods of obtaining so essential an addition to our knowledge of the extent and causes of disease, will probably be discussed by the Section; and I hope that the Association will adopt such measures on the subject as may aid those who are endeavouring to obtain from the legislature an organisation of skilled officers of health, to whom would be committed the compilation of the proposed register of sickness in every district. Great as have been the results of voluntary effort in this place—still more remarkable the completeness of these records in Manchester and Salford for the last ten years (thanks to Dr. Ransome and other earnest workers)—it is, I believe, generally admitted, that a national machinery is indispensable to the permanence and universality of the work, and that the fitness and efficiency of that machinery depend on the course which Parliament may take in future sanitary legislation.

INTRODUCTORY ADDRESS

DELIVERED IN

THE SECTION OF PSYCHOLOGY,

*At the Annual Meeting of the British Medical Association,
in Newcastle-upon-Tyne, August 1870.*

By THOMAS LAYCOCK, M.D.,

Professor of Physic in the University of Edinburgh; President of the Section.

HOW FAR CAN THE RELATIONS OF BODY AND MIND BE INVESTIGATED SCIENTIFICALLY AND PRACTICALLY?

I CANNOT but offer my congratulations to the Association that the Council has completed your scheme for the advancement of medicine by the initiation of a Section of Psychology. The title, too, is of happy omen; for that which is usually called medical psychology is the only science worthy the largely comprehensive name of the science of the soul of man. A true psychology must deal with the varying states of consciousness in their immediate relations to the organisation, and not apart therefrom, as is common with the speculative psychologist.

Now it is at the outset an important question to determine how far it is possible, and by what method, to understand these relations of body and mind, so that psychological medicine may have a solid scientific foundation. It is customary with uneducated and unscientific persons to affirm that they are too mysterious for scientific investigation. There is a natural conclusion from the popular doctrine that the mind or soul exists and acts under certain circumstances independent of the body. Nor is this opinion restricted to the uneducated; it is the *ignava ratio*, or idle reason, which some metaphysicians give for neglecting the study of cerebral anatomy and physiology. Yet professedly scientific investigations are attempted in accordance with the popular doctrine, and the results are “spiritualism” with all its follies. Now, a truly

scientific psychology not only excludes the popular doctrine from its researches, but distinctly adopts the contrary thereto; its starting-point being the fundamental fact of experience that no change in the human mind or the consciousness, of whatever kind, can or does take place without a coincident change in the living encephalic tissue. If this be true, as a fact of experience, to its fullest extent of the statement, it follows that a true psychological science can have no other foundation than that fact, and that all systems of mental philosophy and of medical psychology which discard inquiry into these necessary relations of body and mind are *ipso facto* vicious in method, and must lead to errors in both theory and practice. There are two extremes of modern philosophers, however, the physicists and the metaphysicians, who, while they admit the truth of the fundamental fact of scientific psychology, agree in opinion with the uneducated as to the inscrutable and mysterious nature of the relations of consciousness and organisation. Hence, also, necessarily follows their opinion that, for want of a competent method of inquiry, the fundamental fact must always be barren

of scientific results, and psychological medicine be nothing more at the best than an enlightened empiricism. It is a great advance that all the best modern psychologists and metaphysicians admit that this fundamental fact is true generally; they have not quite given up the idea of a separate existence of mind or soul, the basis of the old methods of inquiry; but they affirm no more than that the mind, for anything we know or can find out, may and does act independently of organisation. To this view of the matter there can be no objection on the part of the scientific inquirer, who strictly limits his researches, of whatever kind, to what is cognisable either by the senses or the understanding—in Baconian phrase, “*re vel mente*”. The question between the two schools of mental science or philosophy is thus fundamentally a question of method, and that depends upon the answer to the question—Are the relations of body and mind so mysterious as to be inscrutable by scientific research, or ought the method of inquiry common to all the natural sciences be applied to them and a rank materialism established?

Starting, then, from the fundamental fact, it is clear that the objects of research are essentially those molecular changes in the encephalon, termed cerebro-mental, which inseparably coincide with the varying states of consciousness of the living man. Since these encephalic changes are vital, it necessarily follows that the changes of the states of consciousness termed, generally, mental faculties, powers or energies, must be inseparably connected with the causes of the vital changes considered as vital properties, energies, or forces. This proposition which a true mental science affirms, speculative philosophy denies, and opprobriously terms it materialism; while theology professedly orthodox, re-echoes the change. It cannot be denied that this opprobrious disparagement of scientific inquiry has greatly retarded the development of psychological science. Is it then, justifiable? By no means; on the contrary, the doctrine of the inseparable connection between life and soul is taught by Holy Scripture and by the great metaphysical creed of the Church, that of St. Athanasius. The fact is indeed adopted as a simple truth in that creed to explain a true mystery, when it says—“For as the reasonable soul and flesh is one man, so God and man is one Christ.” Also, in Genesis, we are told that it was only after the Lord God had breathed into man’s nostrils the breath of life—a divine emanation, be it observed, that he became a *living* soul. It is very lamentable to note how often ignorant persons, professing to be orthodox, blaspheme, I may truly say, the true Scripture doctrine of human nature by discarding from their thoughts that life which, coming direct from God, is holy and sacred.

Turning, now, to a consideration of the method to be followed, let us scan more minutely what we have to investigate. It is obvious that our fundamental fact of experience requires to classify phenomena, which are the various states of consciousness from the highest efforts of the intellect to the simplest feeling of bodily pain and pleasure. This had been done in some degree by the philosophical schools; what we have to insist on is, that they all shall be considered as fundamentally of one kind, for the feeling of bodily pain is just as much of the soul of man as the highest sentiments of humanity. These phenomena of consciousness we will designate mental or psychal. Next come those which we term vital; and, in this generalisation we must include all vital phenomena, from those which coincide with the manifestations of the highest intellect, to the characteristics of the simplest organism or protoplasm. But, thirdly, there is an important school of physicists who maintain that life is only a manifestation of the physical or molecular forces of matter. To understand this question better, it will be useful to determine what we mean by certain terms. Now, the highest manifestation of the human consciousness is the knowing adaptation of means to ends, as reason; the means can be finally resolved with the application of energy to ends, or, as I would prefer to say, motor energy. We necessarily thus discriminate between the means and their use; now, that which directs their use is termed mind. Here, therefore, are two other kinds of phenomena, those due to the physical motor or molecular energies, and those which are metaphysical or intellectual, which belong to the “pure reason” of philosophy, and which differ from the psychal in this, that they do not imply necessarily any feeling or emotion of the soul. Now, this “pure reason” is identified by philosophy with the great intelligent First Cause, and except as manifested in us is inscrutable, and cannot be separated from the mental or psychal. We have three classes of phenomena, therefore, and three causes of these named forces or energies; viz., the psychal or mental, the vital, and the physical. What, then, are their practical relations to each other?

Physical force or energy is necessary to all mental work. The potential energy of the brain is the greatest of all the known kinds of vital energy or tension, and requires a large supply of blood to maintain it. Few members of this Association can have failed to

be interested in the admirable researches of Dr. Haughton in this direction, who has shown that five hours of cerebral activity or mental work are equal, as to expenditure of energy, to about ten hours of merely muscular activity. The relative proportions may not be exactly made out, but this uncertainty does not affect the conclusion to be drawn; which is, that much more force, as motion, is used in mental than in bodily activity in the same time. Here, then, is an eminently practical and scientific fact, worth acres of speculative writing.

Two obvious and unavoidable conclusions follow; firstly, that the molecular changes which coincide with vital and mental activity may all be resolved into motion; and, secondly, that there is an accumulation or conservation of motor energy in the brain or the organ of mind. This coincides generally with what the physicists teach us as to molecular motions in ponderable matter in general, whether it be living or dead.

But the question thence arises, In what respect does this cerebral energy differ from the purely physical? The brain is ponderable matter, and has therefore gravity; and both heat and chemical affinity are essential to all its molecular motions whatever. But it is equally certain that these motions of living matter in relation with consciousness must not only differ from the chemical motions of inorganic molecules, but be of such a kind as to coincide and correspond with all states of consciousness. What, then, is the cause of these differences in molecular motions of inorganic and organic matter? Now, if we take the proper characteristic of the mental forces or energies, it is that of conservation and distribution of potential energy with adaptation to ends—"the pure reason"; consequently, it is in this characteristic of adaptation that the vital energies resemble mind or the psychal energies, and both differ from the physical. In like manner, the kinds of chemical motions of the molecules of living and organised matter must differ from those of dead and unorganised matter. For the results of those motions consist not merely in the chemical compositions and decompositions by which vital energies and forces are accumulated and manifested, and which occur in unorganised matter, nor even in motions of organs and limbs, which may also be, and are often, due to physical forces, such as elasticity and contractibility, but in the results which follow upon these energies in adaptation to ends. Hence it is that we cannot exclude this fundamental characteristic of adaptation to ends from our definition of life and its forces: so that adaptivity, if I may be permitted to name this characteristic, is as much a peculiar property of living matter as gravity is of ponderable matter.

If, then, the vital and physical molecular forces be identical, as is maintained by certain physicists, it legitimately follows, on the one hand, that the property of adaptivity—the special characteristic of the vital molecular force—is also the property of the physical molecular force; and on the other, that, since the vital and mental energies are inseparably connected, the mental forces are equally inseparably connected with the physical. But these physicists prefer to deride the principle of adaptivity (which is the foundation of teleology), and to declare with the metaphysicists that the inseparable connexion of body and mind is an unfathomable mystery. As a fact of experience, it is, however, no more mysterious than that inseparable union of matter and force which constitutes weight or gravity. However simple the idea may appear to modern physicists, it is not two centuries since one of the greatest philosophers of the day, Leibnitz, remarked: "I am a great friend of experimental philosophy; but Newton deviates much from it when he pretends that all matter is heavy, or that each particle of matter attracts every other particle." (*Life of Sir Isaac Newton*, by Sir David Brewster, vol. ii, p. 60.) The history of this as well as of all other departments of science proves that mystery and ignorance are synonymous terms, and that all possible knowledge is open to the human mind, if a right method be adopted. It also shows that methods are right and fertile in results in proportion as they are founded on broad general principles—fertile as well in correcting the error and ignorance veiled under the term mystery, as in advancing knowledge. Newton himself probably never dreamt that his great discoveries in physics would enable Adams and Leverrier, more than a century later, to find in the irregularities of motion of a known planet proofs not only of the existence, but of the place of existence, of another planet hitherto invisible because of its position on the extreme limits of the solar system. I say nothing of the wonderful application of Newton's researches to the spectro-analysis of the sun and the most distant bodies moving in the universe of space; these are still *sub judice*. That the attempt is made, is enough for my purpose, which is to show that the more comprehensive the general truth, the more widely applicable is it to the discovery of the order of Nature. Consequently, if it can be shown, as to adaptivity, that it is coextensive with gravity and the molecular force, we ought to avail ourselves of the fact to elucidate the connexion between mind and body.

As an illustration of this part of the method which I propose, let us examine the relations of adaptivity to gravity, as manifested in the motions of the celestial bodies, which move so harmoniously through space. I need not stop to prove that our own planetary system is stable, and that this end is attained by the motions of its constituent elements. What is of present interest is the fact that the particular direction of their motions—viz., from west to east—is essential to stability, and is so clearly an adaptation of their motions to ends, that they could only be due to an intelligent cause of the adaptation. The existing system is, in truth, one of so many other possible arrangements of the constituent masses of matter (which, for the sake of elucidation, may be considered relatively to each other as molecules), without attaining such a perfect result, that Laplace calculated, by the calculus of probabilities, the chances in favour of the motions being directed by an intelligent First Cause to be above four millions to one, and two millions of times more certain than that the sun will rise again to-morrow. Such a fact is conclusive as to the principle I have laid down; viz., that the direction and rapidity of the motions of molecules moving to ends is comprised in the idea of adaptivity. It is in this respect that chemical affinity, considered as a cause of arrangement of molecules, takes its place in the series of adaptive energies known as vital.

The fact of adaptivity to ends being thus established as inseparably connected with particular kinds of motions of masses and molecules, we next naturally inquire into the cause and intent of the adaptations. If we are unable in thought to separate motion from its cause considered as force, we are not less unable to separate adaptivity from its cause considered as Mind or Intelligence. In fact, the direct presentation to the human mind of all energies and forces is in the first instance as none other than an adapting energy; it is only by a knowledge of the external world that we are able to realise the operation of motor and subordinate energies. I know it is affirmed by certain cerebral physiologists that every man is conscious that he thinks by means of at least his head, if not by his brains; but it must be remembered that from a like datum of consciousness Plato and other ancient philosophers made the heart the seat of the emotions, so that the hypothesis influences language to this day. This direct presentation to the consciousness as immediate knowledge of the cause of adaptation to ends is the true fundamental fact. As such, it was the basis of all the old cosmical philosophies, however varied, and with Plato and others gave rise to the hypothesis of an *anima mundi*, or soul of the universe. So also, being the foundation of all natural religion, as a direct intuition of a cause in nature adapting to ends, it has been operative in the human mind from the most remote antiquity, in shaping religious beliefs, being manifested even in pre-historic times. Hence it was that the earliest inquirers were led to worship dead men, and to find multitudinous spiritual beings present where we now only recognise the forces of nature directed by one God to beneficent ends. Undoubtedly, this direct intuition, being the sole primary knowledge of energy as mind, is the strongest scientific proof of a spiritual element in man and nature.

Seeing, then, that what is common to all energy is motion, and that what differentiates motions due to mental and vital energies from those due to merely physical forces is the quality of adaptivity or coadaptation to ends by varying the direction and rapidity of molecular motions, in what respect is there a difference as to the accumulation and conservation of energy? The law is this: that adaptivity is more and more manifested, and potential energy or tension increased, in proportion as living organisms are evolved in form and function—being least in the lowest, greatest in the highest. Now, this is to say that the vital and mental energies are under the great biological law of evolution from the general to the special. Looking at these questions from this point of view, we see at once how chemical affinity is separable from all the other physical molecular forces, since it is the only one of which we can predicate evolution. Abundant facts prove that, whether it be manifested in organic or in inorganic matter, complexity of chemical composition correlates increase of potential energy or tension, as represented by molecular weight, in ascending series. Thus the molecular weight of hæmoglobin, composed of 54.2 carbon, 21.5 oxygen, 16.0 nitrogen, 7.2 hydrogen, 0.42 iron, and 0.7 sulphur, equals 13,280. Another illustration of this doctrine is the relation of certain compounds to the chemical affinities of brain-constituents; as, for example, the different effects of the methyl series of compounds with increase of the carbon-molecule in evolutionary series, of which chloral is one, as has been so beautifully shown by Dr. B. W. Richardson. The difference which one atom of water makes is shown by the different effects of morphia and apomorphia, which latter has one atom of water less than morphia, and is not a hypnotic or sedative, but an active emetic. The influence of chemical compounds on the higher states of consciousness has been well shown by experiments with the organic nitrites. "These agents" (the organic nitrites), writes Dr. B. W. Richardson, "against

our wills, act through precisely the same means and in precisely the same manner as do the more obscure because more refined influences which excite daily in us what we call emotions. An act which shall call forth a blush, an act which shall call forth the pallor of terror, which shall produce involuntary secretion, which shall make the heart beat with an intensity that is painfully felt—all and any of these acts, which would be called psychical, have their precise analogues in the actions of the organic nitrites." (*Report of the British Association for the Advancement of Science*, 1869, p. 409.)

I will only allude to one other series of phenomena in connexion with this subject, but one of singular interest and novelty. The question has often been asked, What is the nature of the so-called impressions made on the senses, and through these on the encephalic nerve-centres, when the varying states of consciousness arise in connexion with external impressions? We can well understand that they must be finally reducible to waves of motion or of energy, but waves in *affinity* (I use the term advisedly) with the molecules which constitute each nerve of sense in the first instance, and next with those of the connected nerve-centres. Nothing is more striking than the apparatus of the senses, provided in so great variety in different organisms, for intensifying this motion of impressions—multipliers exceeding far in nicety of construction the most perfect of the very ingenious apparatus used by physicists. I forbear entering further upon this deeply interesting field of research. What I have said is enough for my purpose, which is to show that, so far from the relations of body and mind being too mysterious for investigation, it is a simple fact that the phenomena can be brought within the range of molecular physics and experimental research.

I have said nothing of the vast collateral range of inquiry opened out by bringing psychology into the circle of the biological sciences. As to this and other lines of psychological research, I would only remark that, while they are inexhaustible, they have hardly been entered upon by psychologists. Another generation, however, will see profound changes in all the sciences which deal with human nature. The proper foundation of them all being the great science of life, or biology, and that being the essential foundation of both scientific and practical medicine, it is clear how large a part the profession must play in the future development of those sciences which aim at the social advancement of man. Its influence will be exercised through psychology, which, as now defined, touches on ethnology, anthropology, morals, education, the public health, and all questions included under social and political economy.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

FREEZING AND VENTILATING MACHINE.

A NEW freezing and ventilating machine, of remarkable ingenuity and promise, invented by Franz Mulhausen, Esq., Civil Engineer, of Brunswick, Germany, is on view at the Ice Works, Emerson Street, Southwark. In the construction of this machine, the cold is produced by the mechanical expansion of atmospheric air. It produces, when in operation, any desired degree of cold, freezes water without the use of any chemical agents, and will effectually cool and ventilate any apartment or building, on whatever scale, large or small. In hospitals, especially in tropical climates, where the production of ice and the cooling of the air is often a matter of great urgency, and always of great value; in theatres and workshops, and in our new Indian barracks, such a machine will be of infinite value. The London theatres can hardly afford to be without it. The labour of one man, with a small five-horse motor power machine, will produce 100 pounds of ice an hour, and cool 15,000 cubic feet of air from thirty to fifty degrees below Reaumur. The production of pure ice, for the purpose of cooling our drinking-water and furnishing a cheap mode of replenishing our domestic refrigerating safes during the hot season, will be a great addition to the sum of comfort in London life. Cheap ice will be especially a great boon to the hospital and sick-room. Nothing is so refreshing for the parched lips of the sick man. If it were not so costly as it now is, ice would be very largely used in all hospitals, and would be an infinite boon to the sick.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 27TH, 1870.

THE ASSOCIATION AS CHAMPION OF MEDICAL REFORM.

A HIGHLY important debate on medical reform occurred at the Newcastle meeting. It was not wanting in any of the circumstances which could give it interest and dignity. On the one hand were five members of the Medical Council who were known to entertain opinions not altogether favourable to the course pursued by the Association and its Committee in insisting on direct representation as a *sine qua non* of medical reform. On the other hand there were the members of the Direct Representation Committee and the officers of the Association, who have so insisted throughout the year, at a great sacrifice of labour and time, and at the cost of repeated visits to London and persistent representations to the members of the legislature and the Government. Very early in the meeting it became evident that this most important subject was largely occupying the minds of some of the members. Dr. Stokes and Dr. Paget, to whom was entrusted the task of proposing the well-merited vote of thanks to Dr. Chadwick for his exertions on behalf of the Association, and for the admirable manner in which he has filled the office of annual President, recalled to mind that no small part of the President's duties had arisen in connexion with the demand of the Association for the direct representation of the profession in the General Medical Council; and that, in pressing that claim on the Government and the House, Dr. Chadwick had taken part in the decision that those acting for the Association would rather see the Bill withdrawn for this session than passed without provision for the direct representation which they were instructed to demand. This led them at once into a digression on medical reform at the outset of the meeting; and both this digression and the cheers which greeted the warm allusion to it by Dr. Chadwick in replying to the vote of thanks, showed that there was a general and deep interest in the topics thus introduced, and that a spirited debate might be expected.

The report of the Committee on Direct Representation having been read and its adoption proposed, it was printed for deliberate consideration: and, on the following day, the final discussion on it took place.

Issue was joined very fully and fairly; and the debate, which was one of great moment, was sustained with marked ability. Let us add, for the information of the Medical Council, that the speakers were limited to ten minutes each; that it is tolerably certain that they put forward within that space of time all the arguments which really bore upon the point at issue; and that, while many things were repeated, it does not appear that any material arguments were omitted. The discussion lasted nearly two hours. There is not the least reason to suppose that it would have led to any other result if it had lasted a week. The main facts and arguments were placed in a perfectly clear light by those who have been the acknowledged leaders of the two classes of

opinion; and the decision of the Association was unmistakable. Dr. Acland, who undertook to lead the expression of the opinions of those who thought that the Direct Representation Committee of the Association had gone too far in rejecting the Government Bill, regarded the action of the Committee as practically a vote of censure on the Government and the Medical Council. He moved an amendment declaring that the Association regretted that the Committee had thus thrown out the Bill by insisting on a clause for the reform of the Council by direct representation as a *sine quâ non*. Dr. Stokes, Dr. Paget, Dr. Emberton, and Dr. Rumsey followed in the same line of argument. Dr. Paget set forth very ably the good that was in the Bill: its abolition of partial qualifications as a title to registration and consequently to practice in all departments; its legislative affirmation of the principle of one portal, which has been the guiding thought of the Association for so many years; its excellent penal clause, which prohibited practice without registration, and protected the public and the profession from the encroachments of unauthorised quacks. This, too, had long been the pressing demand of the organs of the Association. Dr. Stokes openly acknowledged how great had been the influence of the Association—so great as to induce the Government to throw up their Bill when they found that they could not secure its co-operation.

From none could the arguments in favour of the Bill have fallen with greater weight than from its five defenders, unless, indeed, from any member of the Association of equal acceptance with themselves, and not a member of the General Medical Council. Such, however, were not to be found on that side of the question. The opinion that the reform of the constitution of the Medical Council was a secondary matter in medical reform, found as its exponents only the members of the Medical Council who happened to be present at the meeting. It would be impossible to find members of the Association more invariably and thoroughly welcome at its meetings than Drs. Stokes, Acland, Paget, and Rumsey. They have filled offices of the highest trust in the Association, and so filled them as to earn claims on the permanent esteem of the members. Stokes, Acland, and Paget, as Presidents at Dublin, Oxford, and Cambridge, are representative of memorable receptions; and all these speakers have been repeatedly accepted in the Association as leaders on matters of intellectual and social importance. They were, therefore, very welcome at Newcastle; and their words had all the special weight which position, character, and personal acceptability could give. Moreover, their arguments were urged with characteristic ability. Every one who heard them in that very full assembly must have felt satisfied that the Bill had some great merits; but it was equally evident that it was defective in two points which the Association regards as essential. Was, then, the Representative Committee of the Association right in rejecting the Bill, because it did not provide for such an alteration in the constitution of the Council as to admit the direct representation of the profession in it? and because, after apparently recognising the principle that entrance to the profession should be through one portal only, it practically negated that principle by leaving all the now existing portals open? The continuous and earnest applause which greeted every speaker in succession who rose to defend the course taken by the Committee speedily proved that the meeting was of opinion that that course was thoroughly right. The Committee were appointed by the Association in annual general meeting to carry out resolutions of the most deliberate and authoritative character, more than once repeated, in favour of direct representation. Their powers were this year renewed and their duties impressed upon them by a special general meeting of the Association in London, and by resolutions from a great number of the Branches. A memorial to the Government, signed by ten thousand practitioners in and out of the Association, and hundreds of petitions to the Houses of Parliament, had been presented for the express purpose of claiming direct representation. Nevertheless, the Bill contained not one word on the subject. The General Medical Council had made no advance towards this end. The Government would give no pledge. The Committee were specially entrusted by the Association with the maintenance of a

principle which had been declared vital to medical reform. That principle found no place in the Bill, while another of equal importance was so imperfectly recognised that its recognition was valueless; and the course which they pursued was to exercise, for the rejection of the Bill, the great political influence which has been developed in the Association, rather than be a party to a remodelling which afforded no hope of settlement, and rather than acquiesce in the ignoring of the principles which they were bound to maintain. The response of the meeting to their statement was overwhelming and enthusiastic. With characteristic good taste and good temper, Dr. Acland admitted, shortly afterwards, how very decided and complete had been the expression of opinion against the views entertained by himself and his colleagues in the Medical Council who were present at the meeting; and, amidst well deserved cheers, expressed the hope, on many future, as on many past occasions, to find the whole Association as unanimously accordant with him and the few but distinguished friends who voted with him, as on this occasion it was unanimously dissentient from them. The question was thus far settled in a complete and satisfactory manner. The power of the Association was acknowledged to the fullest extent on the one side; its views were once more energetically enunciated and ratified on the other. The Association, acting for the profession, as it always has done in this matter of medical reform, has declared direct representation and the one portal vital principles of such reform. Henceforth no plan of medical reform is possible which does not include them. It is important that a scheme which does include them shall be at once brought forward by the Committee on Medical Reform appointed at Newcastle, and that it be freely discussed. Such a scheme has, we believe, already been framed. We would suggest that, after due consideration, but as speedily as possible, it be brought forward in such a manner as to admit of discussion before it is placed in the hands of the Government or of an independent member. One or two private Bills have been already spoken of; indeed, Mr. Brady and Dr. Brewer have both given notice of their intention to introduce measures of the kind. It is, however, obvious that, to pass through Parliament, such a measure must command the support, or certainly must not arouse the opposition, of the British Medical Association.

PUBLIC MEDICINE.

No more efficient ally could be enlisted in the cause of Public Medicine than the Earl of Derby. All that he said, and said well, on Tuesday at Bootle, on Medical Charities and Sanitary Reform, is familiar to our readers; for the British Medical Association, stimulated very much by the efforts of such men as Rumsey, Stokes, Acland, Farr, Stewart, Gairdner, Burke, *et multi alii*, has distinguished itself by energetic efforts to carry out the extended and much-needed reforms in sanitary legislation required to give effect to wise words such as those of Lord Derby. The Royal Sanitary Commission now sitting is one of the results of these efforts. The formation of the Section of Public Medicine, and the efforts to obtain recognition for Public Medicine as a special element of instruction and examination, are testimonies of the importance which we desire to give to this great field of medical activity. Dr. Rumsey's Address, which we publish to-day, delivered in the Section of Public Medicine at Newcastle, affords a rapid and comprehensive view of the most assailable positions on which preventable disease is intrenched, and of the obstacles which distract the attacking army of physicians. Its publication will excuse us from publishing at length Lord Derby's speech at Bootle, which is addressed to a public not yet so far advanced in the subject as we are, and which needs to be taught first principles. The members of the Association at large may render a valuable service by directing their individual attention to the subjects treated by Dr. Rumsey, and by supplying, through the JOURNAL, materials which each man accumulates who pleases to use his power of observation in daily practice, for demonstrating striking injuries to public health by the neglect of sanitary laws, by the omission of pri

vate individuals to observe the precautions required by law, by the failure of local authorities to enforce those precautions, by the deficiency in the laws, or by unremedied sanitary defects. Instances of the spreading of scarlatina by neglect, for example, are undoubtedly most numerous. It will help us to render a public service just now, if our readers will supply us with the most striking examples which come under their notice.

DRS. BOUCHARD, Ball, and Dujardin-Beaumez have been appointed "médecins des hôpitaux" at Paris, at the close of the last competition.

THE Prince and Princess of Wales have consented to be joint patrons of the Royal South London Ophthalmic Hospital.

COPIES of the photographic groups taken at the Convalescent Home, Whitley, during the Newcastle meeting, may be obtained at Messrs. W. and D. Downey's, 9, Eldon Square, Newcastle.

A SANITARY Council for Bohemia has been formed, consisting of Professors Jaksch, Halla, Kaulich, Town-District Surgeon Dr. Grosse of Prague, and District-Surgeon Dr. Hosier of Karolinenthal.

Dr. ODLING has consented to open the session at the London Institution, Finsbury Square, with a series of educational lectures on Chemical Action. After Christmas, Professor Huxley will deliver a course on the First Principles of Biology.

THE Head Mastership of the Royal Medical Benevolent College, Epsom, vacated by the preferment of the Rev. Robinson Thornton to the Wardenship of Trinity College, Glenalmond, has been conferred upon the Rev. Dr. W. D. West of St. John's College, Oxford.

DR. T. E. THORPE, of Owen's College, Manchester, has been elected by the trustees of Anderson's University, Glasgow, Professor of Scientific Chemistry, in the room of the late Dr. Penny. There were four candidates.

THOMAS AND ELIZABETH SAVILE, "peculiar people," of Charlton, have been committed for manslaughter for having neglected to have recourse to medical aid in the treatment of their infant son, aged three months, who died of diarrhoea. In the present state of opinion as to the treatment of infantile diarrhoea, the measure seems a severe one.

AT Leeds this week, four persons were summoned before the magistrates for refusing to have their children vaccinated. One of the defendants, a chemist named Toulson, was summoned for the thirteenth time. All the defendants were ordered to comply with the Act, and to pay costs.

REGULATIONS are about to issue from the Poor-law Board authorising and facilitating boarding of urban pauper children in rural districts by the guardians, under proper supervision, and carrying into effect the general approval of that method of training orphan and deserted pauper children expressed in the recent letter addressed by Mr. Göschen to Miss Preusser, on behalf of the lady memorialists who have offered their voluntary aid in the matter.

WE strongly advise all surgeons and nurses intending to place their services at the disposal of the sufferers in this war, to do so through the National Aid Society. We learn to-day that an eminent British surgeon, who had, with the consent of the French authorities, organised a hospital establishment at Metz, received at the last moment from the provost-marshal an intimation that, although his services had been in the first instance accepted, there were objections entertained which made it desirable that he should quit the town. He did so just in time, and is now in Paris, awaiting a diploma of service from the Aid Society of London.

NEW ASYLUM FOR IMBECILES.

THE Metropolitan Asylum Board have, through their clerk (Mr. Jebb), intimated to the various boards of guardians of the metropolis that the two asylums, built by them for the reception of imbeciles at Leavesden and Caterham, will very soon be ready for the admission of patients.

THE VICTIMS OF SCARLET FEVER.

WE are about to make a statement which in its bare simplicity will, we venture to believe, strike all thoughtful persons as appalling. During the twenty-one years 1848 to 1868 there were registered in England and Wales 415,982 deaths from scarlet fever and its allied disease diphtheria. To bring this number down to the present time, exact data are not yet forthcoming, but the means exist for approximating fairly enough to the truth. Thus the registration accounts for 1869 are at present incomplete, but we know that 6,181 fatal cases were recorded in London during that year; and as the scarlet fever mortality is, if anything, rather less than greater in the metropolis by comparison with the rest of the country, it may be estimated, on the basis of population, that at least 40,000 deaths occurred throughout England last year. Curiously enough, we have fuller information about 1870, in consequence of the extension of the Registrar-General's Quarterly Returns, which show that in the six months ending June last, 13,900 deaths were returned by the registrars as resulting from scarlet fever and diphtheria—a number which we suspect, however, to be under rather than over the mark. Here, then, we have an aggregate in round numbers of *four hundred and seventy thousand* persons who have fallen victims to one type of zymotic disease in the last twenty-two and a half years. Of these, the loss is absolute, irretrievable. But what of those whom the disease attacked, yet did not kill outright? Anything like an accurate estimate is out of the question, thanks to the supineness of past and present Governments, who have neglected so obviously important a branch of health statistics, as is the record of sickness among the population. On the most moderate assumption as to the proportion of deaths to attacks, it is probable that at least *five millions* of persons in England have, during the twenty-two and a half years, suffered more or less severely from attacks of scarlet fever and diphtheria. That a considerable number of these persons ultimately perished by other maladies, either induced by the original attack or supervening on a broken constitution, must undoubtedly be taken for granted. In fact, it is impossible to gauge the full extent of the mischief done where the ramifications are almost endless and frequently obscure. Nor can it be necessary to do more than point to the absolute slaughter of nearly half a million victims, as a reason for the adoption of the most stringent measures against the culpable ignorance and criminal neglect alluded to in this JOURNAL of last week. Let it be remembered that sixty-two per cent. of the victims are children under five years of age, who are incapable of taking steps for their own preservation, and who have therefore the strongest of all claims upon the protection of the State.

THE LONDON MEDICAL SCHOOLS.

THE medical schools in connection with the London Hospitals will commence their winter sessions in October; and, as the 1st of October this year falls on a Saturday, some of them will commence business on that day, while others will defer the opening until Monday, the 3rd. King's College medical school will be opened on Monday, October 3, with the introductory address by Mr. John Wood. At St. George's Hospital, the session will commence on Monday, the 3rd of October, when the inaugural address will be delivered by Mr. Brodhurst. At St. Thomas's Hospital, the session will commence on Monday, the 3rd of October, when the address will be delivered by Dr. Gervis. At St. Mary's Hospital, Paddington, the session will commence on Saturday, the 1st, when the inaugural address will be delivered by Mr. Gascoyen. At University College, it will be delivered by Mr. Berkeley Hill; at Guy's Hospital, by Mr. Bader.

A NEW DRUG.

MM. RABUTEAU and Peyre have been experimenting with the root of a plant in use at the Gaboon as an ordeal poison, and locally known as m'boundou or icaja. It will be remembered that it was from this source that the highly valuable Calabar bean was obtained and utilised in medicine. The authors state that, even in very dilute decoctions, it is very bitter, and appears to contain one or more alkaloids, since the

aqueous decoction is largely precipitated by iodide of potassium, and also by phospho-molybdic acid. The poisonous effects of this substance bear some similarity to the effects of brucia, but the authors state that, under certain conditions, this poison does not hurt men. Some of the lower animals are readily killed by it; a dose of three milligrammes of the alcoholic extract, placed under the skin of a frog, kills it; and rabbits and dogs are killed by doses of from fifteen to twenty-five centigrammes of the same extract introduced into the stomach.

OUR INDIAN ARMY.

A RECENT Report of the Army Sanitary Commission indicates the necessity for the immediate adoption of some simple but highly important reforms in recruiting for that service and in the management of the men. Men under 21 years of age should not be sent to India under any circumstances. There is overwhelming proof that these young and immature recruits suffer from a high death and inefficiency rate. As far as possible, all troops should be landed in the last two months of the year; and the occupancy of hill-stations by all new troops is advocated in very strong terms. Many men are invalided unnecessarily to Netley who only want the cool season to brace them up; hence the Invaliding Board should sit at the end or beginning of the year, instead of October. Again, men who need to be invalided should not be sent away so as to arrive in England in the cold season—a sure source of danger—but so as to arrive not later than April. The present rotation of regiments sends men from one malarial station to another still more unhealthy. Arrangements such as Sir W. Mansfield has recently recommended for the location of three more British regiments at hill-stations would break that vicious rotation, and render possible an improved system by which the preventive merits of hill-stations might be utilised to the great saving of life and money for newly arrived regiments, and one-fourth of the men might always be located there. To adopt these precautions will be found the shortest way to obtain a surplus aid to cut down the Indian income-tax.

HIPPOPHAGY.

RECENT events seem to have given a fresh impulse to hippophagy. The *Gazette de Liège* says that the butchers who sell horse-meat exclusively hasten to the battle-fields to buy horses killed in the engagements which have taken place, and to find good young horses prematurely rendered unfit for use, and formerly intended for something better than supplying butcher's shops. The trade in horse-flesh is extending at Liège.

THE NEW MEDICAL M.P.

THE following notice of the career of the new medical member appears this week in the *Times*.

Sir Dominic John Corrigan, of Cappagh and Inniscorrig, county of Dublin, who has been elected M.P. for the City of Dublin in the Liberal interest, in the place of Sir Arthur E. Guinness, unseated on petition, and whose seat has remained vacant for eighteen months, is a physician of great eminence in Dublin. He is a son of the late Mr. John Corrigan, an eminent merchant of Dublin; his mother was a Miss Celia O'Connor. He was born on the 1st of December, 1802, and graduated M.D. at the University of Edinburgh in 1825, and at Dublin in 1849. He became a member of the College of Surgeons (England) as far back as 1843. He has been President of the Pathological Society in Ireland, and Physician to the House of Industry Hospitals at Dublin, from which he retired in 1866. He was appointed one of the members of the Senate of the Queen's University in Ireland at its first establishment in 1847, and was five times in succession elected President of the Royal College of Physicians in Ireland, an honour never before him bestowed on any of its Fellows. He holds the post of one of Her Majesty's Physicians in Ordinary in Ireland, and is the author of numerous contributions to leading medical journals. He was created a Baronet in February, 1866, in recognition not only of his very high and distinguished professional position, but also of his great and gratuitous services through many years to the cause of health and education in his native country. Sir Dominic, who has long been known in Dublin as one of the most zealous, but at the same time most truly Liberal members of the Roman Catholic body, married in 1829 Joanna Mary,

daughter of the late Mr. William Woodlock, of Dublin, by whom he has had two daughters and three sons. His eldest son, who was captain in the 3rd Regiment of Dragoon Guards, having died in 1866, his heir is his grandson, John Joseph, who was born in 1859.

THE UNIVERSITY OF MELBOURNE.

AT the recent Commemoration of the University of Melbourne (May 21st), four students received the M.B. degree, and two graduated as Doctors of Medicine.

THE HUNTERIAN ORATION.

MR. SOLLY has intimated to the Council of the College of Surgeons his inability—owing, we regret to learn, to indisposition from the effect of exposure to the excessive heat of the sun—to deliver the Hunterian Oration. The President, Sir William Fergusson, has undertaken the duty.

THE GERMAN HOSPITAL.

AT a meeting of the governors of the German Hospital, a special vote of thanks was passed to Baron F. von Daigadt, who, as we last week stated, has presented the hospital with the magnificent gift of £10,000, as a memorial of his late parents, who have always taken a great interest in the welfare of the hospital.

THE WAR MANIA.

As usual in times of war excitement, the effect is beginning to be felt in lunatic asylums. Several instances of lunacy, taking the form of war-mania, are reported here this week. Among others, a man armed with a carving-knife and a pair of tongs hired a cabman this week in Bethnal Green to drive him to the war. He was driven to Dr. Millar's lunatic asylum at Bethnal Green, from which it appeared that he had escaped, and the cabman consulted the magistrate how to get his fare, five shillings, which he had ineffectually claimed at the asylum.

THE NAVAL MEDICAL SERVICE.

AT the competitive examination for assistant-surgeons in the navy recently held, we observe that the average number of marks granted indicates a considerably higher standard than at previous examinations. This may, we hope, be accepted as an indication of an increasing tendency of good candidates to enter the service. In the face of some considerable ameliorations which have been recently made in the conditions of service, such an improvement may fairly be looked for; but the fact that only ten out of twenty-two vacant appointments could be filled, shows that more must yet be done to attract a sufficient number of candidates of the right stamp.

SICKNESS RETURNS.

Dr. DICKSON, R.N., the Medical Inspector of the Customs, in reporting on the health of the custom-house officers in London, makes some observations in support of the collection and publication of sickness-returns, such as those which our Association is about to exert itself to induce the Government to institute. He remarks that the large part of the sickness of the force is due to diseases whose causation would probably be materially cleared up were some attempt made to register the sickness as well as the mortality of the kingdom. For such returns, he says, "ample and easily available material exists in the records of various public institutions, and more especially of the Poor-law service."

FOR EXTERNAL USE ONLY.

LAST week a case was reported in which a woman had accidentally poisoned herself by drinking a quantity of poisonous lotion supplied to her in an ordinary bottle, duly labelled, from a metropolitan hospital. The *Pharmaceutical Journal*, commenting upon the accident, observes that in hospital dispensing none of the precautions are observed which have been lately much insisted upon as to specialising the bottles in which poisonous drugs are dispensed. The patients usually find their own bottles, and the same bottle often makes alternate pilgrimages from

the gin palace to the hospital dispensary, and will sometimes contain beer or gin, and sometimes poisonous liniments. This criticism is justified by a further accident which has since occurred. An old lady, on a railway excursion from Battersea to Cheltenham, offered to her companions what she described as gin, from a bottle which she carried. They accepted and swallowed the refreshment; but it was soon found to be some lotion in a bottle labelled poison, which she had brought away in mistake for the gin bottle. Fortunately, the train just then reached Slough, emetics were administered, and no great harm seems to have followed. But the accident gives room for thought. If the Pharmaceutical Society, whose function it now is, by Act of Parliament, to devise rules for storing and dispensing poisonous substances, can offer any suggestions to our hospital authorities, they will certainly be favourably received and carefully considered. There is in many institutions much room for improvement.

UN SOUND FISH.

A CASE of wholesale poisoning from eating unsound fish is reported from Waterford. A farmer and two labourers dined together on salt Newfoundland fish, potatoes, and milk. Very shortly afterwards, they all three became alarmingly ill, and medical assistance was ineffectual to save their lives; the three men died during the evening. This is the case as reported in the paper. We should be glad to receive further medical details. Cases of poisoning from unsound food are not common; and it is important they should be recorded. A great deal of unsound fish is seized and destroyed in our London markets; but there is no doubt that a great deal also escapes seizure, and the salting and smoking unsound fish is a branch of business with which we have no sympathy, and should be glad to help to exterminate.

THE CHOLERA AT TAGANROG.

IT appears that for some time cholera has been more or less prevalent at some of the places on the Caspian Sea. But in the autumn of last year there seems to have been a decided outbreak at a fair held in one of these places; thence it spread to the interior of Russia, and has now made its appearance at Taganrog. It was first reported in the latter place at the middle of July; and, in the beginning of the present month, foul bills of health were issued to the shipping leaving that port; and consequently all vessels arriving in Ottoman ports from the Sea of Azof are compelled to undergo quarantine. The accounts which we have received enable us to state that there have been, up to recent dates, between fifty and sixty cases; and the deaths seem to have been nearly half as many as the reported cases. It appears that hospitals for cholera patients are being established by the authorities locally responsible for such matters.

THE AMMONIA CURE FOR SNAKE-BITE.

PROFESSOR HALFORD, of the University of Melbourne, in a paper read before the Medical Society of Victoria, has reviewed at length the history of twenty cases of snake-bite treated by his method of injecting liquor ammoniæ into the veins during the last eighteen months. These cases were all in the hands of different practitioners in the colony, who have each reported on them. Recovery followed in seventeen cases. In thirteen of these, the practitioners in attendance expressly report that the patients were in a dying condition, and, in their belief, would soon have died, but for the employment of this remedy in the manner prescribed. The method employed was that introduced by Dr. Halford, and first brought to the knowledge of the profession here by him, in our pages, through Mr. Paget; viz., by injecting dilute ammonia—say, at the least, thirty minims of the liquor ammoniæ B. P., specific gravity 959—into a superficial vein; the vein being first exposed, and its coats pierced with the nozzle of a hypodermic syringe. Dr. Dempster, Dr. Rae, Dr. Langford, Mr. Dallimore, and Dr. Meyler, each in his own words, and from the observation of separate cases, describe the curative effect as being immediate, and the recovery from collapse to be so rapid and startling as to be “almost magical”. This method

of treatment, of which such remarkable effects are detailed, has been sharply criticised; but Professor Halford successfully vindicates the claim of the snakes to be considered highly venomous—almost as much so, he intimates, as some of his London critics. They included the tiger-snake, the brown and black snake of Australia, which are affirmed to be as deadly as the cobra and rattle-snakes of India. Strong testimony to the efficacy of the treatment in saving life was borne by Australian practitioners who took part in the discussion, and vindicated Professor Halford's claim to be considered as the discoverer of a means of rescuing many from an otherwise inevitable death.

NAVAL MEDICAL SERVICE.

WE are glad to be able to draw attention to the undermentioned promotions in the Naval Medical Department. It will be seen that they include three surgeons promoted to the staff rank, and twelve assistant-surgeons to be surgeons. The former have been promoted before they would have been entitled by seniority, for meritorious services. The assistant-surgeons have been promoted, not by seniority alone, but also in recognition of the evidence they have afforded of superior medical attainments and meritorious services, and from the evidence furnished to the department of their zeal and efficiency in the service. Such promotions afford an incentive to the profession, and supply the rewards due to ability and merit.—To be Staff-Surgeons: Henry Slade; William Bennett Dalby, M.D.; Ahmuty Irwin. To be surgeons: James Leech Whitney; Garland William Langdon Harrison; George Bewsher Beale, M.D.; Charles Strickland; William Shute Fisher; Samuel Grose; James Trimble; Robert Longstaff Bett; Bradley Gregory; Thomas L. Bickford; Alexander Turnbull, M.D.; John Mitchell Hunter.

THE COMMITTEE OF THE ASSOCIATION ON DIRECT REPRESENTATION.

THE Report of the Committee of the Association on Direct Representation appeared last week; and the discussion thereon is published in this day's JOURNAL. The Report is a document which, by its clearness and force, speaks for itself. The warmth, amounting to enthusiasm, with which it was received and adopted by the General Meeting, after the animated debate raised by Dr. Acland's amendment, will have assured the members of the Committee that their services are highly appreciated by the profession, and that the spirited course which they adopted was that which the Association looked for at their hands. Direct representation on the Medical Council is the universal demand of the profession: the Association had pledged itself and pledged its Committee to labour for that end, and they were bound to insist upon that end being respected and that principle being recognised in what purported to be a measure of Medical Reform. Few, however, even amongst those who most heartily applauded the spirited language of Dr. Chadwick, Mr. Husband, Dr. Waters, Dr. Sibson, Mr. Southam, and Mr. Heckstall Smith, knew how much labour, how much time, how many long journeys, and tedious correspondence have been involved in the successful exertions made by the Committee in asserting the wishes of the profession and the principles of the Association on this occasion. It is right that we should recall this, however, to the minds of our readers. The task which the Medical Reform Committee have undertaken is no light one. It is full of labour and responsibility. It will demand no inconsiderable sacrifices of time, money, and ease on the part of those who have undertaken it at the bidding of the Association. Such labours call for every earnest and grateful acknowledgment from the members at large.

THE NAVAL MEDICAL SERVICE.

WE understand that another competitive examination will be held at Somerset House in November next, to fill up the further vacancies in the Naval Medical Service consequent on the recent large batch of promotions and retirements.

NOTES OF THE WAR.

NO THOROUGHFARE.

THE refusal of the French to allow the wounded in the recent battles to be transmitted to the hospitals of Aix-la-Chapelle involves a difference of three days, against three hours' transit; that is to say, it signs the death-warrant of some thousands of their own countrymen as well as of their wounded enemies. It is true that some problematical advantage may be derived from the terrible aggravation of mortality and suffering involved in the refusal to allow the combatant army to relieve themselves of this load; but it must be remembered that precisely similar advantages are accorded by the conditions of the treaty of Geneva, which allow the combatants on either side to leave their wounded within the enemy's territory, under the protection of the red-cross flag, and which neutralise alike the wounded, the ambulances, and the medical officers, on both sides, and relieve the retreating combatants of their encumbrances. In the rout of MacMahon's army, one hundred and two members of the French medical staff were cut off, comprising seventy-five surgeons and thirty-seven assistants. All have been sent back, *via* Cologne and Belgium, over this neutral territory. No objection has been made, nor is likely to be made, to their travelling by this route. The severely wounded are now expressly neutralised; and we cannot help feeling deep regret that they are not allowed to be sent to hospital by the shortest route, over neutral territory.

ARMY MEDICAL OFFICERS OF NEUTRAL POWERS.

THE refusal of the British Government to allow unemployed army and navy medical officers to give their services in the Franco-Prussian war is not easily to be explained, in the face of the opposite measures agreed to at the International Conference last year at Berlin, of the opposite course now being pursued by other governments (as the Russian and Swiss), and of the interests of English medical science and of English soldiers. One of the measures agreed upon at the International Conference respecting volunteer aid to wounded soldiers in time of war, held last year at Berlin, was the following:—"In case of war, non-belligerent powers are invited to place at the disposal of the belligerents those surgeons of their army whom they are able to lend without disadvantage to their own service; such delegated surgeons to be placed under the orders of the principal medical officer of the belligerent army to which they may be attached." The Governments of France and North Germany, on the opening of the present war, both announced their intention of accepting and acting upon the resolutions agreed upon at the Berlin Congress. Accordingly, the Federal Government of Switzerland, as a neutral non-belligerent power, has offered to the French and German Governments a number of surgeons of their army staff who had volunteered to go. Both of the belligerents have accepted the offer through their respective ministers at Berne, and have expressed themselves thankful for the assistance. The Swiss army surgeons destined for France are ordered to report themselves for further instructions to the Central Committee of Volunteer Aid to the Wounded sitting at Paris; those for Germany to the corresponding Committee at Berlin. We understand that a large number of surgeons of our own army, desirous not only of helping in the hospitals, but also of gaining military surgical experience, have applied to be allowed to give their services in a similar way; but their applications have not been acceded to, notwithstanding that the reason given for no examinations for admission into the army medical department being held at present is that the department is over-numbered. Captain W. Noble, R.A., Deputy Director-General of Ordnance, and Captain Brackenbury, R.A., have left Woolwich for the respective seats of war, the former for Prussia, the latter for France, to watch the military operations and report to the English Government, so that the objection to make the necessary arrangements for sending medical officers appears all the more unaccountable.

THE CONVENTION OF GENEVA.

THE advantages secured to the wounded by the Geneva Convention are manifesting themselves every day during the present war, which is the first which has occurred between two Powers both of whom had signed the treaty. When the war occurred in 1866 between Prussia and Austria, Prussia had signed the treaty, but Austria had not. Before the war, however, had concluded, although not until fighting had ceased, Austria, seeing the advantages offered by the Convention, applied to be admitted as one of the signatories to it, an application which was at once acceded to. One of the principal articles of the

Convention was the neutralisation of the *personnel* and the *matériel* of the hospitals moving with an army in the field—of all, in short, that is absolutely necessary for affording the first means of saving the lives or lessening the sufferings of the wounded who are placed *hors de combat* after each succeeding engagement. One can see the importance of this provision from the information which reached London on the 20th inst. in a telegram from Brussels. A French field hospital complete—comprising fifteen surgeons, ninety *infirmiers*, eight ambulance vehicles and their horses—was captured by the Prussians near Metz and sent on by them to Cologne; but, at the date of the telegram, the whole was passing through Belgium on its way back to France. Before the Geneva Convention, all the persons belonging to this hospital establishment would have been retained and treated as prisoners of war, while the carriages and rest of the hospital equipment would have become prize of war. The military reasons which led the Prussians to send back this French military hospital through Belgium instead of returning it across the ground on which the Prussian army was manœuvring are sufficiently obvious. One or two telegrams have referred to field hospitals being fired upon, contrary to the terms of the Geneva treaty. No doubt explanation will be given of these supposed infractions of the Convention; but it is to be remembered that the Convention particularly provides that the neutrality of the field hospitals is to cease if they are placed in positions of strategic importance. Their neutralisation might be taken advantage of to secure important military ends were this provision not made; indeed, no government could have been expected to sign the treaty without such an exception being attached to it.

THE WOUNDED IN FRANCE.

OUR correspondence from Paris includes the following items. There are indications that the grievous official incompetence and obstructiveness, which have weighed on the efforts of professional and non-professional volunteers and subscribers to the aid of the wounded in the war, is about to come to an end. No words can express the grievous injury which it has done. The *intendance générale*, which has blocked the way, will probably be swept on one side by General Trochu.—The Faculty of Medicine have just formally placed at the service of the Minister of War all their professors, *agrégés*, and pupils, in a body. The provincial Faculties are taking a similar course.—The Medical Dean of the Faculty of Montpellier has abandoned his salary in favour of the wounded whilst the war lasts; he has added a further subscription of 500 *francs*, his own services, and his Chateau de Grammont. One thousand seven hundred physicians and students have inscribed their names as volunteers at the Val-de-Grâce.—Dr. Cunier, of the First Corps, private physician of Marshal MacMahon, has been made prisoner at Reichshoffen, and, notwithstanding the neutrality convention, has not reappeared. Other surgeons captured have, however, been set free by the Prussians.—The Aid Society has, at short notice, established a permanent hospital at the Gare de Strasbourg, communicating with the station by an inclined plane. The wounded are received there at once, on issuing from the railway-carriages, and either retained there, or forwarded after their wounds are dressed, according to circumstances.

NOTES OF AN AUSTRIAN SURGEON.

A CORRESPONDENT of the *Wiener Medizinische Wochenschrift*, writing from Heidelberg on the 15th instant, at which place he had arrived on the previous day in charge of 500 wounded, says that Billroth was fully employed as principal surgeon at Weissenburg, where he had charge of a hospital of 500 wounded. His assistant, Dr. Czerny, had the care of 100. The correspondent says that the difficulties of the medical staff are great and manifold. The number of wounded scattered in all directions in Germany must exceed 15,000. The French ignore the regulations of the Geneva convention; their army surgeons do not wear the white band with the red cross, and the transport service labours clumsily, but earnestly and fearlessly, to remove the wounded from the battle-field, even in the midst of showers of bullets. After the battle of Wörth, he saw an ambulance waggon overturned on the declivity of a mountain, and lying under it three wounded men—one *in articulo mortis*—who had evidently been left on the spot in consequence of the overturn and of the flight of the drivers. The French, he says, have made no improvement in their ambulances, notwithstanding their experience in Italy and Mexico; they still use for the conveyance of the wounded carriages which are dark and unventilated. The question of providing bedsteads is still unsettled. Billroth, though a man of great energy, could not provide beds for his patients in less than eight days. The Prussian members of the order of St. John, and their conduct, are beyond all praise; they supplied the writer's transport-waggon with all possible necessities and comforts. There is a want of means for the

transport of the wounded from the field of battle, and of operators in the ambulances after the fight. The neutral powers, as a rule, do not appear to trouble themselves about carrying out the resolutions arrived at in Berlin last year, by sending out army surgeons to the seat of war.

AID TO THE SICK AND WOUNDED.

COLONEL LOYD LINDSAY states that there are now twenty English surgeons serving under the Society for giving aid to the sick and wounded, in equal proportions on the French and German sides. The Society continues to receive applications for surgeons. Eight thousand French wounded are in the German Hospitals. Dr. Mayo, who is the chief representative of the Society in Germany, has gone forward to the frontier, after having had interviews with the Crown Princess of Prussia and Princess Alice of Hesse. Chloroform, surgical instruments, disinfectants, waterproof goods, tourniquets, are the leading necessities asked for. We suppose that Liebig's extract, hydrate of chloral, and opium may be counted, also, in the front rank. Great supplies of charpie and rags have been forwarded. The Committee give to each surgeon an allowance of £1 a day, partly to pay their expenses, and partly to enable them to procure for their patients such comforts as are not to be found in a military hospital. Dr. Frank is the chief representative of the Society in Paris; three of the surgeons are near Chalons, two at Metz, and two in Paris.

AID TO THE SICK AND WOUNDED.

THE *Pharmaceutical Journal* has appealed to the numerous members of the influential Society of which it is the organ to afford assistance in kind to the societies for aid of the sick and wounded in the war. The appeal is timely and well-placed, and we do not doubt that they will respond as liberally on this occasion to the appeal from their own journal as they did on a former occasion—the heroic war of liberation by Garibaldi—to a private appeal to relieve the necessities of the wounded volunteers who fought in the cause of Italian freedom. Among the drugs most needed will, of course, be carbolic acid, hydrate of chloral, opium, and chloroform; but all hospital necessities will be needed in bulk to relieve the dreadful sufferings of the mass of men now suffering from wounds or sickness. Lieut.-Colonel Loyd Lindsay has addressed this week a letter to the *Pharmaceutical Journal*, thanking it for its appeal, and giving a list of articles required, as agreed on by Dr. Sieveking and Mr. Pollock.

DRESS OF SURGEONS AND DRESSERS.

SEVERAL instances on both sides are reported in which surgeons and dressers have been fired upon and killed. It is suggested, perhaps with reason, that this is due to the difficulty of distinguishing them from many combatants, from whom they differ but little in uniform. It is recommended that "surgeons, hospital attendants, and ambulance men should be dressed in some unmilitary uniform of a conspicuous colour, say, for instance, the bright yellow formerly worn in the Spanish army—a colour no longer worn in any army in Europe." The idea seems good, although the colour will probably not be approved. Modest men, however steeled by scientific carelessness of costume, would feel uncomfortable nowadays in a canary-coloured dress, and a more sober means of distinguishing them might easily be selected. In time of war, indeed, extraordinary expedients are suggested; but regimental surgeons walking about the streets in yellow coats would probably know no peace. This Spanish uniform is at present worn, we believe, by one division of the rag-brigade, who would possibly join the gutter-boys generally in resenting the arbitrary adoption of this colour by the Army Medical Department.

MATERIAL RATHER THAN MONEY.

It seems incredible, says the *Wiener Medizinische Wochenschrift*, but from all quarters, especially the German hospitals and ambulances, the complaint reaches us of want of material for dressing the wounded and for treating and supporting the sick. It would almost seem as if governments and war ministers took care for the provision of the means of destroying, wounding, and maiming, and treated charpie, compresses, and surgical aid as quite of secondary value. And if this want is apparent at the commencement of a war, what must it become after weeks or months? It is almost the exception for the aid-societies to send to the belligerent powers material, and not money. Money has been liberally supplied for the wounded; but of what use is it, if it is impossible to buy medicines, charpie, bandages, wine, and other necessities on the spot where they are wanted? The Austrian patriotic help-union has turned its attention, in the first place and chiefly, to the sending of material both to the French and to the German armies; from both sides it has received the warmest expressions of gratitude,

and requests for further aid of the same kind. It would only be a matter of simple humanity if other societies would apply themselves more to the sending of material than of money.

ACTION OF THE ITALIAN AID-COMMITTEES.

THE Italian Committees for aiding the sick and wounded in war have placed themselves in communication with the central office at Basle. Those of Padua and Milan have forwarded to that place supplies of every kind. Arrangements for doing the same thing at Florence are being made; and the Turin Committee has provided ambulances and placed them at the disposal of the central committee, whose instructions as to their destination are expected.

DR. MOSETIG, formerly assistant of Baron von Dumreicher, will probably go to the seat of war in France, as a delegate from the Austrian Society for mutual help.

THE *Wiener Medizinische Wochenschrift* learns with deep regret that the Austrian foreign ministry has declared it inopportune to comply with the proposal of the ministry of war, to allow military surgeons to be sent to Prussia and France, and placed at the disposal of each power for service in the military hospitals.

DR. MAYO, one of the medical men whom we last week mentioned as having been sent by the National Aid Society to Germany, has telegraphed from Darmstadt:—"Have seen Princess Alice. Am going forthwith with party towards Metz. Instruments much needed, probably surgeons. Send cases of instruments, tourniquets, and 20lb. of chloroform to me here. Mark 'Immediate,' with large red cross. Pray continue to give us your aid."

MR. SIMON'S NEW REPORT.

THE Twelfth Annual Report of the Medical Officer of the Privy Council will be shortly in the hands of the profession. It is one of considerable interest and importance. It deals with the recent epidemics of relapsing fever and scarlatina, the dry-earth system of treating night-soil, and the midden and its allied systems used in some northern towns, the water-supply, the use of milk of diseased cows, the transmission of disease by vaccination, animal vaccination as practised on the continent, the Pharmacy Act, and other subjects.

In respect to relapsing fever, though there have been cases in other parts of the country, the reporter confines himself to giving an account of the metropolitan epidemic. He observes that it is a disease almost unknown in England, but as far back as the middle of 1868 there were precursory symptoms of such an epidemic. It was not till the autumn of 1869 that it became an accomplished fact. Mr. Simon calls attention to the memorandum, to which we referred at the time, for the guidance of local authorities, and gives the following short account of the epidemic.

"The admissions of relapsing fever in the London Fever Hospital in October had numbered 130; in November they were 259; in December 315. Here, perhaps, strictly speaking, my statements on the subject ought to cease, as my report formally relates only to the business of 1869; but probably I shall be excused for adding the more satisfactory experience of the first three months of 1870. After Christmas the disease increased in the district of Holborn with Clerkenwell, and in the parish of St. Saviour's, Southwark, and appears to have attained at the beginning of the year its chief extension over the poorer parts of London. In January the cases of relapsing fever admitted into the London Fever Hospital were 258; in February the London Fever Hospital, together with the newly opened Hampstead Hospital, received 153 cases only; in March they received 140. At the present date (March 31st, 1870) the two hospitals contain 103 cases of relapsing fever; the disease is on the wane; and the months of winter, during which such infections are particularly apt to spread among the poor, have happily now passed with comparatively a trifling epidemic."

The mortality was very low: out of 769 cases treated in 1869 in the London Fever Hospital only 17 were fatal.

Reference is then made to the Diseases Prevention Act of 1865, and to the working of the Metropolitan Asylums Act of 1867; and Mr. Simon says of the former that, though it has only been passed fifteen years, it had, even in a crisis such as that of 1869, to be treated as

obsolete. This supplies another striking example of the confusion into which the law on sanitary matters has drifted. It may be hoped that the action which should follow the report of the Sanitary Commission, issued at the instance of the British Medical and Social Science Associations, will not be moulded after the very defective pattern of the Sanitary and Sewage Utilisation Acts.

The other great epidemic of the year was scarlatina, of which we have already had much to say. It is here stated that the scarlatina deaths, which averaged fifty weekly in the first half of 1869, rapidly increased after midsummer, until in September they were more than two hundred a week, and in December kept the very high average of 220. The total number of deaths in London alone is stated to be 5,803. The total deaths from the disease throughout the country are estimated at not less than those in the epidemic of 1863-4, when "scarlatina destroyed in England more than 60,000 persons." A large proportion of these deaths must be ascribed to the neglect of individuals and of local authorities. Though the exact cause or first germ of the disease is still undiscovered, it is certain that it can be prevented from extending in the locality, if it cannot be immediately stamped out. Freshness of atmosphere, absence of dirt, prevention of overcrowding, pure drinking water, the isolation of the sick and their attendants from the healthy, and the thorough disinfection of premises and things: these are conditions which, if the local authorities throughout the country did their duty, would obtain everywhere. For, in Mr. Simon's words, "thoroughly to isolate the sick from intercourse with susceptible persons, and thoroughly to trap and exterminate all contagium which the bodies of the sick evolve, are the preventive feats which have to be accomplished." It is the imperative duty of legislators to provide the powers, and of the executive to carry out these measures.

In respect to vaccination, the Privy Council examined, through its inspectors, during 1869, the state of public vaccination in 1,600 vaccination districts. The sums awarded during the year to vaccinators amounted to £3,885 : 15 : 4, distributed amongst 391 public vaccinators, of whom 235 were in the first class and 156 in the second class. This shews an improvement in the public vaccination of the country; for, says Mr. Simon, whereas in 1867-8 first-class gratuities formed only 33 per cent. of the whole number of the awards, the first-class gratuities in 1869 formed 60 per cent. of the number of awards. Notwithstanding the mischievous outcry which has lately been raised against the use of humanised lymph for vaccination, nearly 14,000 applications have been made to the Government for it, including many from distant parts of the world.

The work under the Pharmacy Act has consisted in the approval of a code of consolidated and amended bye-laws, some of which greatly modify the conditions of admission to the practice of pharmacy; several additions to the schedule of provisions annexed to the Act; and the visitation of the examinations of the Pharmaceutical Society on the part of the Privy Council. "It had," says Mr. Simon, "long been a desideratum in Great Britain as regards the practice of pharmacy, that this skilled commerce, where unskilfulness means very serious danger to the public health, should only be open to persons whose qualifications for safely practising it had been tested by proper examination; and the appended reports appear to me to give ground for much public satisfaction, as shewing that the system which the Pharmacy Act of 1868 brought into operation provides adequate security to that very important effect."

HOW SCARLATINA IS SPREAD.

WE called attention last week to examples of the reckless carelessness by which scarlatina is spread, and gave examples from experience. The Rev. T. P. Ouvry of Leighton Buzzard writes to the *Times*, describing the following case in point.

"I am the incumbent of a parish where scarlet fever is now prevalent and very fatal. Straw-plaiting, in so-called 'plaiting-schools', forms the chief occupation of the children. The medical officer of the Union reports to me this morning that he finds a child suffering from scarlet fever lying in the corner of a room full of children engaged in straw plaiting. Already twenty children, out of a population of fifteen hundred, have died, and several others are not likely to recover. The law punishes people having infectious diseases for exposing themselves in streets and public places: should it not also punish parents who send their children into infected houses, and house-owners who receive children when an infectious disease is in the house?"

In order to carry out the object which we have in view—that of awaking public attention thoroughly to the extreme and incessant danger and mass of mortality arising from this negligence, it is desirable to collect and make known such instances. No doubt the etiology is

not always apparent; but in a great mass of cases, scarlatina may be directly traced to negligent exposure. We desire to collect, to publish frequently, and to make known such instances. In this way the public mind may become at last thoroughly impressed with this important truth, and the local authorities moved to vigilance. We beg the aid of our associates and readers, and ask them to search out the causes of their scarlatina cases; and, when the contagion can be clearly traced to any kind of apparent carelessness or neglect, to oblige us with brief details for publication.

PLAN OF ORGANISING THE VOLUNTEER MEDICAL FORCE.

ONE or two leading Volunteer surgeons have communicated to us their wish to take part in any steps which may be thought advisable to remedy the utter want of organisation of the Volunteer medical department, to which we last week urgently directed attention. In consequence of similar representations which we made a couple of years since on the subject of the want of organisation even for the purposes of field days, an association of Volunteer medical officers was formed, of which the machinery is still available. Dr. John Murray, the honorary secretary, is not at present in London, but will, we believe, shortly return. Meantime, we shall hope to be able to lay before the Volunteer medical officers an outline scheme for organisation, which we have asked an eminent authority to render a public service by preparing as a matter of suggestion; and we are prepared to follow up the subject, finding that the observations which we made last week have been held to open an important subject in a manner which may lead to useful results.

ASSOCIATION INTELLIGENCE.

MIDLAND BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held in the Guildhall, Lincoln, on Thursday, August 4th. About thirty members of the Association were present.

A Vote of Thanks was unanimously accorded to T. W. Benfield, Esq., for the ability with which he had filled the office of President during the year.

The President-elect, Dr. MITCHINSON, took the chair.

The members of the Council and the Branch Secretaries were re-elected.

New Members.—Dr. G. W. Lowe (Lincoln) and Mr. Bower (Methringham) were elected members of the Association.

President's Address.—The PRESIDENT delivered an address, in which he mentioned the advantages the profession derived from the Association. He called the attention of the members to the unsatisfactory Medical Bill which had passed the House of Lords, but was withdrawn in consequence of the determined opposition of the members of the Association and profession at large. He touched upon the progress of medicine during the year, the subject of medical relief in our public institutions, the Contagious Diseases Act, and the loss the profession had sustained in the deaths of Simpson, Syme, Clark, Copland, and Von Graefe.

Papers, etc.—The following papers were read.

1. Dr. MORRIS (Spalding): The Use of the Turkish Bath in Albuminuria.
2. Mr. BROADBENT (Cottingham): The Treatment of Puerperal Convulsions. He strongly advocated bleeding and speedy delivery.
3. Mr. CRAVEN (Hull): Lithotomy and Lithotrity. Mr. Craven exhibited nearly one hundred illustrations of vesical calculi removed by his late father and himself.
4. Mr. THOMPSON (Bellinghay) considered that deligation of the umbilical cord at parturition was a physiological error. It was his practice not to apply any ligature; and he never had any hæmorrhage. Most of the members said that they should consider themselves culpable, in case of any accident, if they did not tie the cord.
5. Mr. SYMPSON read a case of Resection of the Os Calcis, and showed the patient.
6. Mr. SYMPSON also showed a female whose Knee-joint he excised many years ago. This was considered a remarkably satisfactory case.

Next Annual Meeting.—It was resolved that the next annual meeting be held at Derby; and that S. W. Fearn, Esq., be the President-elect.

Dinner.—The members afterwards dined at the Great Northern Hotel, where they were joined by the Mayor and other gentlemen.

THIRTY-EIGHTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in NEWCASTLE, August 9th, 10th, 11th, and 12th, 1870.

THURSDAY, AUGUST 11th.

WE here give those portions of Thursday's proceedings which we were obliged, from want of space and other causes, to omit last week.

The third general meeting was held in the Lecture Room of the Philosophical Institution, at 11 A.M.

THE MEDICAL ACTS (1858) AMENDMENT BILL.

Dr. EDWARD WATERS, Chairman of the Committee for securing the Direct Representation of the Profession in the General Medical Council, brought up the Report of the Committee. [It was published at page 197 of last week's JOURNAL.]

Mr. HUSBAND (York): I rise with very great pleasure to propose the adoption of the Report which has just been read. There is no occasion to go into any enunciation or advocacy of the principles of medical reform for which this Association has contended almost from its very existence; for, sanctioned as they have been by annual meeting after annual meeting, and, supported as they have been by petitions from the members in every part of the kingdom, there can be no need, unless those principles be attacked, to say one word in their favour. But, sir, I cannot, as head of the executive of this body, forbear telling you how much your thanks are due to some of our members who have, at an expense of time and money which was scarcely called for from them, brought the powerful influence of this Association to bear upon the Legislature and upon the Government, in a manner which has never been done before. [*Applause.*] Our Chairman, Dr. Waters [*applause*], devoted an amount of time, of energy, of calm judgment, and of influence, which enabled us first to get a position in the House of Lords, and next in the House of Commons, which would most thoroughly have defeated that Bill if the Government had determined to persevere in it. I would also pay my tribute to Dr. Chadwick [*applause*], who has devoted, during the last year, an amount of attention to the business of the Association, which I can safely say no President ever gave before. [*Applause.*] I say this because I have been practically mixed up with it, and I know that we have now a position and an influence with the Legislature which will make it impossible for any Bill to be passed until it has the sanction of this great and important Association. We felt a great responsibility; we felt that the fate of the Bill was in our hands. As you have heard, proposals were made to try, as it were, to disarm our opposition to the second reading; but we felt that we would be traitors, we felt that we would be disloyal to the members of the Association, if we did not take the responsibility and say that no Bill should pass that House which did not carry out the principles of one portal and the direct representation of the profession. [*Loud applause.*] Of course, if we had allowed that Bill to pass, and got the vague promise that these principles might be recognised, the result would have been that members of Parliament might say in the next session, "You gave us plenty of trouble last session, and have not fairly tried yet how the Act will work"; and, therefore, we felt and do feel now that, unless those principles were engrafted in a Bill, it was our duty to bring the influence of our Association to bear and to take care that the Bill did not pass. [*Applause.*] I have no doubt you will think that it is a wise step which the Committee ask you to adopt—that now you should take a wider view of the subject. [*Hear.*] We have had a Committee restricted to the principle of direct representation; but there are many important points which will have to be considered before another Bill is introduced. We must carefully examine the Bill and see how far the powers of the Privy Council go; and, however much I respect the gentleman who holds the office of medical adviser to the Privy Council, too much power in a profession like this ought not to be placed in the hands of any one individual. [*Applause.*] That there ought to be a balance of power we will not attempt to deny; and the medical profession have never asked that they should have an overwhelming influence in the Medical Council. We have wished Corporations and Universities to be fairly represented; we have wished the public, through the Government, to be fairly represented; and, at the same time, we desired—as Englishmen and members of a great and noble profession—to have some share and some direct influence in the Council which is to regulate us for good or for evil.

Therefore I think we ought to be no longer accused of having only one idea, but that we ought now to take a larger and a wider view of the matter; we ought to see that the Privy Council has only its proper influence, and to take care that that for which we contended thirty years ago—the one real actual portal—is obtained. A good real and practical portal through which men should pass to the profession, is what we want. Then, again, as to direct representation. You have adopted it time after time; and I may tell you this with regard to direct representation. We have been told that it is perfectly impracticable: that it is very well in theory, but that it was impracticable. Now, we have in our hands clauses drawn up by the draughtsman frequently employed by the Government; and he has told us that nothing is more simple and nothing more practicable and more capable of being carried out than the clauses, the impracticability of adopting which we have often heard alleged. [*Applause.*] I say, then, under those circumstances, elect a Committee in which you can have full confidence: give them power to act; and I believe then that this Association will wield a power never wielded before, and that at last the Government will be induced to see that the wishes of the medical profession are not to be disregarded, and that in any Medical Bill their voice must be recognised, their influence felt, and their fair and legitimate demands conceded. [*Loud applause.*] I have much pleasure, therefore, in moving the adoption of the Report.

Dr. A. P. STEWART (London): I have been requested to second the adoption of this Report, perhaps because I have been considered in past time rather lukewarm on the great subject which has during the last few months called forth the energies of the Association, and resulted in so successful an opposition to a Bill which I, with my fullest and most mature consideration, believe to have been a great slight to the large body of the medical profession. I never had the slightest doubt that the great principle for which this Association has been fighting during these three years past was a right and proper one; and, though at the meeting in Dublin I ventured, along with a few others, to stand up in opposition to the suggestions then made, it was not because I had the slightest doubt that the Medical Profession ought to be directly represented in the Council, but because I thought it right to warn the Association that they would have great difficulties to overcome, and that, in my opinion, the proper way to begin was at once to face the question of disfranchisement, in one shape or other, of some of the bodies at present represented in the Council. I thought it fair and right that the medical profession, with its many thousands of highly educated men, should have the same voice as the small licensing bodies which were fully represented in the Council—that the many thousands of the profession should at least have some share in the management and the regulation of their own affairs. That opinion was not followed. I think that recently those who have had the duty of conducting these negotiations have seen the necessity of modifying their views on this subject. I am not changed in the least in my opinions; and I am perfectly sure now, as I was in 1867, that the only practicable way of carrying out this great improvement in the Medical Council is to address ourselves to the task of apportioning the representatives of the different bodies in the Council. We objected to the Bill that was brought in during last session on several grounds. The first objection, which was stated by Mr. Husband, was the great power which was originally placed in the hands of the medical officer of the Privy Council. To this there was an universal objection. We did not think that it was right and proper that there should be a potential right of interference on the part of one member of the profession, so as to enable him to overturn everything without appealing to the decisions of a body which was thoroughly capable, and which, if it is to be entrusted with the management of the affairs of the medical profession, ought to be more capable than one single man of forming a judgment as to which is right. There was a strong opposition to the Bill on that ground. The second objection was on the modification introduced in the House of Lords by the omission of the eighteenth clause. After all that has been said on this point, I think there can be no doubt whatever that the omission of this eighteenth clause opened a door to great abuses. We know very well that it is easy enough to make pains and penalties in an Act of Parliament for the commission of certain acts or the transgression of certain provisions of Acts of Parliament. But the question is—Who is to enforce them? who is to get up the evidence? If you grant to universities the right of giving honorary degrees—and I suppose you grant to other bodies the right if they choose to confer degrees—if you grant to all the licensing bodies this right, who is to get the evidence of persons really engaged in practice so as to satisfy a court of law that the penalties enacted in the Bill ought to be inflicted? I hold that it is practically impossible. If you ask any lawyer how these penalties are to be inflicted, he will tell you that, as your Bill stood when it was before Parliament, these

clauses would be practically inoperative. What we ask is, that there shall be no loophole for escape, and that every man be compelled to pass through a certain examination, and then, if he wish to have further academical distinction, he can go where he will get it. But the natural result of the change on our position will be, that he will only go to the bodies whose diplomas are really worth having. It will tell in favour of the best licensing bodies, and against those who ought to have no place as licensing bodies. That will be the natural operation of the Bill when the Bill we ought to have has passed into law. It will act quietly in laying down into the tomb of all the Capulets that large number of little licensing bodies which have hitherto done so much to keep down a proper standard of medical education. We have a perfect right to insist on the withdrawal of the modification proposed in the eighteenth clause. I know from Mr. Simon himself that he hoped and expected that, if the modified clause passed in the House of Lords, it would be restored to its original reading in the House of Commons. Then, there is the question of the representation of the profession. I own, sir, that when I saw the Government, the Medical Council, and all the corporate bodies quietly combining together to overlook altogether, in a Bill carefully prepared and long considered, the interests of the many thousands—about twenty thousand—of the medical profession, and while saying “Oh, yes; your claim for representation upon the Council is very strong and very good”; nevertheless, practically treating them as if they did not exist, and drawing up a Bill carefully providing for their exclusion from any interest in the management of their own affairs—I tell you, that if I had been lukewarm before in this matter, that sight was enough to raise me to the boiling-point. Now, I mean to go through with it; and, as I wrote to my friend, Dr. Risdon Bennett, when he asked me to exert my influence with the British Medical Association in endeavouring to get them to desist from opposition to the Bill, I said the best thing we could do was to accept the challenge thrown out to us, and to have a fair trial of strength. A fortnight after I wrote these words to Dr. Bennett, that trial of strength issued, as you all know, in the contemptuous rejection by the Medical Association of the Bill brought in by the Government. And, as has been well said by Mr. Husband,—and it was said in the College of Physicians the other week—no Bill which does not carry the British Medical Association with it has any chance now or henceforward of passing into law. [Applause.]

Dr. PAGET said he would not vote for or against the Report, as he had only heard half of it read.

Several members stated they had not heard the Report.

After some discussion as to reading the Report, Dr. ACLAND moved, “That the Report be printed and placed in the hands of members before night”.

Dr. WILTSHIRE seconded the motion, which was carried.

The PRESIDENT then proposed that the concluding general meeting be held on Friday morning at 11 instead of 12 o'clock; and that the discussion on the Report be proceeded with first. The motion was carried.

EXCURSION TO TYNEMOUTH PRIORY AND PRUDHOE MEMORIAL CONVALESCENT HOME.

On Thursday afternoon a number of members of the Association had a very pleasant excursion to the above places. At a quarter past twelve o'clock they embarked at Newcastle Quay on board a steamer, and proceeded to Tynemouth. On the way down the river, the principal manufactories and shipbuilding yards, etc., were pointed out by the Rev. R. F. Wheeler and Dr. Philipson. The steamer arrived at Tynemouth about half-past one o'clock, and the party proceeded to view Tynemouth Priory. Dr. Philipson read the following paper.

“Twelve hundred years have elapsed since an Abbey was first founded at the mouth of the river Tyne. Here, surviving the change of dynasties, of language, and of laws, a religious foundation flourished, with little interruption, from the times of Northumbrian kings down to the middle of the sixteenth century. In the reign of Edwin, king of Northumbria, probably not long after the year 627, an edifice dedicated for religious purposes was erected at Tynemouth. This structure was of wood, and gave place to an edifice of stone built by Edwin's successor, St. Oswald, who began to reign in A.D. 663. About 1075, Robert de Mowbray, Earl of Northumberland, rebuilt the church; of this church, considerable portions remain. They indicate the limited extent of this Norman building, and its plain and massive character. The edifice consisted of nave, aisles, and transepts, the eastern end of the chancel being terminated by a semicircular apse, and a low tower rose above the intersection of the cross. Considerable portions remain of the clustered piers from which the tower arches sprang. In the early part of the reign of Henry III, the monks raised their new conventual church, which was completed about the year 1220. The plan

which they adopted was to build a spacious church eastward of the Norman fabric, and to incorporate the latter in the one edifice, making the nave of the old Norman church the nave of the expanded and loftier structure, but adding to it a new western front, and increasing its length. All that stood above ground of the Norman chancel was destroyed, a spacious choir and transepts were added eastward of the central tower, and the choir was terminated by a chancel or presbytery, the eastern and southern walls of which are still standing. A stone seat ran round this chancel, and was divided into stalls. The principal sedilia, which have trefoiled heads, remain in good preservation. The high altar stood in the centre nearly opposite to these canopied recesses. The western entrance has been uncovered to its basement. The edifice called the Lady Chapel, but which was more probably a mortuary chapel of some noble Percy, was erected about the year 1390. Its great peculiarity is in the vaulted roof, the ribs curiously intersecting, and the intersections on three of the longitudinal ribs being enriched with circular bosses, surrounded with an invocation to each saint represented by name. The condition of the priory was prosperous in the early years of the reign of Henry VIII. In 1534 the lesser monasteries were suppressed. On the 12th of January, 1539, the monastery was surrendered to the Crown by Robert Blakeney, last Prior of Tyne-mouth.”

Dr. CHARLTON also made a few remarks in reference to the venerable building, as well as with regard to the Lady Chapel, which was likewise visited. Dr. Charlton explained that the latter was some years ago used as a powder-magazine, but, by subscriptions given by the Duke of Northumberland and the Antiquarian Society, it was cleaned and restored. The ruins of the priory, as well as the interior of the chapel, were viewed with much interest.

The company subsequently proceeded by special train, on the Blyth and Tyne Railway, to Whitley Station, and thence walked to the Prudhoe Memorial Convalescent Home, and were shown through the building by Dr. Philipson and Rev. R. F. Wheeler, M.A., Honorary Secretaries. They expressed themselves highly pleased with the arrangements.

Dr. PHILIPSON stated that the Prudhoe Memorial Convalescent Home was erected by public subscription, in memory of the Most Noble, Algernon, Fourth Duke of Northumberland. The foundation stone was laid by Lord Warkworth, now Earl Percy, in June 4th, 1867. The memorial was inaugurated by Her Grace the Duchess Dowager of Northumberland, September 14th, 1869. The total cost of the building, site, furniture, etc., amounted to a sum a little over £20,000. The length of the frontage is 230 feet, and the various offices extend backwards 190 feet. The present accommodation is for 60 patients, 35 males and 25 females. The administrative department is built for 100 patients, in view of the future extension.

At the invitation of Dr. Philipson, the company were entertained to a sumptuous luncheon in the Dining Hall. The chair was occupied by Dr. Philipson, who was supported on his right by W. D. Husband, Esq., President of the Council; J. Whipple, Esq., President Elect of the Association; the Under Sheriff of Newcastle; Dr. Chadwick; Rev. John Lintott; Dr. Falconer; Dr. Edward Waters; Dr. Eason Wilkinson; and on his left by Dr. Charlton, the President of the Association; the Sheriff of Newcastle; the Rev. R. F. Wheeler; T. W. Williams, Esq.; Dr. Paget; Rev. T. Thornton; Dr. Gibson; and Dr. Embleton.

After luncheon, the CHAIRMAN gave the health of Her Most Gracious Majesty the Queen.—The CHAIRMAN gave “the Bishop of Durham and the Clergy of the Diocese.” [Applause.] As was well-known, the Bishop efficiently discharged his duties, and the clergy were ever foremost in works of mercy, benevolence, and charity—they being always ready to relieve the requirements of man. He had extreme pleasure in associating with the toast the health of the much esteemed and respected vicar of the parish—the Rev. Mr. Wheeler. [Applause.]—The Rev. Mr. WHEELER said he considered it the highest privilege to do anything towards relieving the sufferings of his fellow-man; and it had occasioned him the greatest possible pleasure to be associated with that institution, and to assist in carrying out the objects it had in view. [Hear, hear.] He believed that that institution was calculated to do a very great amount of good, and he rejoiced at its erection and establishment. He referred to the efforts of the Chairman—Dr. Philipson—in connection with the Home, and said he had displayed the greatest possible zeal in carrying on the work of Honorary Secretary. [Hear, hear.]—The CHAIRMAN asked the company to join with him in wishing prosperity to the British Medical Association, and the health of the distinguished President, Dr. Charlton. [Applause.]—Dr. CHARLTON thanked the company most sincerely for the cordial manner in which they had drank the toast. He felt proud of the Prudhoe Convalescent Home, and he also felt proud of Dr. Philipson, one of the honorary secretaries, who had displayed the

greatest possible interest in connection with it. It was, indeed, impossible to speak of the Convalescent Home without mentioning the name of Dr. Philipson. [*Hear, hear.*]—Mr. HUSBAND proposed the health of their respected host, Dr. Philipson, who had liberally provided the many good things which had been placed before them. [*Hear, hear.*] He proposed long life, health, and happiness to Dr. Philipson. [*Applause.*]—Dr. PHILIPSON thanked the company very much for the kind manner in which they had been pleased to receive his name. In making the arrangements for that excursion, he could truly say that it had given him sincere pleasure. He esteemed it a very high honour to see assembled in that hall so many of his friends who had favoured him with their company. [*Hear, hear.*]

EXCURSION TO SUNDERLAND.

Arrangements had been made at the reception-room to receive the names of members of the Association who were desirous of visiting Monkwearmouth Pit, Sunderland Docks, and Messrs. Hartley and Co.'s Glass Works. About thirty names were entered; and to each was given a card of invitation to luncheon in the Queen's Hotel, from Mr. Welford, President of the Northern Branch of the Association, and the profession of Sunderland. The party arrived at Monkwearmouth station on Thursday morning, by the express train from Newcastle, and were received by Mr. Welford, Dr. Blumer, Mr. Barker, and Dr. Dixon. Monkwearmouth Pit was first visited, and several descended to witness the mode of ventilating and working the mine. This they were enabled to accomplish to their entire satisfaction, through the kindness and attention of Mr. Heckels, Junr., nephew of the chief viewer, Richard Heckels, Esq. The rest of the party proceeded to the Docks, where they were received by Mr. Hudson, traffic manager, and by Messrs. John Nicholson and R. M. Hudson, commissioners; and were by these gentlemen conducted through the extensive engine works on the east side of the dock. This section of the visitors were next driven to the East Park, to glance at Havelock's monument, and thence to the Infirmary, to which they paid a short visit. The visitors all assembled at the Queen's Hotel, and sat down at half-past one o'clock to a Champagne luncheon. Complimentary toasts were proposed to the Chairman, Mr. Welford, to Dr. Dixon, and to others who had taken an active part in the reception of the visitors; and were severally and appropriately responded to. The company concluded the day's work by a visit to the Glass Works of Messrs. Hartley and Co., where, through the kindness of J. J. Kayll, Esq., the whole process of the glass manufacture at that establishment was witnessed and explained.

THE DINNER.

The annual dinner of the Association took place in the New Town Hall, on Thursday, August 11th, at 6 P.M.—the President (Dr. Charlton) in the Chair. About 150 gentlemen were present. The hall was decorated with exotic plants, etc.; and Mr. W. Rea, organist to the Newcastle Corporation, performed upon the grand organ. Mr. F. Helmore's glee party, and Mr. Wilson, the Tyneside vocalist and poet, sang at intervals.

The PRESIDENT proposed "The Queen". [*Applause.*] At that moment, when a great empire on the other side of the Channel was perhaps crumbling to ruins, their hearts were drawn more and more closely to that woman who held, and who would continue to hold as long as she lived, the love of all her subjects. [*Applause.*]

The PRESIDENT next gave "The Prince and Princess of Wales and the rest of the Royal Family". The Princess, he said, had thoroughly endeared herself to the people of England. Though a stranger to this country, she had the same blood as ourselves—the Danish and Norman blood—and she had amply and fully justified the expectations entertained of her. [*Applause.*]

The PRESIDENT said that they all knew how valuable the clergyman was in the work of aiding and assisting the suffering poor, and in carrying out many sanitary improvements. At all times and in the wildest districts the medical practitioner had an able counsellor in the clergyman. They had amongst them a good representative of the working clergyman in Canon Whitley, of whom personally he could speak most favourably. He proposed "The Bishop and Clergy of the Diocese", coupled with the name of Canon Whitley. [*Applause.*]

Canon WHITLEY, in responding, heartily expressed his gratitude for the way in which the toast had been drunk, and for the kind remarks of the Chairman. The clergy and the medical men, especially in rural districts, worked well together, and they ought to be the best possible friends. [*Applause.*] There were many improvements required which could not be accomplished but by the cordial union of medical men and clergymen. The dwellings of the poor ought to be better than they were; they ought to have a more abundant supply of water, and

a greater amount of fresh air: but what success could the clergymen expect to achieve in these matters unless with the assistance of the medical profession? If the clergyman and the doctor went shoulder to shoulder there would be some chance of success; but unless they moved together there was none. He would like to see every medical man—not only those whose social position was undoubted, but those working in the remote districts, getting five pounds as union doctors—he would like to see all these men put on a level with clergymen, so that they would not merely find a doctor going to a parson because he would see a gentleman, but that when a parson went to see the doctor he would meet a gentleman. [*Applause.*] With these sentiments he thanked the meeting most heartily for their kind expressions.

The PRESIDENT proposed "The Army, Navy, Militia, and Volunteers"; and he believed that if ever these services should be required they would be found to maintain their good name.

Mr. LUKE ARMSTRONG responded.

The PRESIDENT, in proposing the toast of the evening—"The British Medical Association"—said that they did not meet entirely for congratulating and praising each other. They met for real work. They were accustomed to real work all their lives; and he believed that was the reason it was often said of them that there was not a jollier set of fellows than doctors when they came together. [*Applause and laughter.*] They had earnest duties, in which it would be necessary for them to persevere, and show that they did not meet once a year merely to hold convivial assemblies. They had solid and serious work to do in the improvement of the profession. The Government was not only beginning to recognise that the Association was a power, but they had felt that power; and he trusted that they would feel it still more. [*Applause.*] He would not enlarge upon the benefits that accrued from their social gatherings. Kindly feelings were engendered, and old animosities were smoothed down. He had never known the meetings to produce much mischief, but he had always seen them produce an enormous amount of good. [*Applause.*] He trusted that the present would be very far from the last occasion on which they would meet together. If they were preserved for another year, they would meet in a southern clime; and he hoped that they would be favoured with as brilliant sunshine as they had experienced in Newcastle-upon-Tyne. The British Medical Association was now upon its trial. It was not upon its trial as a scientific Association, for it had proved itself that already; it had kept up its character by its JOURNAL, and by the character of the papers brought before the profession. But it had now another and a great duty to perform—that of a political power—that of a power which should influence the making of laws for the improvement of the medical profession. [*Cheers.*] Let not the possession of that power make them forget that there were difficulties to be met: they must remember that there were often concessions to be made upon the part of those who asked as well as of those who gave. He had great pleasure in asking them to drink "Prosperity to the British Medical Association."

The toast was drunk with "three time three".

Mr. HUSBAND said that he did not address the President on that occasion because he was going to ask the members to join him in doing that to which he should not ask the President's assent. Great men were modest; and if he had asked the President's consent, he might have refused it; and, as a humble subject, he would have been bound to obey the decision. But he asked them to thank the President for the kindness and courtesy, for the hospitality, with which they had met, for the grace with which he had presided over the proceedings, and the ability with which he had conducted the business. [*Applause.*] Their President was an antiquarian, and his mind had often gone back to times when from across the border the Scots came, and always made a raid where they thought there was a good store to get. Upon this good town of Newcastle a most successful raid had been made, not only from the northern kingdom, but also from the south; from the classic groves of Oxford and Cambridge; even from across the Atlantic men had come; and, instead of being met with pike and sword, and other destructive weapons, they had been met with open arms. The President's reputation was an honour to his profession; for he was not only known as a successful cultivator of the healing art, but he raised the profession by being a cultivated gentleman, a man who was acquainted with the arts and sciences, and who took an interest in everything which ennobled human nature, and formed the man and the gentleman. [*Applause.*] He believed that Dr. Charlton would be no mere ornamental President; but that, when they wanted the weight, power, and authority of his name, he would very readily lend it, together with that wisdom and moderate counsel which, after all, he believed they were bound to exercise for the benefit of the community, and for elevating the great profession to which they belonged. He asked them to join him in drinking, with all the honours, the "Health of Dr. Charlton, the President." [*Loud cheers.*]

The PRESIDENT thanked them for this testimony of kindness. There was something in Mr. Husband's speech that somehow stirred the border blood in him, and told him of a time long past, when he alluded to him as an antiquarian, and one that was fond of dwelling on the scenes of former times. He had indeed revelled greatly, in the intervals between professional hard work, in these ancient scenes and legends, and they had afforded him much pleasure—aye, he might say (for he had tried them both), more than a good gallop across the moor northwards, or the hooking of a fine salmon. But, above all, these old legends had taught him to have a kindly feeling towards his fellow-brethren. He had ever found somehow or another a moral condition in those that seemed to have little of moral in them. Something had told him that the men of old, in dealing with each other, were actuated much by the same feelings and passions as actuated men at the present day, and that those who dealt kindly with their fellow-creatures were in the end rewarded, while those who did evil met likewise with their deserts. As for anything which he had done for the British Medical Association, it had been little indeed. He had said his say when in the Chair. He had done the best in his power to point out what of interest there was in the town, and to render the meeting as hearty and jovial as some of those meetings that had been held of late years—such as at Dublin, Oxford, and Leeds. He was greatly inspirited at the Dublin meeting; and when he once more rejoined his friends, it seemed to him as if a kindlier and more hearty spirit had been infused into them. Had it not been for the kind assistance rendered to him by his colleagues in the town, who had worked shoulder to shoulder—nay, who had preceded him in the work—he should have found it very difficult to properly fill the honourable position in which they had placed him. But when he saw the way in which his colleagues at Newcastle were working, when he observed the good spirit that animated every one of them, it gave him the fullest confidence that the meeting would not be amongst the least successful of the meetings of the British Medical Association. [*Loud applause.*]

Dr. SIBSON proposed "The Health of the President-elect". They had in Mr. Whipple a surgeon as eminent as their present President was a physician. They were glad to have for a President so distinguished a physician one year and so eminent a surgeon another. [*Applause.*]

Mr. WHIPPLE, in acknowledging the compliment, assured the members of the Association of a hearty reception on their visit to Plymouth, and trusted that the change of place would be as agreeable to them as they could desire. In conclusion, he paid a high compliment to the ability of Dr. Chadwick, the ex-President, whose health he asked the company to drink with all the honours. [*Loud applause, followed by "three times three."*]

Dr. CHADWICK said there seemed a sort of propriety in their employing the coming President to speed the parting one. The reception which the toast had met was very cheering. When he remembered that he had had little opportunity of appearing at the festive enjoyments of the annual meetings, now that he had this single opportunity of speaking to his fellow-associates, he would assure them that the honour he had enjoyed during the past year had been thoroughly and completely estimated. He knew that in any association, whatever the object to be attained, success was most likely to follow where the association was thoroughly carried out; and, attaching as he did a great importance to this Association, they might be sure that he estimated the honour of having led them for a single year. The work of the past year had in some respects been arduous; but the striking unanimity that had characterised the Association during this period on the great subject which had occupied its attention, must satisfy everybody of the value of the principle of the Association. [*Applause.*] He was anxious, in leaving his office, that they as well as he should appreciate this principle, and that they should also carry it out fully, so that whether the Association were for scientific purposes or for promoting the social or moral well-being of the community concerned with the health of the people, they would in every way find that they were strengthened by this principle of association. He believed that, whether they were to practise medicine as a science or not, or had to come into contact with Government, or had to deal with social and moral evils, they must cultivate this principle of association, and he was sure it would carry them forward to success in every possible department. He had endeavoured during the twelve months he had been their President to become the mouth-piece of the Association. He hoped that he had had only one single view—to speak out what he believed to be the desire of the body which he represented; and whether he had blame or praise for it, was a matter to him of very little moment, because he felt he had carried out properly the duties that were imposed upon him. But as he had had an opportunity of saying at the commencement of the meeting, so he said now, that it was a poor discharge of duty if it terminated with the year of office. [*Hear, hear.*] If the position of President had any

value, brought with it any influence, that influence and that value should continue after the mantle of office had fallen from his shoulders. He trusted that health and opportunity would be given to him to assist this great Association in carrying out those objects for which it was formed.

Mr. HECKSTALL SMITH proposed "The Health of Dr. Falconer, the Treasurer of the Association." [*Applause.*] Not only was Dr. Falconer a man who had the interests of the Association at heart; not only was he one who had toiled in its general interests year after year; but he was especially interested in connection with his office, and he could not conceive where, if they were unfortunately to lose Dr. Falconer, they would be able to put their hands upon another who would take upon himself the trouble—and the drudgery, he might say—and perform the duties of the office with a genial spirit, and kindness, and determination, equal or approaching to that of Dr. Falconer. [*Applause.*]

Dr. FALCONER returned thanks. As an elected officer of the whole Association, he was bound, without reference to any individual or any committee, to exercise the duties of his office, and he had only to consider the general interests of the Association. [*Applause.*] So far as he was able, he had exercised the duties of the office with the greatest impartiality and care. [*Applause.*] While he stood before them as Treasurer, with some breadth of shoulder, he must give a hint to all that, if the Association did not attend to the Treasurer as they ought to do, he might in the next or following year produce to them an example of extreme inanition. This was a matter of considerable import to the whole Association. They must pardon him for introducing a grave subject on a festive occasion; but at the same time he knew there were many present who came from distant parts, and if they would be kind enough to remember what he said they might do a very great deal in their separate districts to assist the Treasurer. [*Applause.*] He thanked them most sincerely for their very kind appreciation of his services; and in the performance of his duties as Treasurer, he would never be forgetful of the general interests of the Association. [*Applause.*]

Dr. ACLAND proposed "Prosperity to the Corporation of Newcastle". [*Applause.*] A good deal might be said on this toast. They, strangers from various distances, had to heartily thank the Corporation for showing them that they had not forgotten the old English custom of offering good cheer in connection with the ancient institution of Mayors and Corporations. [*Applause.*] He saw with no small satisfaction that an esteemed gentleman, working hard in his profession, was one of the influential persons who, by his practical wisdom and kindness of heart, and known character, was, if he mistook not, able to advise his colleagues as to the duties of a British Corporation such as the British medical profession were wont to consist. [*Applause.*] He proposed the toast, coupling with it the name of the Sheriff. [*Applause.*]

The SHERIFF returned thanks. The Corporation of Newcastle, like other Corporations, endeavoured to do its duty. According to the best of their ability, the members of the Corporation endeavoured to regulate sanitary matters, and, he thought, with very considerable success. They had not been unmindful of what was required to be done for the commerce and trade of the town, and in the last three years the Corporation had spent, or were spending, £350,000. The Corporation was building a quay, at which there would be twenty-two feet of water at low tide. He must express the pride and gratification the visit of the British Medical Association had given to the Corporation and the inhabitants of the town. The first visit of the British Association to Newcastle had come to be looked upon as an era, and was referred to with pride. He hoped that the present meeting of the British Medical Association would also form in the records of Newcastle an era worthy of being commemorated. [*Applause.*] He thought that this town and every town had reason to be satisfied with the labours of the Association. For his own part, he felt extremely gratified at being connected with the Association. He would, perhaps, never again be amongst such a body; and when the records of this Congress were written, it would be said that in these days there were giants in the land. [*Applause.*]

Dr. WOOD proposed the "Health of the Readers of Addresses." He hoped that every member of the Association would help in gathering important and interesting information, which might from time to time be put into the shape of an address, and communicated to all the members. From the smallest facts the most important inferences might be drawn. He concluded by proposing the "Healts of the Readers of Papers, coupled with the name of Dr. Sibson." [*Applause.*]

Dr. SIBSON briefly responded.

Dr. BEATTY proposed "The Officers of Sections." The first splitting of the Association into sections took place in Dublin; it was a most important step for making the Association what it ought to be. [*Applause.*]

Dr. LAYCOCK responded. He congratulated the Association on having established the Section of Psychology. It had not been quite so successful as some of their friends hoped; but they hoped for a better prospect on some future occasion.

Dr. STEWART would ask the meeting, even at that late hour, to give their thanks in a cordial bumper to one of the most useful and hard-working officials of the Association. In their General Secretary they had one who was thoroughly devoted to the interests of the Association, and who did his utmost to promote its welfare. [*Applause.*] It must be that in any large body, one who occupied such a station was exposed to more or less of animadversion. But if they considered that, during the period of seven years that Mr. Williams had held the secretaryship, the members of the Association had more than doubled, they would agree with him that much allowance must be made for one single man who had so very large an increase of business and responsibility, and he claimed for the General Secretary that which was only his due, the indulgence and cordial co-operation of the members of the Association. He was sure that, as the Association yearly increased by hundreds, the hearty goodwill and cordial co-operation of all the local secretaries and of the members of the Association would be granted to the secretary to enable him to discharge his labours and his responsible duties. He proposed "The Health of Mr. Watkin Williams; long life to him, and much success to him in his labours." [*Loud cheers.*]

Mr. WATKIN WILLIAMS heartily thanked the meeting. There was no doubt that in so large a body some wheel might not run quite smooth; but when he found year after year so much kindness shown to him, he thought he had quite enough to induce him to bear with those who might have imaginary or real grievances—he hoped not often the latter; the former, he was afraid, he could never cure. He thanked them heartily for that mark of respect towards him, and it had always been his desire to deserve it. [*Applause.*] He saw that he was to propose the next toast. He felt that in speaking to the Newcastle Branch he had some little right as a parent. Six years ago, there were but thirty-three members in the counties of Northumberland and Durham. He was then told that it was perfectly hopeless to try anything in Newcastle, for several of the medical men in the place had been spoken to, and it was clear that it was labour in vain to attempt to move them on behalf of the British Medical Association. He surveyed the ground. He found a very large medical population; and he believed that, if the matter were set fairly before them, they would join the Association some day or other. At Cambridge, when he met his esteemed friend Dr. Philipson [*loud applause*] with one or two others, they talked the matter over. To Dr. Philipson's energy, to his great amiability, to his great kindness, at the same time never losing one single opportunity of advancing the object he had in hand, they owed a great deal. They saw that day at the Convalescent Home what he was capable of doing; and in the Northern Branch they saw what he was capable of doing for the Association. Instead of thirty-three members, they had now nearly three hundred. [*Cheers.*] He had to couple with Dr. Philipson's name the other honorary secretaries of that meeting, every one of whom deserved a bumper. He gave "the Health of Dr. Philipson and his co-secretaries for the year;" and cordial thanks to them for the great labours they had undergone. [*"Three cheers for Dr. Philipson," and "one cheer more."*]

Dr. PHILIPSON, on behalf of the Local Secretaries and himself, returned acknowledgments. If, in anticipating the wishes of the members in providing for their comfort and for their diversion, they had, to some degree succeeded, they had had their reward; and this meed of approbation was so much overplus gratification to them. [*Applause.*] In their endeavour to welcome that Association in a proper and befitting manner, they had been ably guided and counselled by their distinguished President [*cheers*], who had thought no endeavour too great, who was ready at any time to guide and to help them forward with his mature judgment and counsel. They had also had a local committee, who thought no labour too great that they could devote to the service and the interest of the Association. Although, therefore, they justly felt that they could not receive the credit which had been ascribed to them, nevertheless it was a gratification to them to know that the members had been pleased with the reception which they had received at Newcastle; and it would be remembered by the Committee with joy and satisfaction that the annual meeting of the British Medical Association in Newcastle-upon-Tyne in 1870 was regarded with favour, and was looked upon as a not unworthy successor of the brilliant gatherings at Dublin, at Oxford, and at Leeds. [*Applause.*]

The PRESIDENT then gave to "our next merry meeting," and the company separated.

FRIDAY, AUGUST 12th.

The Sections met at 9 A.M., when the following papers were read.

Section A.—*Medicine.*

- Philipson, G. H., M.A., M.D. Notes of a case of Biliary Fistula.
Bell, the Rev. D., M.D. Remarks on the Beneficial Effects of Combining Tonics with Aperients in Chronic Constipation.
Drysdale, C. R., M.D. Syphilis in Physicians' Practice.
Roberts, Wm., M.D. The case of a man who had a Vesicular Eruption on the Abdomen, which discharged at times great quantities of a Chylous Fluid.

Section B.—*Surgery.*

- Smith, Protheroe, M.D. Diagnosis and Treatment of Tumours and Effusions by means of exhausting needle-trocars.
McLean, D., M.D. On the Treatment of Hæmorrhoids.
Manson, R. T., L.R.C.P.Ed. The Success of the Antiseptic Treatment of Wounds Explained without reference to Germs.
Heath, G. Y., M.D. On the Rapid Pressure Treatment of Aneurism.

Section C.—*Physiology.*

- Bennett, J. Hughes, M.D. Interim Report of Committee appointed to investigate Antagonism of Remedies, with Experiments.
McVail, D., L.R.C.P.Ed. Respiratory Mechanics.
McKendrick, J. G., M.D. Exhibition of a new Spirometer, by Bergeon and Kastaus.

Section D.—*Midwifery.*

- Miller, Hugh, M.D. The Diet of Parturient Women.
Smith, Protheroe, M.D. Recent Improvement in the Pelvic Band.
Keiller, A., M.D. Instruments and Casts.
Boyd, James, L.R.C.P.Ed. A case of Puerperal Convulsions successfully treated by Chloroform, etc.

Section E.—*Public Medicine.*

- Rogers, Joseph, M.D. Dispensaries and Medical Relief.
Bennet, J. Henry, M.D. On the Climate of Algeria.
Topley, G. W., F.G.S. On the Distribution of Disease in the Northern Counties.
Tessier, W. H. C., M.D. Remarks upon an Epidemic of Intermittent Fever in the Mauritius, during 1866-7-8.

Section F.—*Psychology.*

- Sankey, W. H. O., M.D. The Etiology of General Paresis.
Richardson, B. W., M.D., F.R.S. The Physiological Reading of some of the Phenomena of the Emotions.
Laycock, Thomas, M.D. How far are Alcoholic Stimulants necessary for the Treatment of ordinary cases of Delirium Tremens?

The concluding general meeting was held in the afternoon in the Lecture Room of the Literary and Philosophical Institution, the President (Dr. Charlton) presiding.

THE REGISTRATION OF DISEASE.

Dr. RANSOME (Manchester) read the report of the Committee on the Observation and Registration of Disease. [It was published at page 198 of last number.]

Dr. PAGET (Cambridge) moved the reception and adoption of the report. He also moved—"That a deputation from this Association should seek an interview with the President of the Poor-law Board, to represent to him the views of the Association with respect to the registration of disease, and that Dr. Rumsey, Dr. Sibson, Dr. A. P. Stewart, Dr. Morgan, and Dr. Ransome be requested to form the deputation."

Dr. WATERS (Chester) alluded to the success attending the reports in Manchester and in Newcastle-upon-Tyne, under the influence of Dr. Ransome in the former town, and of Dr. Philipson in the latter. At the present time, there was a probability of these reports being discontinued. They had also been carried out and discontinued in other places; and it was perfectly clear that, while seconding the adoption of the report, the time had arrived when some further action should be taken in regard to registration of disease. [*Hear, hear.*] It was quite clear that, however energetic individuals might be in different localities, without some definite plan by which these reports could be uniformly and far more extensively carried out, all that good which was to be derived from them could not be realised. [*Applause.*] Referring to the request that a communication in writing to the Sanitary Commission, he stated that they had little belief in the effect of private communications. They had reason to think that they too often went into that general receptacle—the waste-paper basket. He further remarked that it had been suggested that these returns should not be made—as was too often the case with the work of the profession—gratuitously;

but that, in a great public matter of that kind, a fair and just remuneration should be accorded by the State to those gentlemen for making such returns. [*Applause.*] The motion was carried.

THE MEDICAL ACTS AMENDMENT BILL.

The discussion on the Report of the Committee appointed to obtain Direct Representation of the Profession in the General Medical Council was resumed.

Dr. ACLAND (Oxford) rose under a sense of the difficulties of the subject. First of all, he might say, above all things he desired the harmonious action and co-operation, not only of the Association but of every Branch and every member of the profession [*applause*]. The members had been informed on the previous day and informed again that day, that the time for discussion was limited—in other words, that one of the most critical questions which had ever come before the Association or before any other meeting of the profession, as regarded its general social organisation, could not be fully discussed. In order to save time he would at once say that, understanding the present condition of the business to be that the adoption of the Report, which came into his hands the previous night, had been moved and seconded, he would propose an amendment; and in whatever he said and in the course he took, he earnestly begged the sympathy of all the members of the Association with him in endeavouring to condense a question which could only be properly stated at great length. He would read the amendment which he thought it desirable to propose.

"That this meeting learns with regret—1. That a Committee of this Association has refused, in the name of the Association, the offer of Mr. Forster, Vice-President of the Privy Council, to grant a Committee of the House of Commons at the commencement of next session of Parliament to inquire into the question of direct representation in the Medical Council. 2. That, in consequence of this refusal, the Government declined to proceed with the Medical Bill, on which Lord de Grey, Lord President of the Privy Council, has bestowed great labour and attention, in connection with the Council and its Executive Committee containing representatives from England, Scotland, and Ireland. 3. That hereby much valuable time has been lost to the public in the settlement of various important measures affecting medical education, as well as the hearty co-operation of a Government truly anxious to promote the best interests of every branch of the medical profession."

That was the amendment; and first of all, he would refer to the propriety of any individual presuming to dissent from or criticise the labours of so important a Committee as that which had reported. He was sure that he appealed without the slightest chance of want of consideration to the readers of the JOURNAL and the readers of the medical periodicals generally, when he pointed out to them the great difference there was between the members of the Medical Council and the members of the Committee, in this, that they, the members of the Medical Council—of whom there were four or five then in the room—being members of the Association, were equally concerned in the honour and well-being of it, and of every member belonging to it, but were at the same time charged by the Legislature, under Act of Parliament—with the endeavour to perform certain duties, and were bound strictly by the letter of the Act as to what they were to do and as to what they were to leave undone. He, for one, had had no choice in the matter. Being officially related to one of the Universities, which under the Act was compelled to send a representative, he could only assure them that, to the very best of his judgment, and the best of his poor ability, from the moment he entered that Council he had assiduously sought to do the best he could for promoting the social character, the well-being, the education, the standing, and the position of every member of the profession, as much as any of those gentlemen who had attacked the Medical Council for neglecting to discharge their duty. That was the first time he had spoken in an attitude of defence on that subject, for it would have ill become one whom the Association had honoured by electing him as President, to have spent one moment in contradicting charges brought against the members collectively or individually of another professional body by a professional body which he also happened to represent. The Medical Council was charged with certain duties; they had endeavoured to discharge those duties—imperfectly, perhaps, and subject to all the liabilities of error of judgment which any twenty-four men might have; but what he wished to say was that, when Mr. Walpole originated the Act in 1858, he did the best he could, as representative of the Government of the time, to select a suitable Council; and he (Dr. Acland) further maintained that, under all the extreme complications of the case, all interests were then represented. True, the Council were a heterogeneous body, but they could not help it; and within the Council the whole of the profession was virtually represented. Mr. Walpole left out none of the bodies to which all members of the profession belonged. [Here the speaker was informed

that ten minutes had elapsed, and that he could speak for only five minutes more.] It was impossible in the space of time allotted to him to state the case, therefore he should only take two points. Lord De Grey, who was a very shrewd man, recommended to the Council—and they in discussion with him acceded on the whole to the various propositions recommended—what he believed to be the best for the whole profession. With the full force of the most powerful Government we had had for a considerable number of years, he endeavoured to grant as much as was within the reach of the profession and within the power of the Government to give. He understood that gentlemen, of whose honesty of purpose, of whose personal character, and of whose firm conviction that they were doing their best for the Association, he did not entertain the slightest doubt, had refused on behalf of the Association Mr. Forster's proposition that so much for the improvement of medical education and the medical status should be granted last session. Mr. Forster had promised not to oppose the formation of a Committee of the House of Commons to inquire into the vexed question of the constitution of the Medical Council at the next session of Parliament. The services of the Government were therefore lost for the present, and all its labour was thrown away. He thought that under these difficult circumstances of time and place, he was not appealing too much to professional and brotherly kindness in asking to add that, among the sources of happiness and instruction he had received in the course of his life, he might count the intercourse which he had had with the most eminent and excellent members of the Council, who came from every part of the kingdom to consider their common interests. A more sincere set of men he had never worked with, nor a set of men who were more likely to endeavour to carry out the just wishes of the profession. That was his honest opinion; and he was truly sorry that it had so come about that they had so far failed in their endeavours, and that it had been thought necessary to inflict upon the Government and upon the Medical Council—a much feebler body—the absolute vote of censure which practically—[cries of "No, no"]—if they wished, he would withdraw it and put it in another shape, and say that it was at all events drawing a bar right across the best endeavours of the Government and the Medical Council to serve the profession according to their judgment. Now the Bill had been thrown back, they had simply to wait and consider the action of private members. He was quite sure that he for one earnestly and heartily wished them success in their endeavours; and if he were called upon still further, either publicly or privately, to work with them, he should continue to do as he had done—the best according to his judgment, for the whole profession. [*Applause.*]

Dr. EMBLETON (Newcastle) seconded the amendment. He was glad that the members of the Medical Council had the opportunity of placing themselves right before the profession at large, and controverting those reports and assertions which had been from time to time thrown out to the detriment of the Council. The members of the Medical Council had not replied to the writings against them in the medical journals, but had rather desired to suffer in silence than to create discord and excite discussion among the profession. He maintained that the Report, if not a direct, was an implied, censure on the Medical Council [cries of "No, no"], and he endorsed every word that had been spoken by the previous speaker.

Dr. WATERS (Chester) was happy to find that the Report had only elicited dissatisfaction upon one point—that of not accepting a Bill which did not provide for the direct representation of the Profession in the General Medical Council. He could scarcely charge the Report with having imputed anything in the way of blame to the General Medical Council. He did not think there was the slightest necessity for any one to defend the acts of the Council. He saw in the Report no imputation of dereliction of duty, of negation of the desires of the profession. The Council was only referred to by implication; at any rate, for his part—who had had something to do with drawing up the Report—he could most distinctly declare that he had no idea of blaming the General Medical Council. [*Applause.*] Now, if those gentlemen who were on the Medical Council, and who were in such strong force, indicated so great an amount of sensitiveness as to see in the Report a direct charge upon them (for Dr. Acland had declared that he regarded the Report as an "absolute vote of censure" on the Medical Council), what must be his (the speaker's) position, as having acted with the Committee, when he found an amendment moved, which could only mean one thing, that the Committee had been guilty of a gross dereliction of duty, and had acted in opposition to the interests of the profession in not allowing the Medical Bill of the Government to pass unopposed? Such an amendment could be interpreted in no other terms than as a vote of censure upon what the Committee had done. The question whether the Medical Council were right or wrong was irrelevant, for their conduct was not impugned in the Report.

Under these circumstances, he would return to the main point—should or should not the registered medical practitioners in the kingdom have a voice in the election of a portion of that body which was for the future to govern it—[*applause*—]and not to govern it as it did under the Act of 1858, but as it was proposed under the amended Bill of 1870, whereby they were given greater powers. He then stated the circumstances under which the Committee was formed, and how, after the resolutions in favour of direct representation had been passed, at the meeting of the Association in Dublin, in 1867, the Committee waited on the General Medical Council, and most deferentially entreated their co-operation. He then predicted that unless they agreed to this prayer of the Association legislation would be impossible; for that, when the time for action arrived, the Council and the profession would be found in opposing camps neutralising each other; and he appealed to the members as to whether the result had not fully justified the prediction. From that day to this, the Council had accorded no answer to the Association. The Committee then had an interview with the Lord President of the Privy Council, who assured them that their representations should have the fullest consideration, and that he would be no party to an imperfect Bill. They left with the impression that the wish of the Association would be granted; but, whether owing to the influence of the Medical Council, which, the representative of the University of Oxford had informed them, had been in constant communication with the Government respecting the Bill, or to some other influence, they found themselves, when the Bill appeared, totally disregarded. He then described the action they took in respect to the amended Bill when it was before both Houses of Parliament. Mr. Forster stated he would not oppose the appointment of a Select Committee, but he did not say he would grant them a Select Committee, if they would allow the Bill to pass. [*Applause.*] That was quite another matter; and he asked them to consider what would have been the position of the Association if they had accepted that proposition? They would have had the full expense of that Committee on their shoulders, and the Representation Committee was not in any way prepared to agree to that; and under these circumstances they were bound not to accept the Bill. [*Applause*] He reminded them that the Universities and Corporations had representatives in the legislature, had funds wherewith to pay delegates to watch the passing of Bills through Parliament, while the Association had no funds at its disposal for such a purpose. He concluded by appealing to them to reject the amendment, because it was a vote of censure on the action of the Direct Representation Committee, which had to the best of its abilities and judgment done all it could on behalf of the profession. [*Loud applause.*]

Dr. SIBSON supported the motion for the adoption of the Report. He first spoke of the approval which the Bill had in frequent votes received from all Branches of the Association, and of the causes which had ultimately led to its rejection. He had heard some of the members of the Medical Council say that they would not object to a fair representation of the profession. What did the Association want? Certainly it did not aim at upsetting the Corporations and Colleges; and the profession would send no men as representatives who had not attained a great position. The method was simple; and the object was so great that, if it would do good, he would go on his knees and ask that, if possible, a great and good measure might be brought about. [*Applause.*]

Dr. STOKES (Dublin) said that some of the speakers who preceded him had gone a little too far on one side. The question for them to discuss was not whether popular representation of the Association was a good thing or a bad thing; but the real question was, whether the Committee had acted with judgment in rejecting the whole Bill because one matter which they considered, or the Association considered, desirable, was not inserted. This was the first point. As a member of the Medical Council, he could add his confirmation to every word that had fallen from Dr. Acland about their anxiety to serve the profession, not as delegates, but as legislators. This was a very important distinction. He, in common with the other members of the Council there, felt that they stood there in a very extraordinary and anomalous position, as they were members of a governmental department and members of a great Association that had been placed by the action of the Committee in antagonism to that department. Nobody could deny that, if ever there were an opposition and antagonism, it was shown when, the Minister having offered a large Bill—he did not say a perfect, but a large Bill—and asked the opposition to it to be withdrawn, the Committee said, “No, we will not have it, unless you give us the whole”; and when, the Minister having said, “The whole must be considered; I will give you a Committee next year”, they replied, “No”; and then followed the result that the Bill was withdrawn—not thrown out by the efforts of the Association—but withdrawn by the Minister in disgust. He had not overstated the matter. It had been represented to

the Government that this refusal of the Bill was the act of the whole four thousand members of the British Medical Association; but he respectfully begged to express his very great doubts as to whether that representation was accurate. He did not think it was the sentiment of every one of the four thousand that the Bill should be rejected. Because why? Because there was no reason to believe it so. These four thousand men were not consulted as to whether the Committee, in its conference with the Minister, should reject the Bill. He would merely refer now to some observations which he had the honour of making at the meeting at Oxford—that the great means of elevating their profession, individually and collectively, were twofold: first, the elevation of their scientific character; and next, the advancement of social feeling amongst one another. The value of these annual meetings—the value of these meetings socially, and in forming new friendships—was a value that, in his opinion, almost overrode the scientific element [*hear, hear*]; and he believed that large numbers could have no great advantage in being called to a distance to go into a discussion upon matters which were still very much undefined and uncertain. He did not stand there as an opponent of the Direct Representation Committee. Far from it. He merely said—as he had said at the first meeting—that they should have taken the Government Bill as an instalment, and have allowed it to pass. [*Hear, hear.*]

Dr. BEATTY (Dublin) thought it right to announce the reason why he did not vote for the amendment. He considered that the Bill was so vicious from the beginning up to the very end, that he was delighted when any excuse could be found for having it thrown into the waste-paper basket. [*Laughter.*] He entirely approved of direct representation, and would be very glad indeed if it were accomplished; but there were a great many points in the Bill that he considered so detestable, that he could accept any excuse to send it to perdition. [*Laughter.*] For this reason he could not vote for Dr. Acland's amendment, because there was an approval of the acts of the Government and an assumption that the Government were anxious to improve the condition of the medical profession on all points. The Bill showed to him very clearly that the Government would do no such thing. The Bill was a destructive Bill—uprooting old institutions simply because they were old and useful, and substituting something in its stead to suit the fashion of the present day. The old institutions were admirable, and, if they were properly handled, most useful results would have been brought out of them. [*Applause.*]

Dr. PAGET felt strongly that the Medical Council had not had justice done to them; but he did not wish to take up time with this subject, as it was not entirely germane to the amendment. It must be known to those who read the minutes of the Medical Council's proceedings, that many members of the Council were certainly in favour of enlarging the basis of the profession in the Council. They must have seen—for the numbers and names were published—that, although some members were unfortunately absent, at least one-half of the members of the Council were in favour of enlarging the basis of representation. Every member of the Council judged for himself, and he could not say that there was a majority agreed upon any one scheme for increasing the representation of the profession in the Council. They had various opinions; and it was the variety of opinions that prevented the carrying of a resolution in favour of a particular proposal. That was all he wished to say as to the Medical Council; and he would now say a word in reference to the amendment. Dr. Waters thought he saw in the amendment a charge of dereliction of duty against the Committee, who acted for the Association. He conceived that the proposer and seconder of the amendment could not be thought to have such a notion in their minds; and there was nothing in the amendment that could possibly bear such an interpretation. On the contrary, he had no doubt they felt as he did, that the members of the Committee had acted with excessive zeal and energy, and had, as they thought, done the best for the Association and the best for the profession at large; but it was surely allowable for each member to form his own judgment as to whether they exercised a good judgment or not in the matter. They had, in his opinion, erred in judgment, however good their intention may have been. They had erred in judgment, because not only was the Bill deferred by their action, but they had no certainty that it would be brought in next session. They had reason to think that a Bill would not be brought in, and that the Government would give up this matter in disgust. [*“No.”*] Consider what would be lost by the loss of this Bill. In the first place, it had always been spoken of as a scandal in the profession that a man who had been able to pass either in surgery or medicine could practise both branches only by proving his competency in one. The Medical Council was bound by the Act of 1858 to put on the *Register* any man who came to them with a diploma of medicine or of surgery; and they had no power to prevent his practising both, although he might be acquainted

with one only. The removal of this scandal would be deferred. Another thing was the making of one portal to the profession. It was the only way in which they could possibly prevent the entrance into the profession of men who disgraced and degraded it, and whom the public trusted at their peril. For this, the Medical Council were not to blame. They had no power under the Act of 1858 to remedy this grievance while there were nineteen licensing bodies in the profession. Let them not think that he blamed these bodies: the large proportion of them did their duty extremely well; but unless all did their duty well, honestly, and carefully, there would enter the profession men in whose hands the public were not safe; so that it was—perhaps for years—a question of lives lost that might have been saved, and sufferings endured that might have been prevented. Let them consider the gain to the profession, still more to the public, if these remedies had been effected. Then again, by another clause, quackery would have been checked—men who called themselves surgeons, doctors, or physicians, and so imposed upon the public, would have been detected and punished. These three things, and many more, the Bill would have effected. They would have been for the good of the profession, and still more for the benefit of the public. As a member of the Association, he did not like that it should oppose the true interests of the public. Its members would lower their influence with other members of the profession, and with the public and the Legislature, if it were surmised that they made their grievances, whether real or sentimental, an obstacle to the welfare of the public. He would therefore vote for the amendment, and vote for it very heartily. [Applause.]

Dr. HUGHES BENNETT (Edinburgh) said that the question they had now to consider was, whether they should support the recommendation of the Report to appoint a Committee to bring another Bill into the House of Commons, or whether they should support the amendment now moved by Dr. Acland regretting the conduct of the Direct Representation Committee. [Hear, hear.] The amendment at the commencement called upon the meeting to affirm, that the Committee of the Association had refused, in the name of the Association, the offer of Mr. Forster, Vice-President of the Privy Council, to grant a Committee of the House of Commons at the commencement of the next session. But he understood from Dr. Waters that no such proposition had ever been made by Mr. Forster. [Hear, hear, and applause.] Further, had Mr. Forster, on the part of the Government, made such a proposition, he understood it would have been gratefully received. He was informed (and the Report stated) that the Government said they would not oppose the appointment of such a Committee. Now this was a very important thing. Dr. Acland had told them that Mr. Forster suggested that Government would have a Committee; and their Committee had told them that what Mr. Forster had said was, that they would not oppose its appointment. These were two separate things. It was quite clear that, if the Committee were correct, Dr. Acland was in error; and that, if Dr. Acland were correct, the Committee had been in some way deceived. It was true that they were not in a position to decide on the two statements; but they were two different things. If Government brought forward a proposal to appoint a Committee, they would have to pay all the expenses; whereas if they simply proposed to allow a Committee, the whole of the expenses would be thrown on the Association. Therefore he thought there was some little discrepancy; and, unless it were cleared up, it was certain they could not support the proposition of Dr. Acland. Now, they must all agree that what had been said about the Council was quite irrelevant. Nobody who had followed the action of the Medical Council in the slightest degree could doubt that every one of its members had been actuated by the purest endeavours to improve the state of the profession. But, although actuated by the best efforts, they had, as Dr. Paget had said, all their individual opinions; and their efforts had not been put in such a direction as to benefit the profession at large. And that was not surprising. They must remember that those gentlemen were delegates from particular bodies; and, although he had not the slightest doubt that they all endeavoured to act for the public good, there could be no doubt, on the other hand, that they were all anxious to benefit their separate corporations. Now, it was simply with the desire for correcting what must be admitted to be a possible evil, that this Association wished to introduce a new element into the Council; and they said, "Whilst still represented by those great corporations and eminent universities, let us, the profession—a new element—be brought in to temper, as it were, the little feeling that may exist in favour of your special departments." As a Member of a University and a Fellow of a Corporation, he did not yield to any man in his desire for the advancement of these bodies; but he thought the desire for direct representation on the part of the Association and the profession at large to be perfectly reasonable; and conse-

quently the efforts that had been made in that direction by the Association ought to be supported. When, therefore, a Bill was introduced, from which this element was entirely excluded, and when, as Dr. Waters pointed out, the subject had been brought before the Medical Council, and the Council did not support it, there arose the question, "Shall we accept this Bill, good as it may be in many particulars, at the risk of not getting our wishes? or shall we oppose that Bill, with the design of ultimately introducing a better?" He thought that the Committee acted energetically and at the right moment. As he believed, they acted well and properly. He had no hesitation in giving his support to the motion. [Applause.]

Dr. RUMSEY (Cheltenham) regretted the tone which the discussion had taken, and that what was intended merely as an expression of opinion had been received as a hostile demonstration. That it would be so, was very apparent from the outset of the proceedings. [No, no.] The speakers had talked of the members of the Medical Council assembling there in force. That was an unfounded insinuation. There were only five of them. They did not come there as opponents of the profession, but came as able to support the profession as Dr. Waters himself. He believed that the rejection of the Government Bill was deeply deplored by a very large number of the profession in this country. He knew that the Gloucestershire Branch—of which he was a member—would not come to any decision as to whether they would be better off with a direct than with an indirect representation; and for the Committee to speak for four thousand men was an assumption. ["No, no," and "Hear."] He regretted very much that the Bill had been thrown out; for he very much feared, as a member of the Association, that they would not get so good a Bill another time. His own belief was, that Government would not be troubled with the matter of medical reform in a future session, unless they saw that they had a better prospect of carrying the measure than the Association—he begged pardon, the Committee [Oh, oh!—had given them reason to expect. He very much feared that, if the Government brought in another measure, they would not put the management of medical education into the hands of a representative body at all. It was very probable they would have a Board appointed by the Government to carry on medical examinations; and he questioned whether any of the bodies would have the least voice in the matter. [A voice, "We won't have it."] Then probably they would have no reform at all. They had lost a great opportunity. [Applause.]

Mr. HECKSTALL SMITH said that the last speaker had said he believed a very large portion of their body, a majority—

Dr. RUMSEY: No, not the majority.

Mr. SMITH: You said a large proportion are opposed to the action of the Committee on this point.

Dr. RUMSEY: I did not say on this point. I said there was difference of opinion on the point of direct representation.

Mr. SMITH said that those to whom Dr. Rumsey alluded might not have had an opportunity of expressing their opinion on the question. The Association should give their entire confidence to the Committee. He happened to be President of the Metropolitan Counties Branch; and, though not a member of the Committee, he had endeavoured to aid them as far as he could, and had communicated with many members of Parliament regarding the Bill. With a strong conviction, he deliberately expressed the opinion that the course pursued was the only course of safety which lay open to them. It would be remembered that the Government had at first resisted any approach towards granting direct representation in the Medical Council. It was known to the Committee that their view, at all events, was apparently the universal opinion of the four thousand members. [No.] It was apparently so. No one had charged the Medical Council with not doing the very best they could to endeavour to elevate the status of the profession; but, as to the point under discussion, it was quite evident that the Medical Council had not endeavoured to have direct representation made a part of the Bill. Dr. Rumsey had told them that he knew a considerable number of members of the Association who were not in favour of direct representation; and he thought that proved that somehow they had been near Dr. Rumsey. But had any of them expressed their opinion publicly. Was there one single petition emanating from any body in the profession, showing that they differed from the other members of the Association as to the want of direct representation? [Applause.]

Mr. SOUTHAM (Manchester) said that he thought he was one of the three remaining members of the original Committee appointed during the time of the passing of the first Medical Bill. He had watched the proceedings of the Medical Council since that time; and his opinion was that, from the way in which they had conducted affairs, the medical body was benefited; and that benefit had arisen from the manner in which the details of the Bill had been carried out. He had the greatest respect for the members of the Medical Council present;

and, if the Association had been asked to appoint representatives, both the gentlemen who moved the amendment would have been elected. But he thought the members of the Medical Council were like property-valuers: there was one set of spectacles for the person for whom they valued, and another set for themselves. If they had looked through the spectacles of the medical profession generally, then they would have settled the matter; but, unfortunately, they had looked through the spectacles of the corporations, and consequently saw that they had to protect the corporations, and look to their interests instead of the interests of the profession. With regard to the proposed Committee of the House of Commons, this possible Committee—as if there was just a vague chance of it—he could say that the same thing was said when the first Medical Reform Bill was brought forward. “Let us get a Bill, and then all will be arranged,” was said; but no attempt was ever made to alter it. His own view was, that the Committee had done perfectly right in resisting the new Medical Bill which did not alter the constitution of the Medical Council, which, no doubt ought to have been the main point in the Bill. With a good Council, he had no doubt all things would work well. [*Applause.*]

Dr. CHADWICK (Leeds) would not have spoken, but for Dr. Rumsey's repetition of the charge, which had already been answered, that the Committee, as distinguished from the Association, obtained the rejection of the Bill. He had presided at a large meeting of the Association in London, where only one hand was held up against the principle of direct representation; and was it for the Committee to neglect that unanimous decision? They were sent to speak the will of the Association; they had done no more. To that meeting every member of the Association had been summoned. Why did not the members of the General Medical Council, who were here now, attend on that occasion? He yielded to no one in respect for that Council; but he was bound to say that they had not treated the Association well. They had been in communication with the Government; and the Lord President of the Privy Council had many months ago assured the deputation from this Association that he would be “no party to an imperfect Bill.” From these premises he, as a practical man, concluded that it would not have been safe to rely on the partial promises of another Bill, which had been offered as the price of their abstinence from opposition. It was clear that neither the Government nor the Medical Council were particularly anxious to give them direct representation. It was futile for Dr. Rumsey to speak of what his neighbours thought: he (Dr. Chadwick) might do the same. It was merely supposition against supposition. The petitions to the legislature were the best test; and he could assert that, out of nearly a hundred practitioners in his immediate district, only two omitted to sign the petition, in consequence of absence from home.

Mr. HUSBAND then replied. He had proposed the resolution, and, as one whose conduct had been impugned, he would call the profession and this Association to witness that not one man had got up there that day, excepting the five members of the General Medical Council, to blame the Committee for what they had done by the instructions of the Association. [*Applause.*] The Committee had acted upon the instructions of four general meetings, upon the instructions from the Branches, and from hundreds of petitions; and they would carry out the instructions honestly and fearlessly, caring for no Medical Council or for any one, so long as they were acting (as they believed they were), as the faithful and loyal servants of the Association. [*Applause.*] The members of the Medical Council had first opposed the Government; they then succumbed to the Government who said, “You say so and so, the Government won't have it”; and they, next day, ate humble pie; and now they blamed the Committee because they also did not give way. As to the Committee of the House of Commons, they were told that that Committee would not be brought forward with the power and weight of the Government, who simply said they would not oppose the Association having a Committee. And what would have been the answer when the Committee was moved for in the House of Commons? It would be said that they were an unreasonable set of men—that the question was settled last year—and that we had not tried the new Act. They would have been unworthy of the confidence of the Association if they had enabled the Government, by such a flimsy pretext, to pass the Bill. He did not think there was any doubt, for one moment, that direct representation ought to be obtained, and that the great intelligent body of the profession ought to be fairly represented in the Council. [*Applause.*]

The motion was agreed to, there being only seven or eight hands held up for the amendment.

[With reference to this discussion, Dr. Rumsey requests us to state that he was prevented by want of time from giving the following explanation in reply to Mr. Heckstall Smith and Dr. Chadwick: First, that his assertion relative to the opinions of a large proportion of the

profession was not based on what he knew about the Gloucestershire practitioners, but from a sphere of information not smaller than Great Britain itself; and, secondly, that, to avoid the appearance of (in any way) influencing his friends and medical neighbours, he purposely absented himself from the meeting referred to, and took no part either by word of mouth or by letter in their deliberations. He thought this course most decorous, as a member of the General Medical Council.]

Mr. UNDERHILL (Tipton) proposed the following resolution.

“That the following gentlemen be appointed the Medical Reform Committee, with full power to take such steps as they deem necessary to secure the adoption of the principles of medical reform advocated by the Association in any Bill which may be brought before Parliament; viz.: the President of the Association, the President-elect, the President of the Council, the Treasurer, Dr. Edward Waters, Dr. Chadwick, Mr. Southam, Dr. Sibson, Dr. A. P. Stewart, Mr. W. H. Michael, the Rev. Dr. Haughton, Mr. Heckstall Smith, Dr. Davey, Dr. Hughes Bennett, and the General Secretary.”

Dr. TILT (London) seconded the resolution, which was adopted unanimously.

CONCLUDING BUSINESS.

Poor-Law Medical Relief.—Dr. RUMSEY, as President of the Section of Public Medicine, brought up the following resolution, which had been passed at the meeting of that Section, and which it was resolved should be submitted to the general meeting of the Association.

“That the Committee of this Association appointed at Oxford in 1868, for the purpose of considering the subject of Medical Relief to the Poor in Great Britain and Ireland, and of co-operating with the Poor-Law Officers' Association, shall be re-appointed, with power to add to their number.”

He moved the adoption of this resolution.

Mr. MANLEY (West Bromwich) seconded the motion, which was carried.

The Antagonism of Remedies.—The following resolution which had been proposed at the meeting of the Physiological Section by Dr. C. J. GIBB, seconded by Dr. COSSAR, and unanimously carried, was submitted to the meeting and adopted.

“That the Physiological Section, having heard the interim report (by Professor Bennett, the Chairman) of the Committee appointed at the Leeds meeting of the British Medical Association in 1869 to investigate the antagonism of remedies, etc., and recognising the importance of the results which have been obtained both to science and to practical medicine, wish strongly to urge on the Council of the Association the desirability of aiding in every way in its power the prosecution of those investigations.”

State Medicine Committee.—Dr. STEWART moved the reappointment of the State Medicine Committee of the Association.

Mr. HECKSTALL SMITH seconded the motion, which was adopted.

Parliamentary Committee.—Dr. HENRY moved—“That it be referred to the Committee of Council to take steps for the reconstitution of a Parliamentary Bill Committee of the Association.”

Dr. STEWART seconded the resolution, and it was carried unanimously.

Election of Dr. Sibson as Vice-President.—Dr. CHADWICK moved a resolution, which, he said, he had pleasure in regarding as the last act of his official career as President. He had great pleasure in proposing that a vote of thanks be given to Dr. Sibson, late President of the Council, and that he be elected a Vice-President of the Association. [*Applause.*]

Dr. FALCONER seconded the motion, which was carried.

Votes of Thanks.—Dr. ACLAND moved—“That the grateful thanks of the Association be returned to the Mayor and Corporation of Newcastle; to the Committee of the Literary and Philosophical Institution; to the Directors of the Savings Bank; to the Gas Company; to the Committee of the Newcastle Infirmary; to the Council of the College of Medicine; to the Committee of the Natural History Society; and to the Committee of the Society of Antiquaries. Likewise that special thanks be given to the manufacturers, who had laid open their works; to Sir William Armstrong; to the Sheriff; and to the Local Secretaries.” He said that he did not consider the passing of this resolution a formal proceeding; for he thought they were greatly indebted to the various bodies included in the vote for the kindness with which they had been treated.

Dr. WATERS seconded the resolution, and said that their special thanks were due to Sir William Armstrong. [*Applause.*]

The resolution was put from the chair, and carried amidst hearty applause.

Dr. CARLTON having left the chair, which was taken by Mr. HUSBAND,

Dr. CHADWICK proposed that a vote of thanks be accorded to Dr. Charlton, the President, to whom they were greatly indebted for the satisfactory manner in which he had discharged the duties of his office. He had never seen the duties discharged in so perfect a manner as they had been by Dr. Charlton. [Applause.]

Dr. SIBSON seconded the resolution, which was carried by acclamation.

Dr. CHARLTON, in returning thanks for the vote, said that he felt his duties as President had only begun. He must follow the admirable example set by the late President of the Association, not to be merely an ornamental president, but to do his work in the great struggle that was coming on; and he promised them he would do that to the best of his power. [Applause.]

The proceedings of the general meeting then terminated.

THE ASSOCIATION AND THE UNIVERSITY OF DURHAM.

Conferring of Honorary Degrees.—At half-past one o'clock, the members of the Association proceeded by special train to Durham, where a special Convocation of the University of Durham was held for the purpose of conferring degrees upon distinguished members of the medical profession. The Convocation took place in Bishop Cosin's Library, Palace Green, at half-past two—the Warden (the Very Rev. the Dean of Durham, Dr. Lake) presiding. A great number of members of the University, as well as members of the medical profession, were present; also many ladies.

The WARDEN having stated the purpose of the Convocation,

Dr. EMBLETON said he considered that to be one of the proudest, and therefore the happiest, moments of his life, inasmuch as he had to present to the Convocation several eminent men belonging to the Medical Association—men whose superiors in the medical profession they would in vain, perhaps, seek to find in the United Kingdom. They were all men of eminence in their different cities and places of abode; they were all men of education—men of great learning, of great experience, and in the active practice of their profession. They were men trusted by all, and he did not know any better seven men whom he could possibly present.—Dr. Embleton presented in succession Dr. Charlton, Dr. Chadwick, Dr. Falconer, Dr. Sibson, Dr. Acland, Dr. Paget, and Dr. Stokes.

On the presentation of Dr. CHARLTON,

The WARDEN said he had not long been a member of the University, nor long known that part of the country; but since he had been in these parts he had heard no name more distinguished than that of Dr. Charlton. He was proud of Dr. Charlton being in any way connected with them, and of the opportunity of conferring upon him the chief distinction which it was in their power to bestow [applause]; namely, that of Doctor of Civil Law.

On Dr. CHADWICK being presented,

The WARDEN said the University had great pleasure for another reason in conferring the degree of Doctor of Civil Law on Dr. Chadwick. The University of Durham was connected with the Medical School of Newcastle-upon-Tyne, which they had now incorporated into their own University; and they knew that there was no medical school in the North of England which had been more distinguished in past times than the Medical School which Dr. Chadwick worthily represented, and which had been distinguished by the name of Hey and others, of whom Dr. Chadwick was a worthy successor. [Applause.]

Dr. FALCONER was next presented.

The WARDEN said for another distinct reason the University had great pleasure in offering to Dr. Falconer the degree of Doctor of Civil Law. Dr. Falconer's name had been known to him (the Warden) from almost his earliest years, not simply as his own, but as representing worthily his father, who was as distinguished in the annals not merely of medical science, but also of general literature; and on both grounds he University was proud to receive him as a member of their body.

Dr. EMBLETON then presented Dr. SIBSON.

The WARDEN said they were proud to hail a very distinguished member of the University of London, whose eminence they knew, particularly in all matters concerning medicine, was second to none. They had great pleasure in offering to Dr. Sibson that distinction which they had offered to his worthy brethren, and the more so as they knew there was no University which kept up that high standard of medical examination more highly than the University to which he belonged. [Applause.]

Dr. EMBLETON next presented Dr. ACLAND.

The WARDEN was sure that nobody there would need him to say that the presence of Dr. Acland in their body was an honour to them all. It was quite a peculiar pleasure to him privately to see Dr. Acland

there, and hail him as one of their body. For many years—almost as long as he could remember—he had known Dr. Acland as foremost not only in his own distinguished profession, but in advocating everything which could advance art, intelligence, and literature, in the University of Oxford. Therefore, he was proud to see Dr. Acland there, and to have the opportunity of enrolling him among their most distinguished members. [Applause.]

Dr. PAGET was next presented.

The WARDEN said the University could not need any recommendation to a person who came before them as they had just heard, as the representative of the great names of Harvey and Linacre; but if they did need such a recommendation, they would find it in the high position which Dr. Paget had always held, not only in the Medical profession, but also in the University of Cambridge. [Applause.]

Dr. STOKES, on being presented to receive his degree, was received with loud and prolonged applause.

The WARDEN said, in offering to Dr. Stokes this honour, he did it not merely on account of the University of Dublin, with which they were proud to be connected, but because he knew that in honouring him they honoured themselves, by conferring that degree on one of the best known and most distinguished, and one of the most beloved members of the profession. [Applause.] Therefore, he felt that not wholly for intellectual eminence for which he was so distinguished, but for that which was perhaps the completing crown of the medical profession; namely, moral dignity and greatness.

The Convocation then broke up.

Service in the Cathedral.—At 4 P.M., a full choral service was held in the Cathedral. Great pains were taken to render this service as complete as possible, and success attended the efforts. The musical portion of the service was, like the intonation, perfect. The Very Rev. the Dean then gave a sermon as remarkable for its sound and charitable advice and brevity as for the affectionate manner in which in eloquent terms he exhorted all people to work for the common benefit of mankind, thereby glorifying God. In the interval between the Convocation and the service, the members visited the different parts of the Cathedral. A large party accompanied Dr. Charlton, who kindly explained the various objects of antiquarian interest with which the building abounds.

Collation in the Castle.—At five o'clock the members of the Association were entertained at a collation in the Castle by the Warden and Senate of the University. About two hundred guests were present. The Warden (the Very Rev. the Dean of Durham, Dr. Lake) occupied the chair; and on his right and left were Dr. Charlton, the Right Rev. the Lord Bishop of Durham (Dr. Baring), Dr. Stokes (Dublin), the Archdeacon of Durham (Venerable E. Prest), Dr. Paget, the Archdeacon of Lindisfarne (Ven. Hans Hamilton), Dr. Embleton, Mr. J. Whipple, Dr. Falconer, Dr. Sibson, Dr. Chadwick, Mr. Husband, the Sheriff of Newcastle, Rev. Canon Eade, and Dr. Acland.

The WARDEN said the first toast was "The Queen," with which he coupled "The Church of England."

The BISHOP OF DURHAM responded. He said it was an antique toast; but he was an old man, and old enough not to think an antiquated thing bad because it was old; and therefore he ventured to stand up and return thanks on behalf of the toast, believing that the two things, Church and Queen, were really closely united, just because he believed that religion and liberty were closely united; and as he believed that, in past times, the Church of England had been one of the great supports of liberty in our land, so did he believe that, if the Church remained, as he believed she would, large-hearted, comprehensive, sound in the faith, so long would she be a real support to our country. [Applause.] They might differ from him in venturing thus to express his own feelings; but they need not hesitate to drink the health of the Church. Those who were strong reformers might still drink to its health in its reformation. Those who differed altogether might, at all events, drink the health of the Church of the future, if not of the present. [Laughter and applause.] It was a great pleasure to him that he had, at the invitation of the Warden and Senate, been able to be present as visitor of the University of Durham to welcome most heartily within those walls that large assembly of the British Medical Association. No one who, like himself, had been for many years a clergyman, could fail to see that there was a very close intercommunion between the clerical and the medical professions. Far distant be the day when the honours gained at Cambridge, Oxford, and Durham should not be considered honours which the entire medical profession could appreciate. Beyond that, the clergy, on going into their parishes, found in most instances that their greatest helpers were the members of the medical profession. They there met with men of intelligence, educa-

tion, high-mindedness, and good feeling, who, though largely engaged in their own work, largely helped the clergyman in his spiritual work by their ministrations to the sick and suffering. He himself would be a most ungrateful man, having been a clergyman in a large parish in London for nearly nine years, if he did not express his deep gratitude to a large number of medical men who were then his parishioners. His parish was one in which a large number of medical men resided. It included Cavendish Square, a considerable part of Harley Street, and Wimpole Street. Those who knew London were aware that this part was practically given up to medical men; and he must say that, as helpers in his parish, as Sunday school teachers, men often starting with small incomes themselves helped him most liberally with their contributions; and he thought that that parish owed a debt of gratitude for the help it received from the medical profession. [*Applause.*] He might venture to mention Dr. Burrows as one of his parishioners, and also Mr. Paget. [*Applause.*] There was also one for whom he had the greatest regard and esteem, and one who, if God had spared his life, would have been well known amongst them now—a man not long in his profession, but showing evident marks that he would rise to the highest point: he referred to Dr. Baly, who was killed by a railway accident. He was an intimate friend of his (Dr. Baring's) and his next neighbour; and he could still boast of the friendship of Dr. Burrows and Mr. Paget, who had been his welcome guests since he had been at Auckland Castle. But these men of whom he spoke were great helpers to him, and others were also, in his work as a parish clergyman. He might go a step further, and give another reason why he felt that the clergy owed a deep debt of gratitude to the medical profession. He had been honorary chaplain to the institution for the relief of decayed gentlewomen which was in his parish, and of which at that time Miss Florence Nightingale was the managing governess. Amongst the cases there were some of considerable danger and anxiety, and the medical attendance was entirely voluntary. A medical man's time was his money; and yet, although there were those attending that institution who were constantly occupied from morning to night, again and again had he known instances where the medical man came, not once only, but twice in the day, and watched as carefully, tenderly, and anxiously over the case for which he received no payment, as over the case of the greatest nobleman in the land. [*Applause.*] He might say that his experience in that institution forced upon his mind more strongly than any other circumstance the great liberality and high-mindedness of members of the medical profession. Indeed, he believed that, apart from the clergy, there was no body of men so warm-hearted, so generous, so self-denying, and so ready to sacrifice their own convenience and comfort for the benefit of others. Therefore it was with the greatest readiness and thankfulness that he accepted the Warden's invitation to attend on that occasion to welcome within those walls that noble band of members of the medical profession. [*Applause.*]

The WARDEN then proposed "The British Medical Association." This was an age of associations. Everything good, and he was afraid everything bad, was done by means of an association; and when a body of men like the present met together and interchanged thoughts, it brought to light what had been working in their minds perhaps during the past year. Might the Association prosper! and he could not couple it with the name of a better person than of his excellent friend Dr. Charlton. [*Applause.*]

Dr. CHARLTON said that the kind words of the Warden called for their warmest gratitude. At the same time, he must refer to what had fallen from his worthy friend the Bishop of Durham. He felt how lovingly, how affectionately, his lordship had spoken of the medical profession. The Bishop was a man who had had practical experience of it; he knew what the medical profession had to endure; he knew how long-suffering and patient they were, and how ready they were to aid; and where they met, as they generally did, the clergy of the parish, he believed there was very little which they could not effect in the way of ameliorating the sufferings of the poor. [*Applause.*] With respect to the British Medical Association, he might tell them that, without the kind cooperation of friends of his own in Newcastle, it would have been a difficult task to give the Association anything like a proper reception and welcome; but with their friends in Newcastle, and those whom they had met with a little further south, in the ancient, glorious old city of Durham [*applause*], they had succeeded, by the kind assistance of friends who, unsolicited, had come forward, like the Warden of the University and the Bishop of Durham, to help them. He believed that the members of the Association, when they went back to the South and the North, would long remember the kindly and good feeling that had been exhibited towards them by their reception in the University of Durham. [*Applause.*]

Dr. ACLAND proposed "The Dean and Chapter of Durham," and referred to the eloquent discourse which they had heard from the Dean

in the splendid old Norman cathedral. The Warden had touched, as also the Bishop had done, upon the relations between the medical profession and the clergy; and, instead of taunting medical men as being devoted to material work and physical science, to the destruction of religion and piety, the Dean had told them that matter and spirit went together towards one common end, the promotion of the kingdom of Christ. That was the union they wanted; and he was thankful that he had lived to be old enough (having served that University fifteen years ago as an examiner) on behalf of his professional brethren to tender to the clergy, in simple words, their acceptance of their share in their duty in promoting the kingdom of peace and of righteousness. He took that opportunity of throwing back, with equal indignation and scorn, into the hands of those who twitted them with it, the imputation that they were opposed to religion. That University had been placed, by the wisdom of the Dean and Chapter, in that far country of the North. It was a young institution; but it was placed in an old situation, full of tradition and of Christian learning. But he was sorry to say that they sometimes heard at Oxford that its doings were very small. That was an unjust charge, and one which he, for one, would endeavour to repel. It was a young institution; and he believed that a day of probation was one of the necessities for trying the mettle of institution of all kinds; and that, because they had not had time to develop, that was no reason why an attempt should be ruthlessly made to destroy them [*Loud cheers.*] He wished to mention to his medical brethren the fact that, before the Medical Act came into operation, in the year 1858, in that University it was arranged that examiners should go thither to conduct the examinations, with as complete and practical a clinical examination in surgery and medicine as ever had been found in the country. [*Loud cheers.*] Thanks to their friend Dr. Embleton, that system was carried on now. For these reasons—for the greatness of the position, for the magnificence of the institution over which the Warden presided, above all, for his kind advice that day, and for his hospitality in that hall—on behalf of his professional brethren he returned thanks, and most cordially proposed the health of the Dean and Chapter of Durham. [*Cheers.*]

The WARDEN responded.

Mr. HUSBAND proposed "The Mayor and Corporation of the City of Durham." [*Applause.*]

Dr. BOYD (Durham) responded, and said that, if at any future time the British Medical Association should visit that ancient city, the Corporation would receive them in the best way they could.

Dr. PAGET proposed "The College of Medicine of Newcastle-upon-Tyne." The College derived immense benefit from the University of Durham. That School and that University was one of the very first places in which that most excellent and only sure test of medical competency was carried into effect—a clinical examination; and he could not help thinking how exceedingly creditable that was for an University like that, in respect to largeness of views and conception. The University might have said that the study of medicine must be pursued within the precincts of their own town; but, instead of taking narrow views, they established a School at Newcastle. He associated with the toast the name of Dr. Embleton. [*Applause.*]

Dr. EMBLETON returned thanks. He believed that the Newcastle College of Medicine did endeavour, as far as its abilities went, to carry out its duties effectually. The College of Medicine was founded in the year 1834; and he was very happy to say that there were two gentlemen now alive—one of them in that room—who assisted at the commencement in founding it at Newcastle; viz., Sir John Fife and Dr. Greenhow. The School went on by itself for some years; and in the year 1851 or 1852 it became united with the University of Durham; and since then, up to last September, they had been the College of Medicine in connexion with the University of Durham. Now, fortunately, he hoped for both parties, the College of Medicine had become united with the University of Durham, and it was now the University College of Medicine in Newcastle-upon-Tyne, and its lecturers were the lecturers in the Faculty of Medicine in the University of Durham; so that it was now a part and parcel of the University. Dr. Acland had alluded to the University being a rising body; and he did not see—and he thought the University would agree with him—that because a body was young and struggling to get its head above water—because it had few graduates and licentiates—it should therefore be debarred from the privileges and advantages which older institutions possessed. [*Applause.*] He hoped that the Association would not consider that youth and inexperience were a bar to the full privileges of manhood.

Dr. CHARLTON said that it was at an early period, comparatively, of his career—for medical men were a long time in reaching their seniority—that he was called upon, now more than thirty years ago, to take part in the original Medical School founded by Dr. Greenhow and Sir John Fife. Later, now ten years ago, they had the great privilege

and advantage of becoming united with the University of Durham—a young University, to be sure, but an University which, though it had been injured by the improved means of communication, had yet a future within its grasp. It did not seek the *prestige*, wealth, or dignity of the old established Universities; but there was a still grander aim which Durham had before it, and of which he did believe that Durham could possess itself. Under the guidance of its most excellent and vigorous Warden, it might become the grand scientific University of the North. [*Applause.*] That, it appeared to him, was the course for the University of Durham. Durham had a grand future before it, if it became the great scientific University of the North of England. [*Cheers.*] Of the kindness of the Dean and Chapter, and also of the University, on that occasion, he could only speak in terms of the highest praise. It had appropriately finished the session of the Association. The grand service in the Cathedral and the excellent discourse of the Dean had given them the feeling that, though they worked hard for the things of this life, yet they must not forget the life hereafter. He proposed “Prosperity to the University of Durham, and the Health of the Warden and Senate.” [*Cheers.*]

The WARDEN, in responding, said no one wished more sincerely than himself that the University should really be a great scientific University, or rather, he should say, a great scientific stimulus to the North of England. But the first difficulty was, that a great part of the revenue must be appropriated to Durham; while the place where they should desire, in many respects, to see scientific teaching carried on, was Newcastle. It was no easy matter, when they had an University at Durham, to do the work at Newcastle. He, however, entirely agreed in the general principle. They never could make Durham a little Oxford or Cambridge. They would try first to make it a good school for the clergy of the North of England, for giving not merely a theological education, but a good general education to begin with; and everybody who knew anything about the education of the clergy knew that it must not be too exclusively theological. They must try to get a much higher school of theology than any other in the country; and along with that they must try very much to encourage the scientific education of the North. You could not travel on the railway near Newcastle without falling in with young men of remarkable ability, between the ages of sixteen and nineteen, for whom a good education would be an admirable thing, not only for themselves, but for the country. A man who had made a fortune of twenty or thirty thousand pounds at the age of forty began to say, “I would like to take part in the affairs of the country.” What sort of men were they who came into the House of Commons without education? He was told that they were the most helpless creatures imaginable. They could not do a better thing than give young men a good education—mainly scientific, but branching out in other directions; and this would be the object of the University. [*Loud applause.*] He felt his hands immensely strengthened by having as the bishop of the diocese a man of such strong sense and truly liberal mind as the Lord Bishop of Durham. [*Cheers.*]

The ARCHDEACON OF DURHAM proposed “The Strangers.”

Dr. STOKES responded, and expressed his solemn conviction that a worthy future awaited the University of Durham.

The company then separated.

EXCURSION TO ALNWICK.

ON Saturday, upwards of sixty members accepted the kind invitation of Drs. Wilson and Fenwick to visit Alnwick. It is needless to say that they were received with great hospitality. A considerable number of ladies accompanied the party. By the kind permission of the Duke of Northumberland, the party visited the noble castle of the Percys, which has of recent years undergone great improvement. At two o'clock the visitors, to the number of about two hundred, were entertained at luncheon at the Northumberland Arms Hotel by Dr. Wilson of Alnwick, and Dr. Fenwick, Bolton Hall.—Dr. Stokes proposed “The Chairman”, and thanks to him and Dr. Wilson for their hospitality. The toast was very warmly received.—Dr. Falconer proposed that they convey, through Mr. Snowball, their sincere and cordial thanks to His Grace the Duke of Northumberland, for his kindness in allowing them to visit the castle. They would agree that the Duke had contributed greatly to the enjoyment of the day; and they could never forget the kindness and attention which they had received from all parties.—Mr. Philipson, as Local Secretary, said it would afford him very sincere pleasure, through his relative, Mr. Snowball, to ask His Grace to receive their sincere thanks for the kindness with which he had contributed to their enjoyment that day.—Several excellent songs were sung by Dr. Beatty, Dr. Keiller, and Mr. Angus; and, after a pleasant day, the party visited the Castle Park, and returned to Newcastle.

CORRESPONDENCE.

A QUESTION OF FINANCE.

SIR,—The delay and laxity of a certain portion of members in paying their annual subscriptions of a guinea, notwithstanding repeated applications, has evidently, from the Treasurer's statement at the annual meeting, become a serious matter. The Committee of Council have adopted a more stringent system of application than heretofore, but it does not seem effectual. If any one can point out where it can be improved, or how the collection of annual subscriptions can be more efficiently organised, I suppose that the Executive will be exceedingly glad to consider any such suggestions. A good many people are slow in paying all subscriptions; but the members of this Association receive for their annual guinea not only all the advantages of social, scientific, and political organisation, but also a weekly JOURNAL, which binds them together in constant communication, and which is besides such as private enterprise is only able to supply for a sum exceeding the total amount of the annual subscription to the Association for all its purposes. The subscription, therefore, becoming a veritable debt from each member to the whole for expenses incurred on his behalf in weekly postage, paper, and printing, on the faith of his promise to pay, it is fair to suggest that a member who continues to receive the JOURNAL weekly, and fails to pay his subscription, due on the 1st of January in each year, does an injustice to all his fellow-members, and at the end of the year will have taken eighteen shillings out of their pocket, the actual outlay on what he receives on the faith of his promise to pay, for which he returns nothing.

I am, etc.,

A PAYING MEMBER.

* * This letter includes the pith of some longer communications on the same subject, but not more to the point, of which it will render the insertion unnecessary.

THE POOR-LAW MEDICAL SERVICE OF GREAT BRITAIN AND IRELAND.

HOW SALARIES ARE KEPT DOWN.

IN pursuing a policy of systematically underpaying the Poor-law medical officers, the Guardians are steadily supported by the considerable number of applications which they receive for vacant appointments, at no matter what salary, and without reference to the proportion of salary to duties. A case in point has come under our notice this week in the Hollingbourne Union, Maidstone. The office of medical officer of that Union has become vacant by the resignation of the last incumbent. The salary is £80 a year, and the extras amount to very little indeed. The area of the district is 15,312 acres, and the country hilly and difficult. The duties involve keeping a horse and conveyance, and hard work for the horse. The recent incumbent found that the salary was not only utterly insufficient for the duties, and was in no way a fair remuneration for them, but that, as the district is thoroughly occupied for private practice, he could not make a bare subsistence on this salary. He applied, therefore, to the Guardians for a modest increase of £20 a year. They replied by refusing to entertain the application. On his consequent resignation, they have advertised for candidates to fill the vacant office. There are, we understand, upwards of twelve applicants. The Guardians, therefore, are confirmed in the belief that Poor-law medical appointments are desirable on other grounds than those of salary; and avail themselves of the abundance of candidates to show that Poor-law appointments at very low salaries are highly attractive to members of the medical profession: so indeed they seem to be—until they hold them. It is worth consideration whether, when Poor-law medical appointments are advertised, it is not desirable, before applying to fill them, to ascertain the circumstances under which they were vacated, and the reasons which induced the possessor to forego the prize. It seems exceedingly probable that, if the circumstances of the resignation of the last incumbent had been known to all those who have now applied for the office of medical officer at Hollingbourne, the number of applicants for the appointment would have been thinned. In this case, the argument of the Guardians in favour of bad payment of medical services would have been weakened, and there would have been a better chance of an improvement in the remuneration.

MEDICAL NEWS.

HER MAJESTY THE QUEEN.

WE regret to learn that the Queen still suffers at times severely. The cares and labours incident to her exalted position are at present increased by personal anxiety for the safety of many nearly related to her Majesty: the Prince Consort's only brother and the husbands of two of the Queen's daughters are in the German army at the seat of war. These causes combine to inflict suffering on a nervous system at all times most sensitive to worry and anxiety. Travelling under arrangements so careful as her Majesty does, the physical fatigue of a journey to Scotland is trifling, while the benefit her Majesty experiences from the cool pure air and quiet of her Highland home is always great and decided.

VOLUNTEER MEDICAL DISORGANISATION.

WE cannot but think that considerable importance should be attached to the total and entire absence of any organisation of the medical department of the Volunteer force, that is, if there is the slightest reason to suppose that the Volunteer force may ever be called upon to fight. To reduce the matter to its most elementary form, fighting with firearms cannot take place without wounds being inflicted. It is obvious that some organisation is needed for carrying off and attending to the great necessities of the wounded. At present there are absolutely none. That is short and clear: it accurately expresses the fact.

MEDICAL VACANCIES.

THE following vacancies are announced:—

- BRIGHTON AND HOVE DISPENSARY**—Resident Medical Officer and Dispenser for the Western Branch: applications, Sept. 5th; election, Oct. 4th; duties, Nov. 1st.
- CHESHIRE LUNATIC ASYLUM**, Upton—Assistant Medical Officer: applications, Sept. 1st.
- CITY DISPENSARY**, Watling Street—Physician: applications, Sept. 10th; Committee, 12th.
- CLAYTON HOSPITAL AND WAKEFIELD GENERAL DISPENSARY**—House-Surgeon: applications, 29th.
- CLOHER UNION**, co. Tyrone—Medical Officer for the Augnacloy Dispensary District.
- DERBYSHIRE GENERAL INFIRMARY**, Derby—Compounder: applications, August 27th; duties, Sept. 29th.
- GLOUCESTERSHIRE LUNATIC ASYLUM**, near Gloucester—Two Assistant Medical Officers: applications, Sept. 5th.
- HOLLINGBOURN UNION**, Kent—Medical Officer for the Lenham District: applications, 30th; election, Sept. 15th.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST**, Brompton—Resident Clinical Assistant: applications, Sept. 3rd; Medical Committee, 5th.
- JERSEY GENERAL DISPENSARY**—Resident Visiting and Dispensing Officer: duties, October 1st.
- LEEDS PUBLIC DISPENSARY**—Physician.
- MALE LOCK HOSPITAL**, Dean Street, Soho—House-Surgeon: applications, Sept. 5th.
- METROPOLITAN FREE HOSPITAL**, Devonshire Square—Surgeon: applications, Sept. 5th.
- NORTH RIDING INFIRMARY**, Middlesborough-on-Tees—House-Surgeon: applications, Sept. 1st; election, October 6th.
- QUEEN'S COLLEGE**, Birmingham—Medical Tutor and Demonstrator of Anatomy: applications, 27th.
- ST. GEORGE DISPENSARY**, Mount Street, Grosvenor Square—Physician-Accoucheur: applications, 30th.
- ST. MARY'S HOSPITAL**, Paddington—Dental Surgeon.
- ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN**, Manchester—Medical Officer for Out-Patients: applications, Sept. 30th.
- ST. PANCRAS**, Middlesex—Medical Officer for the Schools at Leavesden, Herts: applications, 27th; election, 31st.
- SHERBORNE UNION**, Dorset—Medical Officer and Public Vaccinator for the North West District: applications, Sept. 14th; election, 22nd.
- STOKE-UPON-TRENT UNION**, Staffordshire—Medical Officer and Public Vaccinator for the Hanley District: applications, 30th; election, 31st.
- SUSSEX LUNATIC ASYLUM**, Hayward's Heath—Assistant Medical Officer: applications, Sept. 3rd.
- SWANSEA HOSPITAL**—Medical Officer for Out-door Patients: applications, Aug. 31st; election, Sept. 2nd.
- UNIVERSITY OF ABERDEEN**—Three Examiners for Graduation in Medicine: applications, Oct. 1st.
- UNST**, Shetland—Parochial Medical Officer.
- UTTOXETER**—Certifying Factory Surgeon.
- UTTOXETER UNION**—Medical Officer for the Rocster District.
- VICTORIA HOSPITAL FOR SICK CHILDREN**, Queen's Road, Chelsea—Resident Clinical Assistant.
- WESTHAMNETT UNION**, Sussex—Medical Officer and Public Vaccinator: applications, Sept. 1st; election, 5th.
- YORK COUNTY HOSPITAL**—House-Surgeon: applications, 27th.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY**.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
- TUESDAY**.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
- WEDNESDAY**...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
- THURSDAY**...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
- FRIDAY**.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
- SATURDAY**...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE have to express our thanks for their communications to Dr. Harling, Dr. H. W. Rumsey, Dr. Maudsley, Mr. Thomas Bryant, Mr. Hills, Mr. Wheelhouse, Dr. Meadows, Dr. Embleton, Dr. Sells, etc.

J. B. can obtain information regarding the army and navy medical examinations by applying to the heads of the respective departments.

AN ASSOCIATE (Truro).—We do not think the proceeding dignified or advisable; but, as it was brought by its very nature under the notice of the profession and the profession only, every one will have formed his own opinion; and we believe that the injudicious proceeding has brought its own penalty. There are reasons we should abstain from taking any special notice of it. It was probably an error of judgment on the part of a really well meaning and hard working man.

WE regret to be compelled, by pressure on our space consequent on the length of the report of the annual meeting at Newcastle-upon-Tyne, to postpone several communications.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, July 25th; The New York Medical Gazette, August 6th; The Parochial Critic, August 24th; The New York Medical Record, August 11th; The Boston Medical and Surgical Journal, August 11th; The Madras Mail, June 13th; The Gardeners' Chronicle, August 20th; The Poor-Law Chronicle, August 16th; The Shield, August 15th; The South London Journal, August 13th; The Alliance News, August 13th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Hulke, London; Dr. Harley, London; An Observer; J. E. X., Aldershot; Mr. P. H. Holland, London; Dr. H. Clothier, Haslemere; Mrs. M. Summers, Wolverhampton; Mr. J. P. Badley, Dublin; Mr. J. Tilly, London; Dr. Oppert, Hamburg; Mr. S. Chater, London; An Eye of a Needle; Mr. C. S. Redmond, Shrewsbury; A Guardian of the Hollingbourne Union; Mr. Lawson Tait, Wakefield; Dr. C. D. H. Drury, Pullam St. Mary; Dr. Smith, London; Dr. Joseph Rogers, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. T. Laycock, Edinburgh; Dr. Andrew Clark, London; Dr. Hyde Salter, London; Dr. Dixon, Sunderland; Mr. D. Stone, Manchester; Dr. Maudsley, London; Dr. Harling, London; Mr. T. H. Hills, London; Mr. T. Watkin Williams, Birmingham; Mr. C. H. Voelter, London; Dr. Meadows, London; Mr. Husband, York; Mr. Longmore, Netley; Mr. T. Bryant, London; Mr. A. B. Steele, Liverpool; Dr. Embleton, Newcastle-upon-Tyne; Mr. Wheelhouse, Leeds; Dr. Sell, New York; Dr. Rumsey, Cheltenham; Dr. Paul, London; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. Winn, London; Dr. T. Dickson, London; Mr. R. Davy, London; Mr. R. W. Foss, Stockton-on-Tees; Dr. J. W. Moore, Dublin; Miss Wolstenholme, Congleton; Dr. C. B. Taylor, Nottingham; Dr. Brandes, Aix-la-Chapelle; Dr. De Geisse, Bad Ems, Prussia; Dr. Halford, Melbourne; Dr. V. Ash, Truro; Mr. J. C. Costin, Market Harborough; Mrs. M. A. Baines, London; M.D.; Mr. J. Sewill, Caterham Valley; Mr. S. C. Noble, Kendal; Dr. Ransome, Manchester; Dr. Chadwick, Leeds; Dr. Morris, Spalding; Dr. Paget, Cambridge; Dr. Acland, Oxford; etc.

LECTURES ON THE HISTOLOGY OF THE EYE: (BEING THE ARRIS AND GALE ANATOMICAL LECTURES.) Delivered at the Royal College of Surgeons of England, June 1870.

BY
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Ophthalmic Hospital.

LECTURE II.

MR. PRESIDENT AND GENTLEMEN,—At the close of Monday's lecture, I had described the anatomy of the apparatus of *accommodation* in the human eye, and was proceeding to notice some of the modifications it presents in other vertebrata, when the hour struck. As some of these modifications are extremely interesting, I propose to take up the subject where I laid it down.

In all mammalia, monadelphous and didelphous, so far as my observations extend—and, through the liberality of the Zoological Society of London, to which I am more indebted than I can express, I have enjoyed unrivalled opportunities of examining the eyes of a very large number of animals—the lens and ciliary muscle do not differ in any essential point from those of man. In all other mammalia, the lens is more spherical than in man. In most, the central planes are three, as in the human foetus; in a few (cetaceans and some rodents), there is but one. The capsule, its epithelium, and the lens-fibres, are essentially like those of man. The ciliary processes are simple; the suspensory ligament and its connections, the arrangement of the ciliary muscle, and the kind of muscular tissue, are such as we find in the human eye.

Birds, however, present very striking differences. In a bird's eye we are immediately struck with the great extent of the ciliary region. It is the stoutest part of the outermost case of the eyeball; its strength is increased by a ring of bony plates, and then behind these by a cartilaginous lamina intercalated in the fibrous sclera. The ciliary processes are fringed and papillose, not simple; and a plaited membrane—the pecten—projects like a wedge into the vitreous humour from the entrance of the optic nerve. All the intraocular muscles are composed of striped fibre, the iris as well as those in the ciliary region. In the iris, the muscular fibres are disposed in two sets, one having a radial direction, the other being circularly disposed. The radial fibres pass between the great circumference of the iris and the pupil, coursing along the back of the iris just in front of the uveal epithelium. These are the dilators of the pupil. In front of them there is a stratum of circular fibres, forming a continuous sheet from the pupil to the attached border of the iris, stouter here and at the pupil, and thinner intermediately. They are easily demonstrated in the iris of any large bird by dissecting off the thick layer of pigmented connective tissue which forms the front of the iris, and which is in great part a derivative of the ligamentous tissue that fixes the border of the iris to the margin of the anterior chamber. It is in this connective tissue that the great blood-vessels and nerves lie. Those circular muscular bundles which bound the pupil are manifestly a constrictor or sphincter pupillæ; but the bundles at the outer border of the iris, in contracting, not improbably compress the corresponding part of the lens, and so tend to increase the convexity of the uncovered part of the front of the lens in the pupillary area, as H. Müller has suggested. This view of their action derives support from the beautiful prints of those bundles which we often find on the lens in dissections.

The primitive muscular fibres of the iris are much finer than those of the voluntary muscles of the limbs, from which they also differ in dividing and combining in nets.

The ciliary region contains two muscles. In the largest raptorial birds these are quite distinct; they are separated by a considerable interval; but in the eyes of smaller birds the muscles are approximated, and in these their distinctness is less obvious, yet I think none the less real. (Fig. 1.)

The foremost muscle (*cr*) was described by Sir P. Crampton, and it bears his name. Behind it is always attached to the sclera, and in front to the cornea, either directly or to a tendinous prolongation of the inner corneal lamellæ. Shortening of this muscle would, therefore, tend to bring these closer together; and as the sclerotic, with its strong horny ring, is the least mobile of the two, the muscle would tend to retract or de-

press the cornea, and to counteract any force operating simultaneously in an opposite direction to increase its convexity. The posterior muscle (*tc*) always passes between the sclera and choroid. Separated by a wide interval from Crampton's muscle in eagles, as I have already said, in many smaller birds it appears, on a cursory examination, to be a continuation of the posterior fibres of this; yet a careful scrutiny always shows that it has distinct attachments. In many birds there is an accessory muscular slip attached anteriorly to a prolongation of the same

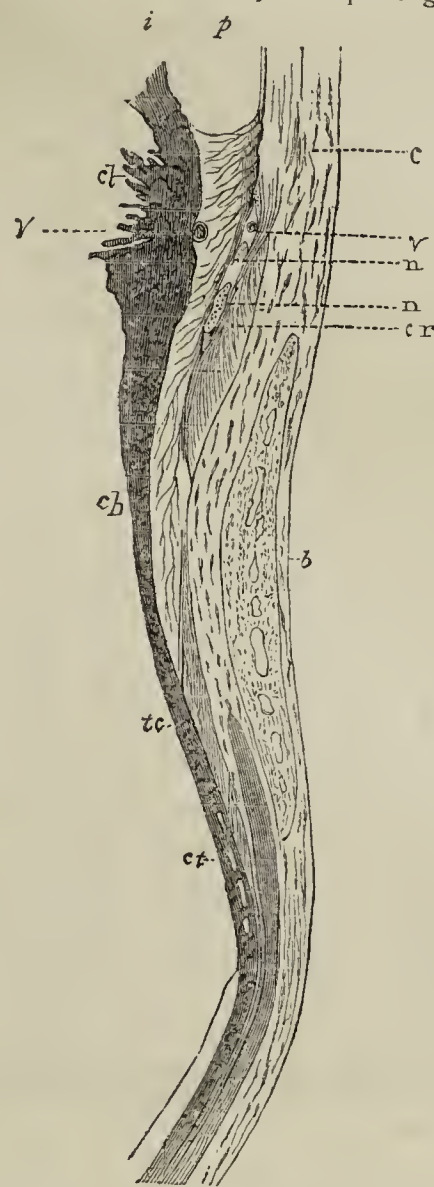


Fig. 1.—Longitudinal Section of Ciliary Region of Eagle's Eye. *c*. Cornea. *p*. Pillars of iris. *i*. Iris. *cl*. Ciliary processes. *v*. Section of blood-vessels. *n*. Sections of ciliary nerves. *cr*. Crampton's muscle. *ch*. Choroid. *b*. Bony plate. *tc*. Tensor muscle of choroid. *ct*. Cartilage.

tendinous band from the cornea, into which the inner ends of the fibres of Crampton's muscle are inserted; and in some birds this muscular slip exceeds that which stretches from the sclerotic to the choroid. The contraction of either or both these muscular slips would tend to draw the choroid forwards upon the sclerotic and tighten it on its contents. They are tensors of the choroid, and the homologue of the human ciliary muscle.

The pecten, which before the ciliary muscles were known was regarded as the agent of accommodation, is not any longer considered so. I shall have occasion to refer to it in my next lecture.

Reptiles have an iris very like that of birds. The primitive muscular fibres of the striped kind are extremely fine; they also exhibit divisions and a flexiform arrangement. They are disposed in two sets—one circular, the other radiating—differing from those of birds mainly in their less development. (Fig. 2.)

Crampton's muscle I have not found in any reptilian eye; but all which I have examined, embracing several chelonia and many lizards and snakes, have a striped tensor of the choroid passing from the sclerotic to this coat, and occupying the same posterior position as its homologue in the bird, and functionally corresponding to the human ciliary muscle.

I have hitherto been baffled in all my attempts to decipher the details of the muscular part of the accommodative apparatus in batrachia. The quantity and blackness of the pigment in the frog's eye have offered,

hitherto, insuperable difficulties. An *unstriated* sphincter pupillæ is generally demonstrable. It is composed of long spindle cells, enclosing an elongated cylindrical nucleus with some granular pigment. How far it extends outwards, and whether the circular fibres reach the periphery of the iris, as in reptiles, I am unable to say. Radial bundles of spindle cells, resembling those of the sphincter, are also certainly present.



Fig. 2.—Iris of a large South American Snake. *pp*. Pupillary border. *cl*. Ciliary border. *r*. Radial muscular fibres. *c*. Circular muscular fibres. *pg*. Pigmented stroma-cells.

The *Conjunctiva* is a thin membraniform web of areolar tissue, with an external epithelium. The structure of the palpebral part differs slightly from that of the ocular. The former is a tougher, the latter a looser tissue. The palpebral part is beset with simple vascular papillæ. The epithelium consists of several layers of cells, the deepest of which are oblong and stand vertically, while the more superficial are flattened and obliquely packed. The meshes of the areolar tissue often enclose large numbers of lymph-like corpuscles. The blood-vessels and nerves are numerous. The nerves are remarkable for the specialised terminations which some of the tubules exhibit—the terminal clubs—Endkolben—named after their discover, Krause.

The loose fold of conjunctiva which connects the lid and globe, and also the palpebral part, but more particularly the former, contains small glandiform bodies—minute spherical capsules—enclosed in a net of minute capillary blood-vessels, and, according to some observers, also surrounded by lymphatics. These, when enlarged, form the transparent bead-like grains which characterise a kind of granular ophthalmia, fortunately for us much less frequent in Great Britain than the papillary form of this complaint.

The *Sclerotic*, in conjunction with the cornea, forms the strong intercase of the eyeball which supports and protects the delicate inner coats. It is thickest behind, around the optic nerve; becomes thinner from here to the attachment of the tendons of the muscoli recti, in front of which its thickness again slightly increases. A funnel-shaped canal pierces it behind for the passage of the optic nerve; and it is perforated by many smaller apertures for the transmission of blood-vessels and of the ciliary nerves. Of these inner openings, the only ones which re-

quire notice are those by which the venæ vorticosæ choroidæ leave the eyeball. These pierce the sclerotic obliquely, which renders them valvular—a mechanism which lessens the available opening whenever the pressure on the inner surface of the sclerotic rises unduly, and proportionately retards the egress of the venous blood and raises the pressure still higher.

The sclerotic is principally composed of white fibrous or common connective tissue, in the form of flat fibrillated bundles, closely interwoven in places, which cross one another at every possible angle, but which have a general direction parallel to the surface of the coat. Amongst the fibrillated tissue are imbedded simple fusiform and branched corpuscles, which are more numerous in the young than in fully grown persons.

The blood-vessels of the sclerotic are not very numerous: the most important are, as before pointed out, the recurrent branches of the posterior ciliary arteries, which unite in a small circle which communicates with the vessels of the nerve. Whether the sclerotic has any nerves of its own is doubtful. The ciliary nerves all pass through, and do not appear to furnish any branches within their canals.

In birds, lizards, and turtles, the fibrous sclerotic is strengthened by the addition of bone and cartilage. The bone is chiefly present in the ciliary region, where it forms the well known circle of plates. The osseous tissue contains well developed lacunæ; and, where the plates are thick, they are hollowed by vascular canals, and by medullary spaces enclosing fat-cells. It appears to be evolved out of fibrous tissue. The cartilage is always of the hyaline variety. In the back of the sclerotic in many eyes, the cartilaginous tissue exceeds the common connective tissue.

Optic Nerve.—The optic nerve pierces the sclerotic a little below and at the inner side of the posterior pole of the eyeball; the nerve appearing, at its inner surface, nearly 1" to the nasal side of the fovea centralis retinæ, in the form of a disc, usually circular, sometimes elliptical, and when so, the major axis is generally vertical. The common aperture in the sclerotic and choroid, through which the nerve passes, is a canal narrower anteriorly, where it tightly clasps the nerve, and wider posteriorly, where it loosely encloses it. Around this opening, the choroid and sclerotic adhere very intimately, their fibrous tissues intermingling here concentrically round the nerve. Here, too, the minute recurrent branches of the posterior ciliary arteries distributed to the outer part of the sclerotic, effect a slight communication with the capillaries in the nerve-sheath, and indirectly with those in the nerve itself. Some of these last inosculate with the choroidal blood-vessels in the level of the choroidal opening. Through these collateral channels, when the trunk of the arteria centralis is plugged, a small quantity of blood can enter the retina. The choroidal stroma around the nerve-foramen contains the same stellar pigment-cells which occur in it elsewhere. In some eyes, in this situation these are more plentiful, and richer in pigment; in such eyes, the connective tissue corpuscles of the neighbouring sclerotic are also not infrequently pigmented. This excess of pigment expresses itself in the living eye by an incomplete narrow brown or blackish circle around the nerve-disc. In the place of the choroid and of the inner third of the sclerotic, the nerve-opening is crossed by a fibrous web—the *lamina cribrosa*—which peripherally merges in the connective tissues of these two coats. The anterior surface of this perforated lamina is concave; the posterior, convex. In the living eye, the lamina reveals itself as a white tendinous spot, striped with minute grey dots, the bundles of nerve-fibres lying in its meshes. These details of the lamina are recognisable, in the healthy nerve-disc, in a small central area which corresponds to a depression which I shall presently describe, known as the physiological pit. A sharply defined image of these details of the lamina overstepping this limit, and reaching towards or even to the edge of the nerve-disc, is a sign of atrophy.

The nerve-fibres in the trunk of the nerve behind the lamina cribrosa are of the opaque or double-bordered kind, while in and in front of the lamina they are pale and transparent. Behind the lamina, each nerve-fibre consists of an axis-cylinder, a delicate external tubular sheath (the homologue of the sarcolemma of a primitive muscular fibre) and an intermediate cortical substance or medulla—the white substance of Schwann. At the lamina, the medulla ceases; the axis-cylinder, with perhaps a very attenuated prolongation of the sheath, passing forwards into the nerve-disc and retina. The greatly reduced bulk of the nerve-trunk in the lamina, and the transparency of the nerve-bundles in the nerve-disc and retina, are due to this change in the constitution of the primitive fibres.

Exceptionally, as a congenital error, some bundles of opaque nerve-fibres reach the inner surface of the nerve-disc, and are even prolonged for some distance into the retina. It is not a very uncommon defect. The opaque nerve-fibres produce a white patch, which is to be distin-

guished from other similar white patches due to exudations on its brush-like feathered edge. After emerging from the anterior surface of the lamina cribrosa, the bundles of transparent nerve-fibres bend away on all sides (quaquaversally) from a central point, and, curving over the edge of the choroidal foramen, spread out on the inner surface of the retina. In doing this, they leave a central void, a little hollow—the physiological pit. This pit is usually in the centre of the nerve-disc, but not always so; and, when eccentric, the vasa centralia usually also perforate the disc eccentrically. A normal physiological pit never, however, is so eccentric as to touch the contour of the disc.

The physiological pit is, then, a small, gentle, funnel-like hollow in the centre of the nerve-disc, perforated by the vasa centralia, appearing as a bright hollow spot, in which, with an enlargement of twelve or fifteen linear, the meshes of the lamina cribrosa and the ends of the bundles of opaque nerve-fibres are plainly discernible.

Blood-Vessels.—At a variable distance from the eyeball, the trunk of the optic nerve is pierced by a branch of the ophthalmic artery, which soon gains the axis of the nerve, and, running forwards through the lamina cribrosa, perforates the optic nerve-disc, in which it divides into two primary branches, which bifurcate, and, passing across the boundary of the disc, are distributed to the retina. In the disc we can distinguish first a short vertical piece of the arterial trunk, and next the branches making a large angle with the trunk, and following the surface of the disc. The capillaries of the nerve-trunk, and those distributed to its disc-like intraocular end, are very numerous; they are sufficiently so to redden the disc when they are distended with blood—a thing which no amount of hyperæmia of the retinal capillaries ever does in this membrane.

The very slight diminution which the arteria centralia undergoes, from its origin to its final division in the disc, shows that it mainly ministers to the nutrition of the retina. It gives, however, in its course, *small* twigs for the nutrition of the nerve outside the eyeball; and these, reinforced by others derived from minute nameless arteries distributed to the sheath, ramify in the septa between the nerve-bundles.

The veinlets accompanying the primary branches of the arteria centralia in the retina do not, as a rule, coalesce in a single trunk in front of the lamina cribrosa; but they pierce this separately, and first unite in or behind it.

Sheath.—In the arrangement of its sheath, the optic nerve differs from all the other large nerve-trunks. They have but one tightly fitting tube of connective tissue—the external neurilemma; but the optic nerve has a double sheath. It has a thin tightly fitting sheath, representing the sheath of other nerves, from the inner surface of which septa are produced inwards between the nerve-bundles, constituting the internal neurilemma or frame, which holds the bundles together, and carries the nutrient blood-vessels.

In front of the lamina cribrosa, in the nerve-disc, the neurilemma is of the more delicate kind, to which Virchow has given the name *neuroglia*. Its fibres have two principal directions—one transverse to that of the nerve-bundles, and therefore parallel to those of the lamina cribrosa; the other vertical to the front of the lamina and free surface of the nerve-disc. These last fibres correspond to the radial connective tissue fibres in the retina. This sheath itself and its septal prolongations consist of common connective tissue—fibrillated bundles, with corpuscles interspersed. In front, this division of the sheath blends with the lamina cribrosa, and with the inner third of the sclerotic.

The outer sheath is continuous posteriorly with the dura mater, so that coloured fluids injected into the space between the two sheaths soon find their way backwards into the cranial cavity. In front, the outer sheath is continued into the outer two-thirds of the sclerotic. The outer and inner tubes are loosely connected by a very open areolar tissue, composed of curling fibres and coarser bundles with large fusiform nucleated corpuscles imbedded in them. These give the interstitial or areolar spaces the appearance of having an epithelial lining. They play an important rôle in neuritis, and in the evolutions of morbid growths.

The space between the sheaths has been lately described as a lymphatic cavity. In severe injuries of the head, blood is sometimes extravasated into it.

In describing the sclero-choroidal foramen, I mentioned the occasional excess of pigment here giving rise to a dark circle around the nerve-disc, visible in the living eye. The presence of pigment in the disc itself is still more exceptional. I do not allude to pathological formations, but to congenital conditions. In some mammalia, however, the neuroglia of the optic disc is always granule-pigment, dotted along the connective tissue fibres and in corpuscles. In these eyes, the pigment-corpuscles are often most numerous along the vessels and in the loose tissue in the sheath close to the globe; but the greatest deve-

lopment of pigment here is in birds, from whose optic nerve entrance a large plaited membrane stands forwards into the vitreous body towards the back of the lens, with a forward and downward inclination. The upper edge lies below the level of the fovea centralis. Its general figure is four-sided; but it varies somewhat, as do also its size and the number of plaits.

It is a vascular sheet, consisting of larger vessels and a very close capillary net overlaid with a pigmented epithelium resembling that of the choroid. Its base blends with the lamina cribrosa, and is perforated by the escaping bundles of nerve-fibres. I am unable to offer you any account of its functions. Before the ciliary muscle was known, it was formerly thought to be the factor of accommodation; against this, however, is the absence of muscularity. H. Müller suggested that it may subserve the nutrition of the vitreous humour, in the absence of a retinal vascular system. But there are very large eyes with correspondingly bulky vitreous humour and no retinal vascular system, without pectens; and this throws doubt on Müller's suggestion. Although reaching its maximum development in birds, the pecten is not restricted to them. It is present in lizards. In the gecko, iguana, and chameleon, it is a little sword-like process, having an intimate structure identical with that of the bird's pecten, but externally unlike this in its surface being smooth, and not plaited. Some snakes also have pectens; I have found it in the boa constrictor and viper, but absent from the common snake.

A METHOD OF ANTISEPTIC TREATMENT

APPLICABLE TO

WOUNDED SOLDIERS IN THE PRESENT WAR.

By JOSEPH LISTER, F.R.S.,

Regius Professor of Clinical Surgery, University of Edinburgh; Surgeon to the Royal Infirmary, Edinburgh; etc.

HAVING been requested to furnish some rules for the antiseptic treatment of wounded soldiers in the present war, I venture to suggest the following plan, in the hope that it will combine efficiency with the simplicity and facility of execution essential under such circumstances.

Wash the wound thoroughly, and also the surrounding skin, with a saturated solution of crystallised carbolic (phenic) acid in water, one part of the acid to twenty of water, introducing the fluid by means of a syringe, and manipulating the parts freely so as to cause the lotion to penetrate into all the interstices of the wound; and at the same time squeeze out such clots of blood as it may contain. The fluid should be introduced repeatedly to insure its thorough penetration. Tie any bleeding vessels with properly prepared antiseptic catgut, cutting off the ends of the thread near the knot. If the surgeon do not possess this article, the arteries should, if possible, be secured by torsion; but for the sake of cases in which a ligature would be absolutely indispensable, some silk or linen thread should be kept steeping in a strong oily solution of carbolic acid, or, if very fine silk be used, it may be rendered antiseptic by steeping for a few minutes in the watery solution. When silk or linen is employed, the ends of the ligatures should be left projecting at the wound. While the antiseptic lotion is in the wound, extract if possible any foreign material that may have been introduced, such as a bullet or a portion of the patient's clothes; and if any spicula of bone exist entirely detached from the soft parts, remove such as can be readily reached, disregarding those which are of very small size or inconvenient of access.* Then place upon the wound two or three layers of oiled silk smeared on both sides with a solution of carbolic acid in five parts of any of the fixed oils—olive, almond, linseed, etc.—the oiled silk being made large enough to cover the raw surface completely and slightly overlap the surrounding skin. Next apply, without loss of time, lint, charpie, or cloth (linen or cotton), well steeped in the oily solution of the acid, the cloth or lint being folded sufficiently to produce a layer at least a quarter of an inch in thickness, and extending a considerable distance, say three inches, beyond the oiled silk in all directions, the outer layer being made somewhat larger than the rest, so that the margin of the mass of cloth may be thin. Cover the oily cloth with a piece of thin gutta-percha tissue sufficiently large to overlap it on all sides by an inch or more, and retain it securely in position

* Gun-shot wounds should not be stitched; but, where sutures are required, silk, steeped in oily solution of carbolic acid, will answer sufficiently well. After the introduction of the last stitch, distend the wound once more with the watery solution, by means of the syringe, and then continue the dressing, as in the text.

by a roller steeped in the antiseptic oil. Round this again wrap a still larger piece of folded cloth, say a folded towel, also steeped in the oily solution of carbolic acid, and cover it with a piece of oiled silk or gutta-percha.

With a view to the intelligent application of this dressing, it will be well to state briefly its *rationale*. The watery solution is applied in order to destroy once for all any septic particles that may have been introduced into the wound; and the oily solution is employed to prevent the spread of putrefactive fermentation into the wound from without. The oiled silk, which is but slightly permeable to carbolic acid, protects the raw surface from the irritation of the acid in the oily cloth, and permits it to heal as under a scab. But though the ultimate office of the oiled silk is to protect the wound from the irritation of the antiseptic, it must itself be antiseptic at the time of application, and is therefore smeared with the oil, which in the course of no long time loses its carbolic acid by diffusion into the wound beneath. The substantial and widely extending oily cloth serves as a store of the antiseptic; but the bloody and serous discharge soaking into the porous cloth tends to wash away the oil and deprive the dressing of its antiseptic character; hence the necessity for the gutta-percha, which prevents the discharge from making its way directly outwards from the wound, and so establishing a road for the penetration of putrefaction inwards. At the same time the gutta-percha, though impermeable to watery or oily fluid, being readily permeated by carbolic acid, permits the antiseptic ingredient to pass in through it from the outer cloth and act upon the discharge that flows out beneath the overlapping margins of the gutta-percha. The outer cloth is intended to be changed as occasion may require, in order to keep up the supply of the antiseptic, while the gutta-percha and all beneath it constitute a more permanent application. The layer of gutta-percha or oiled silk outside the external cloth is to prevent the oil in that cloth from being wasted by soaking out into the surrounding articles of clothing, etc.; or, still worse, neutralised chemically by the penetration inwards of putrid blood or other discharges from the ambulance waggon or bedding. The circumferential part of the deeper cloth will, in consequence of its thinness, be kept completely antiseptic by the carbolic acid which passes inwards through the gutta-percha, while the deeper layers of the thicker portion over the wound will probably in a few days be destitute of antiseptic, and therefore of stimulating properties; hence the oiled silk, though desirable in order to insure the absence of "antiseptic suppuration", is by no means an essential part of the treatment, and if none of it be at hand the procedure may in other respects be conducted in the same way without it. Again, if the surgeon have no gutta-percha at his disposal, the risk that would otherwise arise from the permeability of the dressing may be overcome by frequently changing an external antiseptic cloth, or by treating its surface every few hours with the antiseptic oil.

The changing of the outer cloth will require care in order to avoid raising the edge of the gutta-percha along with it, and so admitting septic air towards the wound. It may be done with perfect security by having the cloth consist of two parts, one covering each half of the gutta-percha, and, as one half is raised, throwing a stream of watery solution (1 to 40) with a syringe upon the margin of the gutta-percha, a fresh oiled cloth being at once applied before the other portion of the former cloth is removed. If sufficient time cannot be spared for changing the outer cloth in this careful manner, it will be better for the surgeon to content himself with pouring fresh oily solution upon the exterior of the cloth without disturbing it, taking care that the oil enter well beneath its margins. I would advise that this should be done in preference where a large number of wounded have to be treated by one surgeon.

The strong oily solution (1 to 5) would irritate the skin if used continuously: after the first dressing a solution of half the strength should be employed, and after a few days it may be reduced to 1 to 20 if excoriation should occur.

The times of changing the outer cloth, or treating it with fresh oil, should be in accordance with the amount of discharge. During the first twenty-four hours the effusion of blood and serum is necessarily profuse, and it will be well that fresh oil be applied to the outer cloth within twelve hours of the first dressing, or even in six hours if there should be unusual oozing. On the second day, also, in the case of a large wound, two dressings in the twenty-four hours will be desirable. After this, if all go well, the discharge will diminish quickly, and a daily renewal of the antiseptic supply will be sufficient; and when five or six days have passed, to apply the oil once in two days will be all that will be required. This, however, should be continued after discharge has ceased entirely, till sufficient time has passed to insure that the wound has healed by scabbing, or at least has been converted into a superficial sore.

The earlier the case comes under treatment the greater will be the

prospect of success, but even after the lapse of thirty-six hours it need not be altogether despaired of.

In the case of compound fractures, the essential objects of the treatment may be attained by using splints constructed of stout iron wire bent into the form of the margin of a lateral splint, and strengthened by cross pieces here and there. Such splints can be readily extemporised by the surgeon himself, by help of two pairs of wire-forceps. The splints should be applied one at each side of the limb, without any padding opposite the seat of injury except the dressing above described, but padded elsewhere with any suitable soft material, an interval being left between such padding and the dressing. The outer layer of oiled-silk or gutta-percha should be applied outside the splints, so that all that will be requisite in order to apply oil to the outer cloth will be to take off the oiled silk with its retaining bandage, and pour on the oil through the ample intervals between the wires. Or the splints might be applied immediately external to the bandage that retains the deeper layer of gutta-percha, leaving the outer cloth to be wrapped round external to the splints, cotton or charpie imbued with the antiseptic oil being tucked in under the splints to keep the margins of the gutta-percha in apposition with the limb, the cotton being changed as often as the cloth itself.

For the sake of the general healthiness of the atmosphere of the crowded military hospitals, it is extremely desirable that even superficial granulating sores should be treated antiseptically. This may be done consistently with rapid healing by washing the sore with watery solution of carbolic acid (one to twenty), and covering it with two or three layers of oiled sick smeared with the oily solution (one to twenty), with well overlapping folded cloth steeped in similar oil, and over all a piece of gutta-percha tissue and bandage.

I have suggested in the above method the employment of such materials as are likely to be accessible to the surgeons of both armies. Other means exist, in some respects very superior. But the supply of these is at present limited, and those who possess them probably understand their use.

REPORT ON THE ORGANISATION AND EDUCATION OF THE PROFESSION IN GREAT BRITAIN AND AMERICA.

By N. PINCKNEY, M.D., Surgeon, United States Navy,

Delegate to the British Medical Association from the Navy Department and Medical Association of the United States in 1869.

[WE have been favoured with the following extracts from a report on the action of the British Medical Association, and on the organisation and education of the profession in Great Britain, by Dr. Pinckney, who visited this country as a delegate to our Association last year. A correspondence between Dr. Pinckney and Dr. Chadwick was published in the JOURNAL of August 14th, 1869. After expressing his gratification at the cordial reception offered to him at Leeds, Glasgow, and Exeter, and his wishes for the continued and extended confraternity of the profession in the two countries, Dr. Pinckney continues as follows.]

The British Medical Association was established thirty-seven years ago. It is, as in our country, the representative body of the profession at large. The colleges of surgery and schools of medicine had, until 1854, the entire control over what constituted the preliminary education to entitle a person to enter upon the study of medicine. It is not to be questioned that under this system a large number of incompetent men found their way into the ranks—men who could never hope to meet the high and responsible duties which the profession involves, and a conscientious performance of which the security of the public demands. The standard of the profession as a great science was thus greatly lowered, and the community at large became the unfortunate victims. Every effort was made to check the tide of this grievous public and professional wrong, but without avail. Finally, the tocsin was sounded, and the whole energy of the profession was aroused to provide a remedy for the evil. The Association, in its representative capacity, applied all the means in their power to construct a dam which would effectually resist the on-sweeping tide. They were Argus-eyed. Quietly yet persistently they entered the field, determined to vindicate the honour of the profession by elevating the standard of attainment. Great were the difficulties that surrounded them. But they were nothing daunted. With a heroism that cannot be too highly praised, and a self-devotion never excelled, the strong men, backed by the weight of the body, went to work in good earnest to see what

could be done to rescue the profession from disgrace. They knew that no great results are ever reached without concentration and combination of mind with mind and heart with heart. Public sentiment was aroused, public sympathy enlisted. All other professions enjoyed the protection of law. Government had secured to them ample safeguards, and hedged them in by wise landmarks. The appeal, then, must be made to men of power; Parliament be invoked to pass an Act looking to the correction of the existing evil. This was done. After years of labour and vexatious delay, their efforts were crowned with signal success.

The General Council of Medical Education was established by the Medical Act which was passed in the year 1858. It was, as I have stated, the result of the persistent labours of the British Medical Association, aided by the medical press, and the support of numerous members of Parliament. This General Council consisted of twenty-four (24) members; viz., a President, seventeen (17) chosen by the Universities and Medical Corporations of the United Kingdom, and six (6) others nominated by the Crown. The Council met frequently during the first year of its appointment, in order to establish a code of action as to the character of the education which should be required, the course of study to be pursued, and the examination to be passed. Having analysed and matured a plan, their sessions are held only once a year. It established the following regulations; or, to speak more guardedly, it submitted and recommended a plan to the colleges and schools of medicine for their future government: 1. Preliminary education; 2. Professional education; 3. Registry.

All surgeons and physicians are required now to register their names with their qualifications. Failure to comply with this requisition results detrimentally to the practitioner. For, by Parliamentary Act, those who have not registered their names and paid the necessary fee, cannot recover at law for professional services rendered. The General Medical Council have the power to recommend, but they do not possess the power to execute. Their power is a moral power; and yet nearly all of the schools have in a great measure followed their recommendations.

By this General Council, Government inspectors are established. Inspectors, two (2); Sub-Inspectors, twenty-five (25); Inspectors of Anatomy, three (3)—(for the metropolis, provinces, and Scotland).

The above-named inspectors are selected by the General Medical Council over parts of England, Ireland, and Scotland. The inspectors have the privilege of being present at the examinations conducted by the colleges and schools, but they can only give their views as regards the efficiency and inefficiency of the examinations. The duty devolved upon them is, however, a very important one. By its faithful discharge, the environs are guarded against the intrusion of mere charlatans, and the stimulus is applied to a more than ordinary watchfulness on the part of the schools; while the Association is made cognizant of what additional legislation, if any, is needed.

No man can then reasonably dispute that the establishment of the British Medical Association has been a signal benefit to the country. This educational system (both preliminary and professional) is based upon the most solid principles—stringent, yet just; searching, yet most impartial. The standard of education elevated, the profession at large is placed in the most enviable position before the public. It is not to be expected that a thorough reorganisation of a profession can be accomplished in a day. Time is needed to rectify evils that have been the growth of centuries, and are the incrustations of deep-rooted prejudices. Apathy is sometimes more dangerous and deleterious in its effects than activity in a wrong direction. The axe is now laid at the root, and it only requires bold determination to extirpate it altogether. Public sentiment is on the side of the General Council and the British Medical Association. Calm, persistent, determined action is all that is needed to reap the full harvest of the past seeding. It is not one nation only that is interested in this great reform. The whole civilised world has a stake in it. Is it not a burning disgrace that any Government should allow men, who are to be entrusted with the lives and happiness of its citizens, to go forth totally unfit to practise the profession of medicine? Is it not an outrage to permit colleges and schools to flood the land with pretentious ignorance, and thus deal death and destruction through its length and breadth? It may be said, without exaggeration, that the Asiatic cholera or the black vomit is not more to be dreaded than ignorant physicians or surgeons. In the one, the patient has the chances of constitution in his favour; in the other, he has not. Are the character, and dignity, and true glory of a noble profession to be prostituted to satiate the cupidity of our colleges and schools? The time has arrived when no effort should be spared to impress upon the Parliament of England the absolute necessity for the investment of sole power in the hands of the General Medical Council over education and registration, which are the foundation-stone of the

arch. This is positively required to ensure the complete success of the measures already adopted. Moral power is not sufficient. Full executive power must be superadded.

In addition to the representatives of the colleges and schools, and of the Crown, there should be direct representation of the medical profession in the General Medical Council of medical education. This is the jewel of the casket—a treasure not yet inserted. It is the restraining power—the power to prevent abuses.

You perceive, gentlemen, that the whole movement owes its beginning and progression to its present state of development, to the combined action of the profession at large and the schools, on a community thoroughly aroused to the magnitude of the crisis. The power should, on a principle of strict justice which ought to underlie all progress towards reform, be reposed in a fair representation selected from the whole.

Having been honoured by you with the distinction of representing you at the British Medical Association, and other similar bodies in Europe, I have brought back with me for your inspection the rich results of their wisdom, together with the fruits of their devotion to the honour of our science. We are the representatives of sixty-eight thousand physicians scattered over this broad and magnificent domain. With a flag that waves peacefully over south and north, and throws its clustering stars from the shores of the Atlantic to the Pacific, and gathers to itself, with almost every flapping of its gorgeous wings, new stars to increase the brilliancy of the constellation, we are here to-day in our associated strength to provide the things that constitute the true secret of power. Education, by common consent, lies at the foundation of the national prosperity—a broad, deep, thorough system of education. Shall we rise to the majesty of our position? What Great Britain has done, shall we ignominiously decline to do? Our Society is only six years younger than the British Medical Association was when it succeeded in getting the Medical Act passed by Parliament. Who of us but must blush to see the amount of work we have permitted to grow upon our hands—work which must be performed in the next ten years, or, if neglected, compel us to hang our heads in very shame. I am not ignorant of the fact that strong prejudices will meet us. Errors in the past system, which, if not so old, are more deeply rooted, will have to be grappled with. But I speak to the men of iron sinew, who delight in nothing so much as opposition, and who glory in nothing so much as a victory won after a desperate conflict. We shall have, on the one hand, the strong desire in the multitude to scale the walls that encircle the temple of our science, or by undermining to throw them down; while they are conscious to themselves that the claim we make to high professional attainment, which is the result of a severe mental discipline, can never be upset by fair and manly argument. On the other hand, we shall have to contend with the rival jealousies of our colleges and schools, and the timid policy of our politicians. But this ought only to whet our weapons of attack and fire our enthusiasm. Right is on our side. The honour of the profession is at stake. We ask nothing that is unreasonable. We do not propose to draw around our profession any invidious lines of demarkation. We only ask that men properly qualified, after strict examination and registry, be admitted into our membership. We deprecate the intrusion of ignorant charlatans into our midst, and seek the broad shield of Law for our protection. No time is to be lost. It has given me the sincerest pleasure to pay a just and deserved compliment to England, who has taken the initiative, and made good progress in the work. I shall be sadly disappointed if our Association does not crown the meeting of 1870, in the metropolis of the nation, by a step taken in the right direction. We have power. What? tell me that the hundred representatives, backed by thousands who reflect the opinion of thousands more outside of the profession, have caught the spirit of enthusiasm that is all aglow within it, have not power to accomplish a reform as much needed as any reformation ever wrought anywhere. Centralisation and combination are all that is required. Centralisation—the meeting in one grand focus of all the rays of light; combination—the blending of the powers centralised; and what can resist the will of sixty-eight thousand men who only ask to be saved from the dishonour of ignorance and presumption. I tell you, gentlemen, we have been hitherto the willing dupes of our own apathy. We have not enjoyed the sweet fruits of our own power, simply because we have not dared to exercise it. Do you ask me how to begin and prosecute this work? I answer, by personal efforts unremittently made; by appeals to the justice of our law-makers, state and national, pressed with all the earnestness and eloquence in our power. Do this. Lend to this cause the weight of this august body, not the weight of mere vapid resolutions spread on the statute book, but the weight of the eye of fire and the tongue of eloquence, and still mightier tongue of a hard and invincible logic; and in a few years from this time, your representatives to the British Medical Association will be enabled

to hand back their own beautiful educational system more than counter-signed, and exhibit to the world the glorious spectacle of St. George's Cross and the star-spangled banner waving harmoniously over a profoundly educated medical profession in each country.

It seems to me that we might transplant another flower from the English system to our own soil with great advantage. They have twenty-one branches, each with its own officers and its own patrons. The laws are submitted to the Committee of Council of the parent Association, and have to be approved by the Council before they are valid. These branches have annual meetings, and some of the branches meet more frequently—to discuss medical and surgical subjects. It is impossible to conceive of the mental stimulus which is infused into a body that meets so often to discuss. Indolent men, men who see a lion in the way, and are always coldly calculating the difficulties to be overcome, will counsel a prudent look out. I write not for such. I write for those who feel that they have a heritage of glory to transmit, and are not satisfied to live altogether on the fame of others.

In my visit to England, at the cost of much labour, first in the civil and then in the military department, in London, Leeds, and Glasgow, I was animated by a single desire to do all I could to arm myself with British precedent on the great question of reform I counsel. I knew that whenever reform is suggested, the cry of fanaticism is raised, and the charge of impracticability is alleged. I therefore stand on principle backed by precedence. The honour of the profession at stake. It is pleasing to look to the land of Cooper, Bell, and Hunter; and in its devotion to the cause of science we shall find more than a warrant for our own. What the British Medical Association accomplished, we can. There is no forbidden fruit in this garden. The two great civilisations of the world, England and the United States of America, may occupy the same sublime standpoint, and feel justly proud of each other's fame. I am strong in the confidence that you will more than endorse the views I have advocated—that you will labour to make the general medical standard of education what it should be, at once practical and thorough—that you will show to the world that in your judgment a diploma is not of itself proof of fitness to practise. Clinical study is the keystone of the arch. All that is needed is concert of action and thoroughness of examination. If I have succeeded in throwing any light on the question, I shall have accomplished one end of my mission.

NOTES ON THE EPIDEMIC OF RELAPSING FEVER IN LIVERPOOL.

By ROBERT GEE, M.D., M.R.C.P.,
Physician to the Liverpool Fever Hospital, etc.

THE type of fever characterised by relapses has not, to my knowledge, assumed an epidemic form in Liverpool till within the present year. The type usually met with in the town is typhus, and that in its most pronounced features. Typhoid fever is of comparative rarity; it has not been epidemic here since 1844, except in one of our suburban districts two or three years ago. The simple continued form, and sympathetic fever depending on gastric or other lesions, are as frequently seen here as elsewhere.

The constant presence of typhus is probably owing to the defective construction of many of the streets and courts, the prevalence of overcrowding, destitution, and intemperance, to which may be added the filthy habits of the lower classes of its inhabitants; while the absence of enteric fever may be attributed to the favourable position of the town for drainage, and the great attention paid to it by the municipal authorities. An ample supply of water, favouring the speedy removal of excreta, may also be an important element in keeping it in abeyance.

Relapsing fever in an epidemic form has now, however, become a fact. It has gained a firm footing, supplanted its more formidable ally—typhus, and assumed such proportions as to call forth the best energies of the Select Vestry to meet its ravages by providing sufficient and suitable accommodation for the treatment of its victims other than in their own unsuitable homes. The idea has been generally entertained that the epidemic of 1847—the Irish fever—was an epidemic of relapsing fever; but it is a mistaken idea. The character of that epidemic was unquestionably typhus; and cases of relapsing fever were exceedingly rare. Typhus has been unusually rife during the present decennial period, reaching its culminating point in 1865. Since then, it has steadily declined. In March and April of the present year, a

much larger proportion than usual of cases of simple continued fever were admitted into the Fever Hospital; and towards the end of May, the first cases of relapsing fever were observed. It is true that cases were sent in at an earlier date with “relapsing fever” on the orders; but, after careful observation, they proved to be cases of febricula. This remarkable feature must be noticed that, concurrently with the decline of typhus, there was a marked increase of cases of febricula (many of them being of a serious character); and that this intermediate affection, in its turn, gave place to fever of the relapsing type. The latter at first slowly and then rapidly increased, so that there are at present no fewer than 730 cases under treatment in Hospital. I shall not attempt an explanation of the phenomenon; but it is evident that there is some law regulating the generation of different types of fever which has not as yet been discovered.

The total admissions into the Fever Hospital and its adjuncts since the beginning of July have been as follows. Week ending July 10th, 72; 17th, 102; 24th, 91; 31st, 118; August 7th, 191; 14th, 188; 21st, 166; 28th, 240.

[To be continued.]

ABSTRACTS OF LECTURES ON HYGIENE.

Delivered at University College, London.

By W. H. CORFIELD, M.A., M.B.Oxon., M.R.C.P.London,
Professor of Hygiene.

LECTURE II.

HAVING considered the ages, with their special diseases, we will now say a few words on the influence of sex.

The blood of women is richer in water and in albumen than that of men, but poorer in the other constituents. Women can and do habitually support easily great losses of blood. They seem to have naturally, if I may so speak, a superabundance of it. Witness the menstrual flow, the nourishment of the *fetus in utero*, the very great losses which often occur after childbirth without much inconvenience, and then the drain on the economy from the secretion of milk: such are losses which no man could stand with impunity. Menstruation is characteristic of woman; but habitual continence causes in man emissions of seminal fluid which have been called “masculine menstruation”, and which cease on the exercise of the generative function. Women may have their menstrual flow stopped by any strong emotion, or occasioned, after it has ceased, by strong amorous ideas, especially in dreams.

During pregnancy, troubles of the digestive apparatus are very common—false tastes, whims about food, vomiting, etc. At this time and during lactation, there is especial need for good nourishment; but note that ordinarily women have less absolute necessity for food than men, and can endure abstinence much longer without discomfort. Their digestive apparatus accounts for this; their smaller stomachs and shorter intestines giving less room for food, while the greater number of lymphatics causes a quicker and more complete absorption.

The lungs of women are smaller than those of men, and their respiration is more feeble. They have less need of oxygen, and can stay in close rooms without much discomfort.

The secretions are more active in man, except that of fat, which is more abundantly secreted in woman.

With such differences, and many others, added to those of habits, we may expect that men and women are differently subject to diseases; beside the obvious fact that each sex may have diseases which the other cannot have. Thus women, from their domestic habits, are more subject to contagious diseases; from their sedentary habits, to anæmia and indigestion, with its resulting constipation; less to accidents and to the results of overwork (mental and bodily), or of exposure to the weather (pneumonia, bronchitis, etc.)

With regard to most diseases, no accurate statistics have as yet been made out.

Hysteria is more common in women; perhaps epilepsy also.

Chlorosis is especially common in girls before puberty. Ulcer of the stomach “is especially found in maid-servants between the ages of eighteen and twenty-five” (Aitken).

Scrofula is about equally distributed in the two sexes. Cancer is apparently most common in women; but this is doubtful. Many cases

occur at the same age in women. The differences in the localisation of it in the two sexes are interesting. In women, it is common in the breast and uterus, and rare in the stomach and ovary. In man, it is rare in the breast, and common in the stomach and testis.

Gout is more common in men—doubtless from their habits as regards eating, and especially drinking; and so are urinary calculi, for obvious anatomical reasons.

Phthisis is, according to Louis's researches, more common in women than in men, in the ratio of 92 to 70. The Paris statistical tables give about 7 to 5 as the proportion. For the whole of England, this statement is true also; but in London more men than women die of consumption. Between the ages of one and two and a half, many more boys are tuberculous than girls; from three to five years, a few more girls; from six to ten years, the proportion is about equal in the two sexes; and from eleven to fifteen, girls suffer most.

Veneral diseases are more common in men, but more fatal in women, for two excellent reasons: their existence is far more often not noticed until the lesions have become severe, and still more frequently purposely concealed, on account of ignorance or shame; or, in public women, from sheer necessity. Where the periodic examination of prostitutes has been made compulsory, the result has certainly been, not only that the number of syphilitic cases among them has diminished, but (and it is very important to notice this fact) that the graver forms of the disease have become much less frequent.

A whole chapter of hygiene treats of the means of prevention of the dislocations of the uterus, which may be summed up in the avoidance of too long continuance in the same position, especially stooping or standing up; not allowing women to walk too soon after the birth of a child, etc. Then we must mention the diseases which accompany and follow parturition. These subjects claim our attention the less, because they are fully considered in the treatises on accouchement.

We now come to heredity. As external resemblances, peculiarities, etc., are propagated, so is the tendency to disease in many cases; that is to say, the fault in the working of the functions which gives rise to a particular disease is often repeated in the offspring, which thus in this, as in other particulars, is shown to be of the same nature—cast, as it were, in the same mould—as the parents. Here we can hope for great results from hygienic precautions; for heredity has its limits. The descendants of a negro father and white mother become permanently white in the fourth generation, supposing a white woman to be taken at each generation for mother. The only way of establishing hereditary influence is by careful statistics. In some cases, one or two good instances are sufficient: *e. g.*, the hæmorrhagic diathesis, happily very rare, is undoubtedly hereditary; it also often attacks one sex in a family, being communicated in a latent state through the other sex. The same is true of many minor peculiarities, as pointed out by Dr. Prosper Lucas, Mr. Darwin, and other observers. Nervous diseases run in families: not that any particular nervous affection descends, but rather the tendency to nervous disease of some sort. Phthisis is certainly hereditary. Louis believed this, although he considered that his observations did not prove it. However, we must not think that phthisis is always hereditary, or even that the majority of cases of tubercle in the lungs result from the tubercular disease of ancestors. It is said that cancer of the breast may descend in females of families, while the males are healthy. Some authors maintain that diseases may change in descent—*e. g.*, that scrofula in children may result from the syphilis of parents; and that tubercle or rickets may proceed from the same cause. Indeed, almost everything has been put down as the result of syphilis. The truth is, that unhealthy parents are likely to produce cachectic children; and that is all. Syphilis, as such, has never been shown to produce anything else in the offspring. Scrofula is without doubt hereditary, and is transmitted by parents who are in appearance quite healthy, having conquered the effects of the disease in themselves at the period of puberty. Chronic rheumatic arthritis appears to be hereditary, as is the case also with emphysema. Some diseases miss out a generation, as gout. Phthisis does so occasionally. There is great difficulty of certainty in all these matters, and much is often advanced on too slight grounds. Diseases should be traced in a direct line. When one gets into collateral branches, the results are always doubtful; and Chomel has pointed out that it is much safer to trace by descent than by ascent the influence of heredity.

Then, the great influence that *habits* bring to bear on the subject is another difficulty. Men live, eat, and drink, in the same way as their parents; they acquire most of their habits; and habits are very difficult to eradicate, especially bad ones. Some habits become an artificial necessity, as eating and drinking too quickly; smoking and snuff-taking; opium and arsenic eating; coffee and tea drinking in excess; laziness; sexual excesses; etc. All such must be gradually, and not forcibly eradicated; the treatment being in the first place a warning of the danger of

continuing in such a course, and then open-air exercise, healthy games, cold baths, and a non-exciting diet.

It is probable that most of the diseases of middle life are to be referred to irregularity in eating, drinking, and exercise—indigestion, constipation, hæmorrhoids, or diarrhoea, dysentery, etc. From constipation, effete matters become reabsorbed into the blood, which not only does not properly nourish the various tissues, but poisons them, giving rise to permanent alterations of the economy. Who knows what this may have to do with artery-disease, with diabetes, with kidney-disease, and especially with the amyloseous degeneration of organs? To excessive drinking of alcoholic liquor we have to attribute chronic indigestion from irritation of the mucous membrane of the digestive canal, improper nourishment of parts, and so fatty degeneration, alteration of the structure of the liver and other organs, cirrhosis, ascites, and finally death.

Habits of laziness, when combined with over-eating, lead to obesity; and this is particularly the case when much farinaceous food is taken, as is well seen in France. Starchy and fatty foods are especially respiratory, but are also stored up in the economy in the normal state. When, however, they are taken in excess, fat is deposited in too great quantities, unless the amount of exercise taken be correspondingly increased; the movements are impeded, respiration rendered difficult, and oxidation of the blood imperfect; while a tendency to suffocation from slight causes is produced.

The great remedy for this state of things is *the balance*. Such people always maintain that they eat very little. Let them weigh their food; forbid bread, potatoes, sugar, butter, and fats generally; make them take exercise regularly, increasing in amount every day—and this habit may be kept in check. Men who eat a great deal, and even a great deal of bread, do not become obese if they work hard or take enough open-air exercise.

The fatal results of bad habits can only be warded off by the spread of a sound knowledge of the laws of health.

The consideration of man collectively, as races, nations, families, is omitted in this abstract for the sake of brevity.

CLINICAL MEMORANDA.

PERFORATION OF THE ASCENDING COLON.

By J. Q. COSTIN, M.R.C.S. Eng., Market Harborough.

I WAS called in on August 3rd to see G. B., aged 45, who was complaining of pain extending over the abdomen, slight fever, and constipated bowels; pulse natural. I ordered castor oil and a carminative mixture; the bowels were relieved after the oil, but the pain remained unaltered. During the two following days all the symptoms became aggravated. I then called Mr. Francis in consultation. On carefully examining the abdomen, we found considerable accumulation of scybala in the colon. We agreed to give him a dose of calomel, followed by senna mixture. This failed to move the bowels; and an enema was administered, which brought away a very small quantity of faecal matter. This was followed by a drop of croton oil, which acted vigorously and expelled a great quantity of scybala. As the pain still persisted, I gave a morphia draught, after which he slept. The next day, the bowels were moved naturally, but sickness supervened, which continued at intervals, and gradually assumed a stercoraceous character. Hydrocyanic acid and chlorodyne were respectively given, with partial success, but the patient gradually sank, and died on the morning of the 15th.

Post mortem examination twenty-four hours after death.—On opening the abdomen, we found the small intestine considerably distended, and some portions of its surface covered with patches of lymph. There was some effusion into the peritoneal cavity, with a markedly faecal smell. On the right side, the omentum was gangrenous, interspersed with small abscesses. Upon tracing the course of the ascending colon, we discovered in the middle third of its posterior surface an oval ulcer, perforating cleanly the whole thickness of the bowel; and immediately below its site, were found two small pebbles (free in the cavity of the abdomen), weighing respectively nine and four grains, of a more or less rounded character, but acted upon considerably by the acids of the secretions. The other viscera were healthy. There were no calculi either in the gall-bladder or the urinary bladder.

My reasons for reporting the above case are twofold: firstly, the peculiar agent by which the perforation was caused, which may probably be explained by the patient having been in the habit of carrying a small stone in his mouth; secondly, the peculiar site of the ulcer.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 3RD, 1870.

THE LOGIC OF CHARITY IN WAR.

MANY persons express, and probably many more feel, a doubt as to the propriety of sending such things as ordinary hospital stores for the use of the belligerent armies on the Continent. It appears to be simply relieving the Governments of the two countries at war with each other of expenses which ought to be incurred, and of duties which ought to be performed, by them. The Governments of these countries are surely as much responsible for having a sufficient supply of surgical instruments, chloroform, and other such requisites, as they are for having a sufficient supply of guns and ammunition, on entering into war. Theoretically there is this responsibility, but practically there is not. Each Government considers that its responsibility ceases when it has provided hospital stores to a certain extent; and if, after that provision has been made, a deficiency exists, as there always does exist, it is ascribed to the casual accidents of war, and not to want of forethought. It has been the invariable deficiency of surgical stores, of means of transport for the wounded, hospital accommodation and hospital appliances, medicines, and comforts, after all great wars, and the immense loss of life and aggravation of misery due to these deficiencies, that has led to the institution of "National Societies for Aid to Sick and Wounded in Time of War" in all continental countries, and indeed we may say, now that there is one in England, in every country of Europe.

Admit the responsibility of the Government of a country for such deficiencies, or rather of the country itself—for it is the country at large which is to blame, when the bottom of the matter is reached—and who is to call the Government or country to account? The sufferers for the most part die, and the dead have little influence. After the war is over, a change of ministry, or of the form of government, condones for the faults of those who were in power in the country which comes off worst; and, in the victorious country, those who were fortunate enough to escape without having needed the surgical assistance which would not have been forthcoming had they required it, and those who have survived, though disabled by loss of limb or otherwise, are too much occupied by the glory and rewards which fall to their share, to dwell much on the circumstances which attended the deaths of the companions they have left behind them. What penalties were paid by the French Government or nation for the thousands of lives needlessly sacrificed on account of the hospital and sanitary deficiencies during the Crimean war—deficiencies which have been so fully exposed in the official writings of Baudens, Scrive, Chenu, and others? What penalties were paid for similar deficiencies in the great Italian war of 1859, when, as is shown in the medico-chirurgical statistics of the campaign published by Dr. Chenu, nearly two hundred thousand French soldiers were hurriedly sent by their responsible authorities to fight, with provisions of surgical and hospital assistance that would have been meagre enough for the twentieth part of the twenty-five thousand who were

wounded, or died of wounds, during the campaign? and, moreover, with the power for good of such surgeons as were placed in high administrative positions, paralysed by their superiors, the "intendants", who, from absence of the necessary professional training, were incapable of appreciating the vital importance of the representations on professional subjects which were made to them? What penalties followed the want of surgical aid, the want of surgical appliances—nay, the want even of rations of food and water—for the wounded who in 1866 fell at Königgratz—when the Prussian army, pushing on after the retreating Austrians, and carrying their army-surgeons and field-hospital stores with them, left behind them twenty-six thousand wounded Prussians and Austrians on the field of battle? Try to conceive the sufferings of that neglected host of wounded. Surely, if the Government were responsible, some penalty followed. What? And so again it is in the present war between France and Germany. Telegrams are constantly being sent to the National Societies for Aid to Wounded existing in the neutral states of Europe, including our own National Society in London, for hospital appliances of all kinds, to meet the urgent necessities of the wounded—instruments, chloroform, lint, bandages, shirts, and other articles that all hospitals should be fully supplied with—not to mention surgeons, dressers, and other hospital attendants. The Governments ought to supply them to an extent adequate to meet the need; but they do not. The want exists; there is no doubt of that. The only question which remains is, shall the sufferings of the wounded men be aggravated by the continuance of these deficiencies—many must suffer, and many must unavoidably die, on account of them—or shall their sufferings be alleviated, and lives be saved, to a certain extent—that is, as far as practicable—by assistance independent of their Governments? Common humanity replies, "Let us do unto others as we would wish them to do to us under like circumstances; let us help as far as we can."

There is no doubt that the Governments of the North German Confederation, profiting by the frightful lessons of 1866, have materially improved the medical organisation of their armies; and that, by encouraging the volunteer aid proffered by the National Societies, they have largely added to the available surgical assistance and hospital requirements for the wounded, but still not to an extent adequate to meet existing needs. The French authorities, if we may judge from recent writings, have done little to improve their army medical organisation of late years; and we fear that, when the medical and surgical history of the present war comes to be written, its pages will be as full of painful evidence of want of all that should be provided for saving the lives of the wounded French soldiers as are those of the history of the Italian campaign of 1859.

THE REGISTRATION OF DISEASE.

OUR attention has been directed to some recent remarks upon the Report and Scheme of the British Medical Association Committee on the Registration of Disease in a medical contemporary, which, if unanswered, might weaken the efforts of those who have for many years fought in the front ranks of this movement, and who may be relied on as knowing thoroughly *what* might and ought to be done, *how* it should be done, and *what* need not be attempted at present.

The writer of these remarks objects to the scheme of the Association because it involves a reform in the registration of mortality. This may, however, very well be considered as a most important reason for its adoption. The two objects are really inseparable, and there would be reason to regret any attempt to sever them. We do not know when or where Mr. James Lewis has shown, or Dr. Farr has confirmed, "that a weekly return of non-fatal disease occurring in public practice can be obtained without creating any fresh local organisation." Those who have no small experience in the matter unhesitatingly assert that a new element of local organisation is absolutely necessary for the regular and permanent registration of sickness attended at the public cost.

Now, the appointment of a Registration Medical Officer in every district was Dr. Farr's own proposal four years ago, in the twenty-seventh

Annual Report of the Registrar-General, although this project was not original, but merely a development of the scheme put forward in 1860 by the Special Committee on Registration appointed by the Social Science Association. The Medical Superintendents of Registration then proposed—in consequence of Mr. Rumsey's papers read at the Bradford congress in 1859—were to perform the very duties, including registration of sickness attended at the public expense, which Dr. Farr in 1866 suggested for his "Registration Medical Officer". Moreover, the Committee on the Registration of Disease appointed by the British Medical Association, having met at Manchester a few months after the publication of Dr. Farr's celebrated letter to the Registrar-General, clinched the argument and consolidated the objects of the plan by the following resolutions.

"1. That this Committee, recognising the importance of Dr. Farr's proposition for the appointment of a Registration Medical Officer in every Superintendent Registrar's District, strongly urge him to press it to a successful issue, and assure him of their hearty co-operation.

"2. That, in the opinion of this Committee, such a medical officer would be the suitable authority for collecting and publishing periodical returns of disease obtained by local associations.

"3. That the districts for the registration of disease should be based on the division of the country for the registration of births, deaths, and marriages," etc.

These resolutions, on being communicated officially to Dr. Farr, were by him acknowledged with cordial approval. (See *BRITISH MEDICAL JOURNAL*, Nov. 3rd, 1866.)

It is now too late to endeavour to dissociate two closely allied objects, neither of which can be carried into effect throughout the kingdom without specially appointed officers, and both of which may be easily worked by the same sanitary officer in each registration district or group of districts.

There is another ominous sentence in the article referred to. "We have been told," says the writer, "that the intervention of a third party between the medical recorders of facts and the central office, for correction and tabulation, would be fatal to regularity and rapidity of publication." Now, seeing that the central office has never yet had the opportunity of communicating directly and authoritatively with "the medical recorders of facts" of public sickness, or of testing "the intervention of a third party"—*i. e.*, a scientific officer or society; and seeing also that practical men like Dr. Ransome and Dr. Philipson have long had that opportunity by means of voluntary machinery, we should be disposed to attach great authority to their opinion on the matter, which coincides with that which we have just expressed. As regards "regularity and rapidity of publication", there is no reason to doubt that a skilled local officer would be far more reliable than a central department in the prompt utilisation of facts of disease and mortality; and, as regards the accuracy and worth of the information published, if any one have the slightest doubt on the point, let him read Dr. Wilson's able "Notes on the Quarterly Return," etc., in this *JOURNAL* (July 23rd, 1870, pp. 84, 85.)

It must be remembered here that the chief of the registration department has, almost offensively, refused to have anything to do with the registration of non-fatal sickness. The fact is that, as at present constituted, neither the General Register Office, nor the Poor-law Board, nor the Medical Department of the Privy Council, is thoroughly available for this purpose. The returns should, in the opinion of the leading members of our Registration Committee, be collected, revised, and tabulated promptly in each district, although uniformity of plan ought to be secured by instructions from a central authority. The subsequent use of the combined records would be the duty of that authority.

Some excellent papers read at Newcastle show plainly enough that a legally constituted machinery, at work throughout the country, is essential to the permanence, completeness, accuracy, and usefulness of these records. A main element of strength lies in local scientific organisation. Any attempt to manipulate crude returns of disease by a metropolitan staff would, we have reason to believe, be steadfastly resisted by the profession in the provinces.

HONoured IN THE BREACH.

AMONG things conspicuous by their absence at the present moment is the Introductory Address of the Winter Session at St. Bartholomew's Hospital Medical School. If that school should take the lead in abolishing the custom of delivering Introductory Addresses, it would earn the gratitude of a large number of distressed lecturers. It is not everyone who has the gift of talking generalities for an hour, or of dressing up with a tasteful new sauce a dish so infinitely old as the well-known advice to students which is now embodied in some hundreds, if not thousands, of addresses, which may be found, in abstract or at length, in the journals of many years past. Some thousands of these lectures have been reprinted by request, and have received a very extensive gratuitous circulation: many more thousands must linger on the shelves of the booksellers, if they have not been condemned to the trunk-maker or restored to the pristine purity of pulp. Most of the lecturers accept the duty very unwillingly, and as an unpleasant burden which all must bear in turn. But the custom which has grown up of giving introductory addresses at the beginning of the session, although of no very venerable antiquity, and certainly of no demonstrable necessity, has achieved of late years a character of despotism which may fairly excite to rebellion. Of course, there is something to be said in favour of them. They afford opportunities of giving good advice to the student; but it is not certain that the time, place, and speaker are always best adapted to make that advice impressive, and probably for practical purposes the same purpose would be much better served by ten minutes' advice from each lecturer at the commencement of his course to his new students collectively, and a little individual attention to their particular wants and habits throughout the session. It may be questioned whether general introductions do not more harm, by absolving individual lecturers from this function, than they can possibly do good. So little is the object or meaning of the annual introductory lecture settled, that incessant and varied efforts are made to break from its tyranny. Some of the best introductory lectures have been, in fact, special essays on scientific subjects or particular aspects of the medical art, which have been of great interest, but have had nothing in them particularly germane to the introduction of a class of new students to their work, except the tag of advice unsymmetrically added to the end, in order to keep up appearances. Other addresses keep rigidly to the avowed object; and it is the authors of these who struggle most courageously against their hard fate, in being compelled to add to a literature so superabundant and to preach upon a text so thoroughly worn by the long succession of able hands through which it has passed. In more than one school there has been an amusing hunt for a lecturer in this as in former years; and if we may assume that St. Bartholomew's has emancipated itself from the tyranny of a form which has really little significance, we think it may be congratulated on its wisdom and courage. Students at Oxford and Cambridge set to work cheerily and successfully enough without this preliminary oration; and that illustration may save us the necessity of prolonging the argument which it points. We leave it to be challenged by any one who differs from us on the subject, if such an one there be.

SECTIONAL ADDRESSES AT THE NEWCASTLE MEETING.

No address was delivered in the Section of Surgery. The address in the Section of Physiology is in the hands of the author for correction. The business in the Section of Midwifery was prefaced by a few remarks from the President, which will appear in the sectional reports. We shall commence at the earliest possible date the publication of the reports, including abstracts of the papers read, and of the discussions which ensued thereupon. Any author who may have failed to send his abstract is requested to make good the omission without delay, if he wish the abstract of his paper to appear in its proper place.

IN another column we are able to afford very complete and important details of the remarkable epidemic of relapsing fever prevailing in Liverpool.

WE wish to ask the attention of those of our readers who are interested, by residence or otherwise, in the health of our British watering-places, to the analysis which we commence this week, with the aid of competent authorities, of the vital statistics of these resorts. It is somewhat surprising how scanty in amount and defective in form are the available data for such an inquiry. We shall gladly receive from resident medical men, or others who have given attention to the subject, criticisms of the results arrived at in these articles, documents, references, and pamphlets, which can assist in throwing light upon the subject.

BY the death of Dr. John Wilson, R.N., Honorary Physician to the Queen, a good-service pension becomes vacant, which is likely to fall either to Dr. Davidson, C.B., or Dr. Salmon.

THE Library of the Obstetrical Society will be closed from Monday, September 5th, to Saturday, September 17th, both days inclusive.

BARON VON DIERGADT of Bonn, who recently presented to the German Hospital in London a donation of £10,000, has presented the like sum of 50,000 dollars to the German Hospital of New York.

SO thoroughly is Ireland now guarded from small-pox by compulsory vaccination, that only one death from it occurred in that country during the last quarter.

AN inquest has been held this week on a child who died from want of food at a baby-farm at Hackney, where there were eleven children in charge.

LADY MUNCASTER has bequeathed £1,000 to the Cottage Hospital at Clearwell. We are glad to hear of legacies tending to place these useful institutions on a footing of permanence.

WE are informed, by a leading member of the German Committee, that communications received from Germany intimate that no more volunteer nurses are required.

AMONG the attractions at the forthcoming meeting of the British Association, will be an address by Professor Tyndall on the Scientific Uses of Imagination.

IT is useless for surgeons to offer their services with the armies now in the field unless they speak the language of the country. No relaxation, we are informed, can be made in the regulations already announced on this head.

A CASE of rib-breaking is reported this week from Hanwell. It was stated that one of the patients had pushed the man over, and that death had resulted from other causes. The verdict was framed in accordance with this evidence.

THE great triennial musical festival is in progress this week at Birmingham, in aid of the Birmingham General Hospital, with very great success. Since their foundation, these festivals have altogether contributed to the funds of the hospital £90,000, besides presenting it with the organ, valued at £5,000, and an extensive library.

THE annual visitation of the Royal Sea-bathing Infirmary, Margate, took place this week, and was largely attended. This hospital was originally established in 1796, when it had ten patients. It provides now two hundred and fifty beds for scrofulous patients from all parts of England, with forty officers. It has warm and cold baths, and machines for bathing.

AMONG the very munificent legacies of the late Mr. John Abbott of Halifax, are £1000 to the Bradford Eye Institution, £1000 to the Bradford Infirmary, £2000 to the Leeds Infirmary, £2000 to the Manchester Infirmary, £1000 to the Leeds Cancer Hospital, £2000 to the Earlswood Asylum for Idiots, £10,000 to found three scholarships in the University of Oxford and two at Cambridge.

MR. SIMON'S Twelfth Annual Report to the Privy Council, which we noticed at some length last week, contains an interesting collection of documents relating to the Medical Bill. With most of them our readers have already become acquainted in the course of the recent discussions. We may, however, find an early opportunity of reviewing them. In the present stage of the question, they have a prospective as well as a retrospective interest.

THE annual rates of mortality, according to the returns of the Registrar-General, for last week were in the following places per 1,000 of the population: Portsmouth, 16; Edinburgh, 20; London and Dublin, 23; Nottingham and Sunderland, 24; Newcastle-on-Tyne, Salford, and Bristol, 26; Sheffield, 27; Wolverhampton, 28; Birmingham, 29; Glasgow, 30; Manchester and Hull, 34; Liverpool and Bradford, 35; Norwich, 39; Leeds and Leicester, 40. The deaths in the metropolis, as compared with those of last week, are about the same, the figures being 1,398 and 1,393.

THE EMPEROR NAPOLEON III.

COMMUNICATIONS which we have received from a source worthy of the highest confidence assure us that the statements which have appeared this week as to the debilitated and doubtful state of the Emperor's health are well founded. We learn from this source that Mr. Prescott Hewett, of St. George's Hospital, has visited the Emperor professionally. The consequences of the painful and wearing vesical and prostatic affections of the Emperor, added to the fatigues and trials, bodily and mental, to which he has been subjected during the recent campaign, have been such that at any moment very startling announcements might be made.

THE LAW CONCERNING SCARLATINA.

WE ask attention to the following *résumé* of the powers which the law gives to local authorities to act in preventing scarlatina. It is from the pen of Mr. John Simon, Medical Officer of the Privy Council. It forms a fitting sequel to the impressive figures which we have published enumerating the half-million victims of a preventable disorder which is spread through the neglect of the local authorities to carry out the law—unfortunately mainly permissive—and of private persons to take those precautions for isolation and disinfection of patients and their surroundings, which every man owes to his neighbour. In the presence of this persistent and fatal epidemic, it is an urgent duty, which should be near to every man's conscience, to avoid scattering the seeds of death broadcast amongst his neighbours. It is no less the duty of the local authorities to put in force the following provisions of the law.

Under the Sanitary Act, 1866, large powers are given to local authorities for the purpose of preventing the spread of contagious disorders; viz., to cause any infected house or part of a house to be cleansed and disinfected; and to provide a proper place, with all necessary apparatus and attendance, for the disinfection of articles (such as clothing or bedding) which have become infected, and to cause any articles brought for the purpose to be disinfected free of charge. Powers are also given to provide hospitals, either temporary or permanent, and carriages for the conveyance to them of the sick; and to provide places for the reception of dead bodies. Where a hospital for the reception of the sick has been provided within a district, a justice, on application, may order any person suffering from a dangerous contagious disorder, and being without proper lodging or accommodation, or lodged in a room occupied by more than one family, to be removed to such hospital at the cost of the local authority; and where a mortuary has been provided, the removal to it of dead bodies, at the cost of the local authority, may, in certain cases, also be ordered. Under the same Act, penalties are recoverable from persons who wilfully do certain actions which tend to spread dangerous contagious disease; viz., any person who, while suffering from such a disease, enters any public conveyance without notifying to the owner or driver that he is so suffering, or wilfully exposes himself, without proper precaution against spreading the disorder, in any street, public place, or conveyance, or who, being in charge of a child or other person so suffering, so exposes the sufferer; any owner or driver of a public conveyance who does not immediately provide for the disinfection of his conveyance after it has, to his know-

ledge, conveyed a person so suffering; any person who, without previously disinfecting, gives, lends, sells, transmits, or exposes any bedding, clothing, rags, or other things which have been exposed to infection from such disorders; and lastly, any person who knowingly lets any house, room, or part of a house, in which any person suffering from a dangerous contagious disorder has been, without having disinfected the same to the satisfaction of a medical practitioner, to be testified by a certificate.

THE CASE OF MISS PRANKERD.

MR. H. CULLIFORD HOPKINS, House-Surgeon of the Bath United Hospital, has favoured us with the following notes concerning the case of Miss Pranker, who is now in this Hospital under the care of Mr. Fowler.

From what I can gather, it appears that Miss Pranker was sitting in a chair when she was shot sideways, the bullet entering the upper part of the ramus of the left jaw, just to the outer side of the tragus. She then placed her hand to the spot and rested her head on the table, hæmorrhage being very profuse. Whilst in this position, another shot was fired on the opposite side, corresponding as near as possible to the wound on the right side, giving one the appearance as if the bullet had gone completely through from one side to the other. Little or no hæmorrhage occurred from this wound. Two bullets are, therefore, lodged somewhere in the upper part of the mouth or nose. I noticed that when she spoke it was through her nose, as if she had a bad cold, but this appears to be passing off. The ramus of the jaw is not broken either on the right or the left side, so that the bullets must have entered through the soft parts. The occurrence took place on Monday week, and she came to the Hospital the following Thursday, and up to this time she has not had a bad symptom. The only treatment adopted has been perfect rest, ice, and fluids, as beef-tea, etc. She is cheerful, talks and swallows without any pain or inconvenience. The two spots where the bullets entered are about the size of a bean, and to-day (Wednesday) are beginning to slough. Before she came to the Hospital, she was seen by Messrs. Stockwell, Mason, and Fowler. She is now under the care of Mr. Fowler.

THE NATURAL HISTORY OF CONTAGIA.

No part of the work carried on by the Medical Department of the Privy Council, under the influence of Mr. Simon, is more interesting to the profession, or of deeper importance to the nation than the original researches which, by his advice, the Privy Council encourage by public grants. Dr. Burdon Sanderson gives in the volume of Reports for 1869 the result thus far of the series of admirable and singularly important microscopic investigations, which he has commenced with the view of making direct studies of the intimate nature and natural history of the contagia. We shall take the opportunity when the time and space permits, of analysing this part of these Reports more minutely; meantime, we shall allow Mr. Simon to express his view of the value and result in his own well-chosen words.

"Dr. Sanderson's present report does not pretend to be more than introductory in the matter. It discusses generally the ultimate constitution of the contagia; shewing experimental reasons, which we think conclusive, for believing that each contagium, as regards its physical form, consists essentially of *extremely minute separate solid particles*; and arguing, on grounds which we think scarcely less certain, that these effective particles of each specific contagium are *living self-multiplying organic forms*. In my annual report of six years ago, when incidentally I had occasion to refer to the intimate nature of morbid infection, I quoted, as of extreme interest to that question, the experiments of Professor Schröder and M. Pasteur on the ordinary processes of fermentation and putrefaction; experiments, purporting to connect each specific fermentatory or putrefactive change with the presence and self-multiplication of some characteristic form of microscopical life; but at that time, though I could claim for zymotic pathology the utmost interest in an extension of these experiments, I was obliged to admit that 'the conclusiveness of the experiments, in the field to which hitherto they have been confined, is still matter of the warmest scientific controversy'. It will now be seen that the views indicated in Dr. Sanderson's report with regard to the agencies of morbid infection are (*mutatis mutandis*) the views of Professor Schröder and M. Pasteur on the agencies of fermentation and putrefaction; and I think it will be admitted that the latter views are importantly strengthened by the evidence which M. Chauveau and Dr. Sanderson supply from their other sphere of study, and with experiments of a new and critical kind, as to the essentially

particulate form in which the morbid ferments exist and multiply. Professor Hallier's very striking doctrine, that contagium-particles, or (as we propose to call them) *microzymes*, are the respective micrococci of certain higher fungic forms which he names, and into which he maintains they can be artificially cultivated, is fully set forth in Dr. Sanderson's report, but has not yet come under our experimental examination. Knowing that all contagia (as such) are distinct one from the other, and believing that each of them has its essence in the so-called microzymes which it contains, we by implication impute to the microzymes that in different diseases they are not identical; and as we affirm them to be dynamically different, so also we assume that, under well-devised differential experiments, other signs of their specificity may be brought to light, and for each sort of them a definite genesiology be written. Hitherto, however, no work has been attempted by us but such as is more or less common to all contagia. And the extremely difficult task of devising the differential experiments which may settle this new branch of natural history is among the obligations of the future."

AMENDMENT OF THE MEDICAL ACT.

WE regret to read the following communication in the *Times* of Thursday.

To the Editor of the Times.

Sir,—With reference to a recent report in your columns, we beg to state that at the late meeting of the British Medical Association, held at Newcastle-upon Tyne, we found ourselves compelled to resign our seats on the Council of that body. As members of the General Council of Medical Education and Registration, we had advocated the main provisions of the Amended Medical Bill introduced into the House of Lords by the Lord President of the Privy Council—provisions which, in our judgment, were of the utmost importance to the public weal. The Bill, it is believed, was withdrawn in the House of Commons by Mr. Forster in consequence of the course pursued by the Direct Representation Committee of the Association. That course was subsequently approved by a vote of the Association at Newcastle. We, therefore, could not, in justice to ourselves or to the members of the Association, continue any longer to belong to its executive. The question of the permanent construction of a Medical Council of Education is one of grave importance. It is intimately connected with other questions and interests entirely extra-professional, and it cannot, therefore, be properly dealt with by any hasty or one-sided legislation.

We are, sir, your obedient servants,
 GEORGE PAGET, Cambridge.
 WILLIAM STOKES, Dublin.
 HENRY W. ACLAND, Oxford.
 H. WYLDBORE RUMSEY, Cheltenham.
 DENIS EMBLETON, Newcastle-upon-Tyne.

August 29.

THE DEAD AMONGST THE LIVING.

It appears that the exceptional fate which is one of the traditions of classic horror is a not uncommon misery of our poor. They are not unfrequently chained to their dead. Mr. John Liddle, the Medical Officer of Whitechapel, draws attention to cases which, he says, are of frequent occurrence among the poor, where the putrefying corpse is long retained in rooms occupied as living and sleeping rooms. He instances three cases. One of these was that of a child who died of diarrhoea at King Street, Spitalfields, and whose body was retained for nine days, the parents stating that they were unable to raise sufficient money to bury it. During the time the body was kept, it became so offensive that it was necessary to remove it to a shed at the rear of the house. Eventually the father applied to the relieving-officer, and obtained an order for the burial of the body. Another case was that of a young man who died of consumption at Royal Mint Street. The body of this young man was kept for eight days in the room in which his father and mother lived and slept. The third case was that of a child three weeks old, who died at Devonshire Place, Whitechapel. The body of this child was kept in the room occupied by its parents for a period of twelve days. In some cases poverty, and in others the ignorance and superstition of the immediate relatives, is the cause of this dangerous and shocking nuisance. Mr. Liddle recommends, and every one will agree with him, that power should be given to magistrates to order the burial without delay of every corpse which is certified to be a nuisance or dangerous to public health.

THE COMING SESSION.

To the list of introductory lectures, then announced, which we gave last week, we may now add Mr. Henry Hancock, at Charing Cross Hospital; Dr. Sturges, at the Westminster Hospital; and Dr. H. G. Sutton, at the London Hospital. At the provincial medical schools, it is arranged that Mr. L. H. Grindon will open the session at the Manchester Royal School of Medicine; Dr. Fleming, at the Queen's Hospital, Birmingham; Dr. T. C. Nesham, at the Newcastle-upon-Tyne College of Medicine; and Mr. E. Atkinson, at the Leeds School of Medicine.

THE BRITISH ASSOCIATION.

THE officers in Section D (Biology) of the meeting of the British Association are now announced to be appointed as follows:—President, Prof. G. Rolleston, M.D., F.R.S., F.L.S.; Vice-Presidents, John Evans, F.R.S., F.G.S., F.S.A., Prof. Michael Foster, M.D., F.L.S.; Secretaries, Dr. T. S. Cobbold, F.R.S., F.L.S., Thos. J. Moorc, H. T. Stainton, F.R.S., F.L.S., F.G.S., Rev. H. B. Tristram, LL.D., F.R.S.

SANITARY EXPERIMENT.

AN important sanitary experiment is being carried out at Rugby. The whole of the sewage of the town, of which part formerly polluted the Avon, is now used for irrigating the fields. It is stated, in a recent special report to the Privy Council by Dr. Buchanan, that the health of the children living in the midst of the irrigated districts, far from suffering, has actually improved. This is a somewhat unexpected result. It would be interesting to have the experience of any of our medical brethren who have had the opportunity of testing the effect of sewage irrigation of the fields on the health of the surrounding population.

THE GHOST OF A HEALTH-OFFICER.

JUST now, it is especially interesting to note to what an exiguous shadow the public functions of a health-officer may be reduced, in any one of the limited number of rural districts where the local authorities think it necessary to appoint one. At Rugby, where sanitary problems of the greatest importance are being solved, by the irrigation of the fields with sewage, and in other ways, there is nominally a health-officer. But Dr. George Buchanan, who has recently returned from a sanitary survey there, reports to the Privy Council that the medical officer is not required to inform himself of the health or disease of the town, nor the local sanitary board; in fact, according to Dr. Buchanan, he is rarely called into requisition unless, perhaps, there are "some sprats to be condemned," for which he gets a special fee. It is, perhaps, not surprising to learn that the good people of Rugby, not a village altogether remote from or dissociated with large vital and educational interests, are drinking water containing twice as much nitrogenous animal and vegetable matters as that supplied by the Thames Water Companies—and that this contamination is due to sewage.

A DOCTOR'S HOLIDAY.

Dr. LANKESTER has, it seems, been spending his holiday in Jersey; and, finding the sanitary condition of that beautiful island far from what it is represented to be, he has liberally given the inhabitants a lecture, which was attended by the Governor and principal inhabitants. It ought to be the healthiest place in the kingdom; but its average death-rate is 22 per 1,000, equal to that of London; while among the 29,000 inhabitants of St. Helier the death-rate has reached the high figure of 26 per 1,000. The water-supply from wells seems to be scanty and defiled.

COMPOSITION OF BONES.

AT the meeting of the Academy of Sciences, August 16th, M. Wurtz presented a note by M. F. Papillon on modifications in the immediate composition of bones, proving that the normal lime contained in the bones of animals may be partially replaced by alumina, magnesia, or strontia, by including these substances in their food.

NOTES OF THE WAR.

THE military ambulances of the Army of the Rhine include twenty-six thousand beds.

DR. VON HUBBENET, Professor of Surgery in Kiew, has been sent to the seat of war as a delegate from the Russian Committee for the care of the wounded. Several surgeons accompany him.

A SECOND ambulance, captured by the Prussians in the neighbourhood of Metz, including in its *personnel* six doctors and twenty assistants, has been sent back into France by Luxembourg and Belgium, as the first was.

A VERY large number of the students of the German Universities have interrupted their studies, and have entered on duty in the ambulances. Many of them have been attached to the third German army corps.

A BAVARIAN physician, writing from before Metz, says that, in addition to the immense number of wounded, dysentery begins to disquiet the troops. Many such victories as the last, he says, and the Prussian army is ruined.

AMONG the physicians killed on the field, victims of their devotion, is M. Milliot. He was extracting a bullet from Colonel Colomieu, now in the hospital of Val-de-Grâce, and had just successfully completed the operation, when he was killed on the spot.

SPECIAL offices have been formed in connection with the International Aid Societies of Berlin and Paris, which will interchange information concerning the fate of the wounded prisoners on each side. Thus the families of the wounded may to some extent learn the fate of those concerning whom cruel doubt now adds to their anxiety and grief.

DR. HERMANN WEBER, who has rendered the most energetic and invaluable services to the German Committee in London for the aid of the sick and wounded, points out that the sick are perhaps likely to be overlooked in thinking of the wounded. He asks ladies for flannel-belts, as preventive of dysentery, lumbago, and other diseases. They should be a foot wide and two yards long, with strong double tapes of two yards length firmly sewn to the two corners of one end of the bandage.

STEAM-BOAT AMBULANCES ON THE RHINE.

TEN steam-boats are on service as floating ambulances on the Rhine, from Mannheim to Dusseldorf. The Geneva flag floats at the top-mast of each. The wounded are better located in these floating hospitals than they were before; but there is a want of medical aid in them.

SWISS SURGEONS FOR THE GERMAN ARMY.

THE North German envoy in Switzerland has, in the name of the King of Prussia as commander-in-chief of the German army, accepted with best thanks an offer made to despatch Swiss surgeons to the seat of war, and has expressed a wish that they may be in the first place sent to Mannheim, Mentz, and Coblenz.

FRENCH AND ENGLISH SUBSCRIPTIONS FOR THE WOUNDED.

THE French International Society of Aid for the Wounded has received up to the 11th of August £85,000 in all. Our own English International Society, in the course of a very short time, already disposes of nearly £60,000 in aid of the sick and wounded, and an immense amount of stores given in kind. It is pleasant to see that the emotions of humanity in the hearts of a neutral people, who see with grief two friendly nations desolated by war, can express themselves with hardly less energy and practical force than those of patriotism amongst the brethren of the combatants.

ENGLISH AID TO THE FRENCH SICK AND WOUNDED.

THE most earnest efforts are made by our International Aid Society to render ample aid to the French, not less than to the German, sick and wounded. The extent of their operations, however, is evidently not properly known to our French neighbours, and hardly at all to the French medical press. Of aid sent purely on the French side, £500 in money have been forwarded to the Société de Secours; and £500 have been expended in hospital stores, which have been forwarded to them. £200 have been sent to Madame Canrobert. Nine surgeons have been sent to France. Dr. Frank, the chief representative of the Society in France, has been furnished with a credit for £1,000, to be expended in hospital stores; and took over with him a large supply of

stores and appliances. Unfortunately, a great deal of difficulty has been experienced in overcoming various obstacles to usefulness—such, indeed, as are much and loudly deplored by French volunteers in the good work. It was with great difficulty that these were overcome; and it was only by joining with the American ambulance, which has been long idly delayed in Paris, and by some resolution, that Dr. Frank and his party succeeded in getting permission to go forward to a position of active usefulness. In this way, they have been enabled to start for Montmédy, and are now in the immediate vicinity of the present battle-fields, and will be able to render effective service. It must be remembered, however, that a very large part of the funds and stores now being distributed on the German side are employed for the relief of the French wounded. The wounded of both armies are to a large extent in the rear of the victorious army. Upwards of twenty thousand of the French wounded are now in German hospitals; and, although professional zeal and humanity regard friend and foe with common tenderness, it is probable that the French, being in many places necessarily the less provided, reap the largest amount of benefit from the noble contributions which have been, and are still being, forwarded with incessant activity, but in a proportion which can by no means equal the terrible need for them. We may mention that the chief seat of the Society's activity at this moment is at Luxembourg. From this neutral territory, two travelling agents are able to ascertain the wants of the different reserve and field hospitals, and to supply them as far as they can. So great have been the supplies forwarded to the one side and the other, that our chloroform-makers, druggists, and instrument-makers are startled, and in many cases quite unable to keep pace with the demand. Orders for chloroform, for lint, for all kinds of appliances and drugs, have to wait their turn, or are supplied only in part. These brief delays, however, are met by increased rapidity of manufacture; and the demand is still for more.

BRITISH OFFICERS WITH THE FRANCO-PRUSSIAN ARMY.

We are enabled to state that permission has not been accorded to military medical officers to give their services in the hospitals of the French or Prussian armies. Two army medical officers have, however, been accredited to the French army for the purpose of studying the system of hygiene and hospital arrangements in the field. Deputy Inspector-General Gordon, C.B., has been selected for this duty; and Surgeon-Major Wyatt of the Coldstream Guards will aid in these inquiries, under the direction of Dr. Gordon. Professor Parkes has been granted permission to visit the Prussian army in the field.

WITH VOICE AND HAND.

SOMETHING has been said in various places as to the policy of the course pursued by the French and German Governments in declining the services of surgeons and dressers unacquainted with the language of the country. We understand, however, that no relaxation has been made in that regulation. Their inability to understand or to give orders, or to take their place in the general movement around them, is felt to be fatal to their usefulness. The London Aid Society is compelled to decline their services for still stronger reasons. Unable to explain themselves, they are particularly ill fitted for emergencies in which a ready tongue and a clear head are constantly needed to smooth official difficulties and to dovetail arrangements, as well as to escape the personal annoyances of being arrested, shut up, or left behind, or sent in the wrong direction.

DISPOSAL OF THE WOUNDED.

It is said that the Germans offered to transfer all the severely wounded French soldiers of the recent engagements to the care of their own countrymen, but that the reply was that circumstances did not admit of their accepting the charge. If this be true, it makes the refusal of the French Government to permit the wounded to pass through Belgium into German territory all the more reprehensible. The Geneva Treaty of 1864, "for the amelioration of the condition of the wounded of armies in the field," particularly provided, in the interests of the wounded, that on mutual consent being given the wounded might be given up at once, immediately after an action, to be cared for by their own army. What circumstances can properly have prevented the French from receiving them—the French wounded having fallen on their own soil, among their own countrymen, with their own towns and hospitals at no great distance from the scenes of action? Some explanation is surely required. The following is the portion of the treaty which includes the provision above mentioned: it is the second section of the sixth article. "Commanders-in-chief shall have the power to deliver immediately, to the outposts of the enemy, soldiers who have been wounded in an engagement, when circumstances permit this to be done,

and with the consent of both parties." The latter part of the same article of the treaty makes the additional provision that such convoys of wounded, "together with the persons under whose directions the evacuation of the wounded takes place, shall be protected by an absolute neutrality."

A DISMAL ACCOUNT OF THE WOUNDED.

THE sanitary condition at the seat of war, says the *Wiener Medizinische Wochenschrift* on the 26th August, is as bad as it can possibly be. The information which reaches us describes in the most gloomy colours the want and misery on the battle-field, in the ambulances, and in the hospitals. Everywhere there is a want of surgeons, dressings, and provisions. The slaughter is without its like in the history of war. At the same time, the belligerent powers have shown less precaution and foresight for their sick and wounded than for their mutilation and destruction. Our correspondents, who are on duty in the battle-field and in the hospitals, assure us that they are almost uninterruptedly called on, day and night, to perform the most fatiguing labour. On the other hand, medical men and operators belonging to neutral States, who have offered their services to the Prussian Government, meet with little support indeed; they never receive information as to whither they are to go for instructions in order that they may reach the right place. The Prussian embassy in Vienna, on being applied to for information by several surgeons, declared that it possessed no information as to the sanitary wants of the army.

THE WOUNDED AT WEISSENBURG.

PROFESSOR BILLROTH of Vienna writes from Weissenburg in terms of high commendation of the organisation for the relief of the wounded, and of the labours which men of all classes of society undergo in rendering aid. With regard to complaints which may be made as to the want of arrangement, he says that these are made only by people who know nothing of the mechanism of so great an organised migration as is taking place; for it is believed that half Germany is in motion. He had at first the idea that it would be necessary to apply to the Society in Vienna for any material that might be wanting; but everything is so well arranged, that everything necessary can be obtained from Mannheim at the shortest notice, while the dépôt at Mannheim was replenished from Berlin. The central societies of Munich, Stuttgart, and Karlsruhe are also believed to have placed themselves in direct communication with Berlin, so that there is on the German side a complete central organisation for the care of the sick and wounded. Materials are sent in great abundance; but the consumption of them is necessarily enormous. Professor Billroth contradicts positively any reports as to want of provisions or ill-treatment on the part of the inhabitants. With the exception of some days at first, he says, the patients, surgeons, and helpers in Weissenburg have been very well cared for by the townspeople, according to their ability. There was, however, an entire want of surgical instruments; but this produced little inconvenience, as Dr. Billroth had a complete supply with him. A portion of the hospital at Weissenburg is placed under the sole charge of Dr. Czerny, Dr. Billroth's assistant.

THE MEDICAL ARRANGEMENTS OF THE PRUSSIAN ARMY DURING THE PRESENT WAR.

FOR the following sketch of the organisation of the sanitary departments of the Prussian armies during the present war, we are indebted to Dr. Geissé of Ems, who is taking an active part in the care of the wounded.

1. *Military Department.*—Each army-corps (32,000 men) has 20 surgeons (all medical men in Germany have the same classical and medical education, and have all passed the same examination), 150 dressers, and 3 sanitary detachments. Such a detachment consists of 9 surgeons, 1 apothecary, 155 carriers for the wounded, 3 officers, 39 soldiers, 41 horses, and 10 vehicles; six of the latter are arranged to convey the wounded; the remaining four contain instruments, bandages, medicines, refreshments, water-casks, etc. The carriers and soldiers of this detachment carry the wounded from the field of battle to the places prepared for bandaging and operating, and after this transport them to the field-hospitals, of which 12 are established for each army corps; 8 surgeons and 9 trained male nurses do the work in such a hospital, which contains 200 beds. According to this, each army corps has nearly 200 medical men, *i.e.*, 1 to 160 soldiers. Each of the carriers for the wounded has a large flask and a tin cup to it. These men search for and refresh the wounded during and after battle, apply bandages were required at once, and conduct them to the principal place for dressing and operating. After this has been done, they bring the wounded into the field hospitals.

Work of the Surgeons at the Dressing-place.—This place is to be chosen near water, near good roads, a navigable river, or a railway. Should there be no houses near, a large tent, always kept in readiness for this purpose, is to be erected; hay and straw are to be provided plentifully. A national and a Geneva Convention flag are to be hoisted here. The surgical staff on the dressing-place is to be divided into three divisions. The first looks after the wounds, refreshes the wounded, dresses the slight injuries, and sends the severely wounded to their respective divisions. The mortally wounded are placed near, as comfortably as possible, to relieve their last sufferings. The second surgical division bandages the severely wounded—a difficult proceeding, and one for which much time is required. The third division performs the great operations required without delay, e.g., ligature of large vessels, tracheotomy, amputation, etc. One head-surgeon superintends these three divisions. To avoid frequent examination and bandaging of wounds on the road from the dressing-place to the hospitals, and to divide the wounded according to the severity of the injury, all surgeons are supplied with small pieces of cardboard, fastened with a ribbon, on which the diagnosis and treatment must be written and signed. Fig. 1 means severely wounded and not to be transported far. Fig. 2, less severely wounded, able to bear a longer journey. Fig. 3, lightly wounded, to be taken to distant hospitals. This little document is to be fastened into a buttonhole of the wounded. For the transport of 100 wounded, one or two surgeons and 12 male nurses are always in readiness.

GERMAN MEDICAL ARRANGEMENTS DURING THE PRESENT WAR.

We have received the following from a Special Correspondent at Berlin.

Trying to bring before you a description of the measures taken by us for the relief of the sick and wounded in the present war, I shall begin by explaining shortly the organisation of the military medical service, because the voluntary aid is given only in connexion with this—an uniformity which is made most indispensable by the exigencies of the war. This organisation, which has been in force since 1869 not only in Prussia but through the whole North German Confederation and in Baden, is in the main quite in accordance with the former Prussian institutions, but details are greatly changed in consequence of the experience of 1866; the stipulations of the Convention of Geneva, as well as the experience obtained in the American war, have also had their influence. Whether the improvements thus made will be sufficient for the relief of all the wounded, in accordance with all that medical science requires, will be shewn only by experience. Every war imposes new and undescribed duties, even on the medical service, and those duties are incomparably greater in this war than in 1866. Then a series of battles and engagements occurred in one week. The present war extends not only over a much longer period of time, but also over a territory larger and more distant from home; and how much larger are the armies! what quantities of blood flow now! Already, on the 16th of August, the losses of dead and wounded on our part were 15,000, nearly as many (16,300) as in the whole war of 1866! From the newspapers you will know that now as then the enemy gives up a great, perhaps the greatest, part of his wounded men to the care of the victorious army; in the Berlin hospitals, for instance, we have for the moment as many French as German. The persons destined in the army for the relief of the sick and wounded are surgeons, apothecaries, *Lazarethgehilfen* (hospital helpers—a kind of educated nurses, who know how to cup, to dress, etc.), nurses and porters for the sick; as well as a certain number of train-soldiers with carriages for transport and clerks for the hospitals. The surgeons, formerly military functionaries with military rank, belong, since 1869, to the class of soldiers, and have rank equal to that of the officers. The assistant-surgeons have lieutenant's, the staff-surgeons captain's rank, etc. When the army is mobilised, the medical men are divided into two parts; one belonging to the troops, the other belonging to independent bodies for medical purposes, field-hospitals, and sanitary detachments. In the troops, each battalion (of 1,000 men) has a staff-surgeon and an assistant-surgeon. The staff-surgeon of one of the three battalions composing a regiment is superior staff-surgeon; he has charge of the medical affairs of the whole regiment. Every regiment of cavalry has a (superior) staff-surgeon and two assistant-surgeons. The number of surgeons with the artillery and other troops is in proportion. All these surgeons are constantly with the troops and have care of the sick and wounded during the march and in slight engagements, and send them to the hospitals if necessary. In battle, a part of them may be attached to the dressing-stations established by the sanitary detachments behind the fighting line; the rest help, as much as possible, the wounded on the spot. Besides these medical officers in the troops,

every army corps (of 40,000 men) has for medical purposes a certain number of independent mobile bodies; viz., three sanitary detachments and twelve field-hospitals.

The sanitary detachments have in greater military engagements to establish the head dressing-stations (ambulances) in a tent, or, if possible, in a house. As in the general organisation of the army, one belongs to each of the two divisions composing an army corps; the third remaining at the disposition of the general in command. The staff and material of every sanitary detachment may at any time be divided into two parts, each of which can, according to circumstances, act independently of the other. Each detachment is composed of 194 persons, among whom are two staff-surgeons, five assistant-surgeons, an apothecary, and eight hospital helpers; the rest are porters and military escort. They take with them four carriages with luggage, bandages, and medicine, six carriages for the severely wounded, and thirty portable litters. During battle the porters and some assistant-porters (told off for this purpose from the general body of soldiers) carry the wounded from the line of battle to the dressing-place. Here these are refreshed and dressed, urgent operations (ligatures, amputations, etc.) are performed, the dying men are laid down and consoled, and injured limbs are put in a proper state for transport. According to circumstances, the general surgeon of the division may for a time demand, as temporary assistance at the dressing-station, a part of the troop-surgeons as well as of the field-hospital surgeons. At the head dressing-station, or possibly even by the troop-surgeon, every wounded man has attached to his buttonhole a tablet, on which the nature of the lesion and other important information are to be written. By this measure, which is taken for the first time during the present war, it is hoped that much pain will be spared to the men and much useless labour to the surgeons who see the wounded afterwards. Another measure, new in the present war, is the distribution of a small plate having the name of the regiment and the soldier's number, to be worn under the clothing by every man, so that it will be possible to recognise any corpse on the battle-field.

Of the twelve field-hospitals belonging as above mentioned to every army corps, three or four are assigned to every division; the others remain in reserve at the disposal of the general commanding. A train field-hospital is destined for the accommodation of two hundred patients, and is capable of being divided into two parts. It has one superior staff-surgeon, one staff-surgeon, three assistant-surgeons, one apothecary, nine hospital helpers, with nurses and train-soldiers; the material is conveyed in six carriages. The surgeons are mounted, like those of the sanitary detachments. These hospitals, under the management of their chief surgeons, are established in suitable buildings, situated as safely and as close to the dressing-place as possible. The wounded come to them, if possible, on foot; if not, with the aid of the porters and the carriages of the sanitary detachment. For the first days after the battle these hospitals are the places of relief for the sick and wounded. To fulfil their purpose, however, they must endeavour to follow the movements of the army as soon as possible. Therefore, all patients that can be removed are sent to the rear and are transported to the reserve-hospitals by carriages and rail. Those of the field-hospitals which can be evacuated are sent on with their corps; the others remain, and losing the connexion with their army corps, become stationary war hospitals, under the general *Etappen-Inspection*. In the general organisation of the sanitary bodies of the army corps, there are defects, to supply which is the object of the *Lazareth-reserve* belonging to every corps, and consisting of three staff-surgeons, nine assistant-surgeons, three apothecaries, hospital helpers, and nurses; in all 86 persons. At the discretion of the general surgeon of the army corps, these persons supply those field-hospitals which become stationary war-hospitals; or the surgeons of these hospitals stay with their patients, and the material and train of the field-hospital go on to join their corps again.

The superiors who have the arrangement of the sanitary bodies which I have mentioned are: a surgeon attached to the staff of the general of division (division-surgeon), a surgeon attached to the staff of the general of corps (corps-surgeon); and above them, again, an army-surgeon, who is attached to the head-quarters of the general commanding several corps. All these general surgeons dispose of their subordinates, particularly in the sanitary detachments and the field-hospitals, according to the respective military authorities.

All the medical men hitherto mentioned belong to the army in the field. Behind the army, both in their own and in the conquered country, at suitable places, reserve-hospitals are established. Each has a certain number of (staff) surgeons and assistant-surgeons, besides, when large, a chief surgeon. A group of them is superintended by a hospital director, who is in turn under the control of a provincial general surgeon.

The communication between the field medical service and the reserve-hospitals is managed by a board, called *General-Etappen-Inspection*,

which superintends the transport of troops, provisions, arms, wounded, etc., to and from the army. A member of this board is a general surgeon, who, with the aid of "field-hospital directors," superintends the stationary war hospitals, and their evacuation, and sends the patients to the reserve hospitals. Whenever it becomes necessary, the *Etappen-general surgeon* establishes hospitals on the high roads (*Etappen-hospitals*). For this purpose and for the escort of the trains he has a number of surgeons at his disposal.

This is the general plan of arrangement in military medical matters. In the next letters I shall try to explain some further particulars, and to show how voluntary aid acts in conformity with the official arrangements.

[The official standard-book for the organisation of the army medical service in war is the instruction published by the Medical Department of the War Office. A commentary on its origin and the practical experience influencing it, is given in the book published by General-surgeon Loeffler: *Das preussische Militärsanitätswesen und seine Reform nach der Kriegserfahrung von 1866.*]

ENGLISH WATERING-PLACES.

THE terrible war which is now desolating the Continent deprives English holiday-makers of their customary visit to places abroad which have been, or may at any moment be, the scene of sanguinary conflict, or which are now fitting destinations only for such as are able and willing to render service to sick and wounded soldiers. A natural result has been to fill to overflowing our British seaside resorts. Not the least remarkable feature of this migration is, that it affords an illustration of the herring-like tendency of English pleasure-seekers, who will go shoal after shoal in just a few beaten tracks, leaving deserted all the while scores of eligible and delightful places. *Pater familias* is weary of his eleven months' confinement in the smoky atmosphere of town, and panting to inhale the generous oxygen. He is eager to restore his own sadly depressed elasticity, and hopes to bring back to the cheeks of wife and daughters the roses of which gas and smoke have robbed them; so he rushes off to Scarborough, to Brighton, to Eastbourne, or perchance to Ramsgate or Margate. At any of these places he is sure of encountering the life-giving breezes of the sea; and he patiently takes his chance of stuffy apartments at exorbitant rents, with a chance of picking up the germs of infectious disease left behind by his predecessor.

Facility of access has, of course, much to do with the selection of ordinary pleasure-seekers. It is, however, often overlooked, that the cost of residence is usually in proportion to the accessibility. The predilection for the seaside is an especial characteristic of the Londoner, who is perhaps, of all persons in the world, the least "at home on the rolling deep". It may, however, some day become an article of the metropolitan creed, that there are hundreds of beautiful inland villages and hamlets scattered over this fair land of ours, where the pursuit of health is attended with a less fatiguing and more refreshing enjoyment, and quite as much actual benefit, as at these crowded resorts of the masses.

But the purpose of our present writing is less with a future than an existing state of things. Failing Switzerland or the Rhine, society ordains that the summer holiday must be spent at the seaside, whither we propose to follow with the pen the great exodus, and to pick up such waifs and strays of information as are to be met with touching the sanitary condition of English watering-places.

In his last Quarterly Return, the Registrar-General notes the freedom, happily existing at this moment, of the seaside towns from any fatal epidemic diseases. He adds: "It is thus fortunate that, while a sanguinary war is raging on the Continent, tourists find the English watering-places in a comparatively satisfactory state—in fact, much healthier than the places of resort abroad, where sanitary science has made even much less progress than in England." We need not criticise the conclusion in favour of English over foreign watering-places drawn by the Registrar-General, who may be assumed to have satisfied himself that he was warranted in thus gratifying our insular *amour propre*. It may be a question whether, after all, we have much to be proud of; for there is a qualification, a mental reservation, implied in the expression "a comparatively satisfactory state". The Registrar is obliged to speak cautiously, for two reasons: first, he knows that, although his death-registers may not indicate the existence of epidemic disease, it is quite possible that in some of the places referred to there may have been a prevalence of sickness unknown to him, that will ultimately develop into an epidemic; and, secondly, because he cannot but be aware that his statistics are defective in regard to the precise locality

which people outside his office identify with the towns he has named in his Report. We shall illustrate this latter difficulty as we proceed; and it will be seen how necessary it is to a right understanding upon many matters connected with the public health, that some means should be taken for adjusting upon a rational basis the areas for which our mortality statistics are published.

A rapid glance at the coast-line on the map will enable us to run through the list of English watering-places of any note. Starting from Whitby as the northernmost resort on the eastern coast, we come round past Scarborough, Filey, Bridlington, Cromer, Yarmouth, Lowestoft, Harwich and Dovercourt, Walton-on-the-Naze, Southend, Herne Bay, Margate, Rainsgate, Deal, Dover, Folkestone, Hastings and St. Leonard's, Eastbourne, Seaford, Newhaven, Brighton, Worthing, Littlehampton, Arundel, Bognor, Southsea, Ryde, Shanklin, Ventnor, Cowes, Bournemouth, Swanage, Weymouth, Lyme Regis, Seaton, Sidmouth, Budleigh Salterton, Exmouth, Starcross, Dawlish, Teignmouth, Torquay, Brixham, Penzance, Marazion, Bideford, Ilfracombe, Linton, Weston-super-Mare, Clevedon, Tenby, Aberystwith, Bangor, Beaumaris, Llandudno, Rhyl, New Brighton, Southport, and Blackpool. We do not pretend that this is a complete list; but it is sufficient for our purpose.

For how many of these towns do our readers suppose the Registrar-General has any statistics which may be relied upon for exhibiting what may fairly be taken as the death-rate? About a year ago, he published a table of mortality "in *districts* or *subdistricts* containing the principal English watering-places", the results embracing thirty-six of such places; and one may suppose that the selection had at least some reference to the degree in which the registration-areas approximated to the areas of the towns themselves. Yet, on comparing the populations for which the death-rates are given in that table with the populations of the actual towns as quoted in the census-volumes, the discrepancies appear to us to be so great as to render the table a most unsatisfactory exponent of the salubrity, either relative or positive, of English watering-places. Nevertheless, we are driven to make use of it, though our principal object in so doing will be to elicit local information which will enable us to form a more exact opinion of the sanitary condition of the seaside towns than can be inferred from a mere study of mortality statistics.

If we remember correctly, the publication of his table of seaside death-rates last year brought down upon the Registrar-General not a few remonstrances from such places as felt themselves aggrieved by the facts put forward. Our object in reproducing those facts is distinctly to show the want of more trustworthy statistics; for we look upon it as not more to the interest of the public than of the watering-places themselves that their death-rates should be ascertainable beyond dispute. How far this is the case at present it will be our business to show.

Let us begin with the first place on our list, and see what we can make out about it from the Registrar's Returns and the Census Reports of 1861.

WHITBY, the popular resort at the mouth of the Esk, on the north-east coast of Yorkshire, is comprised within the registration subdistrict of *Whitby*. This subdistrict has an area of 28,419 acres; its population in 1861 was 14,484; its death-rate in the June quarter of 1869 (based on the then estimated population) was at the annual rate of 23 per 1,000, and in the June quarter of this year 18 per 1000; of a total of 70 deaths occurring in the sub-district this last quarter, 7 were returned from fever, and 1 from whooping cough, no other form of zymotic disease having been fatal. There appears to be no municipality in Whitby, nor do we find that the provisions of the Public Health Local Government Acts have been applied there; the nearest approximation to the town proper, as given in the census-returns, seems to be the townships of Whitby and Ruswarp, having an area of 2,243 acres, and a population in 1861 of 11,137. The map of the parliamentary borough of Whitby, given in the Report of the Boundary Commissioners of 1868, shows that only a very small part of the Ruswarp township lies within the town of Whitby; and hence we are driven to the conclusion that the death-rate of the subdistrict, or even of the two townships just mentioned (supposing that were forthcoming), might very incorrectly represent the death-rate of the town of Whitby. It must, however, be borne in mind that the effect of including a large area of rural district with a town in calculating mortality rates, is generally considered to be as much too favourable to the town population as it is unfavourable to the inhabitants of the outlying villages. The effect of density is to a great extent masked in such case, and everybody knows that close packing is one of the most prolific sources of disease and death. What may be the rate of density of population in the town of Whitby we cannot tell, for the reason already stated; but there is no doubt that one section of the population comprised in the registration

subdistrict is scattered over a large area at the rate of nearly eight acres to a person. The subdistrict mortality of the last quarter compares satisfactorily with that of the corresponding quarter of last year; there is a reduction of nearly 5 per 1,000. To what extent this reduction may be credited to the town of Whitby, and whether there are any local circumstances in the way of improved sanitary condition to account for it, are points upon which we shall be glad to receive early information.

It is our intention to pass the statistics of many, if not all, of our sea-side towns in review, as we have now done for Whitby; and we shall be particularly obliged to any of our members and associates, or to any other correspondents, who will furnish us with facts throwing light upon the present sanitary condition of English watering places. Especially we desire to know how they are situated in respect of drainage and water-supply; and any details as to general health-condition, to the adequacy of accommodation for visitors, and the like, will be most useful to us.

SCARBOROUGH.—This queen, or rather empress, of English watering places, occupies a fine position on the eastern Yorkshire coast. The town is under the Local Government Act, and the area for municipal and sanitary purposes is coterminous with the parish, whose extent is 2,586 acres, having a population in 1861 of 18,377, which is estimated by the Boundary Commissioners to have increased to 22,000 (exclusive of visitors) in 1868. The Commissioners observe that building is increasing on the south side of the town, but chiefly in an inland direction, where there is ample space, rather than along the coast; there being "still a distance of more than a mile from the farthest building on the sea-side to the boundary of the borough." The population of the town has nearly trebled itself since 1831. The registration-area which comes nearest to that of the town is the subdistrict of Scarborough, which is made up of the town and several outlying townships, occupying an area of 20,078 acres, and having in 1861 a population of 20,467, which is now estimated to have become about 27,000. The mortality of the subdistrict in the June quarter of 1869 was at the annual rate of nearly 21 per 1,000 on the estimated population, while in the last June quarter the rate was 19 per 1,000. Out of 129 deaths in the subdistrict last quarter, 23 were returned from scarlet fever, 2 from diphtheria, 6 from fever, and 2 from diarrhoea; thus one-fourth of the gross mortality was caused by these four zymotic diseases—a proportion which cannot but be regarded as excessive. We have no means of knowing whether this large mortality from scarlet fever occurred in the town of Scarborough, or in one of the outlying townships; though, remembering the infective power and the insidious nature of the disease, it is obvious that such knowledge is essential to a right estimate of the risk of infection which a visit to Scarborough might entail. If scarlet fever have been prevalent in the town, intending visitors will be glad to receive from an authoritative source the assurance that all necessary measures have been taken to limit its diffusion, and to stamp out those embers which might otherwise prove destructive under such a condition of overflowing population as Scarborough no doubt is exhibiting at this time.

For the neighbouring town of FILEY, the Registrar-General gave no statistics last year; for the reason, we suppose, that the town had in 1861 but 1,881 population on an area of 968 acres, whereas the smallest approximative registration subdivision had an area of 13,477 acres, and a population of 3,728. Clearly, the death-rate of the subdistrict would have afforded no test of the health of the town in this case.

THE PRESENT EPIDEMIC OF RELAPSING FEVER IN LIVERPOOL.

As late as the 26th of May, 1870, no case of relapsing fever had been observed in the parish Hospital of Liverpool. Dr. De Zouche, one of the parochial medical officers, had reported several cases in No. 7 District, which comprises a very low part of the town, chiefly inhabited by Irish labourers. The first case was on the 28th of January; the next on the 19th of February; and from that period the disease, though not showing the intensity of an epidemic, was never altogether absent from that locality. None of the other parochial medical officers had reported its existence in any part of the town. Two deaths had been due to it; viz., a man (aged 62) on the 28th of April, and a child (aged 1) on the 2nd of May.

On the 26th of May, at the meeting of the Health Committee, Dr. Trench asked that steps might be taken by limewashing the courts of No. 7 District, and by other means under the Nuisance Removal Act, to check the extension of this highly infectious disease.

The following table will show with what rapidity the disease, from the first week of June, spread throughout the parish of Liverpool.

Fever-Hospital Returns.

Week ending.	Admitted.	Discharged.	Deaths.	In Hospital.	Outside District Returns.
May 28th.....	0	0	0	117	18
June 4th.....	72	42	1	146	15
„ 11th.....	39	44	3	138	11
„ 18th.....	50	51	4	133	12
„ 25th.....	71	61	3	140	23
July 2nd.....	72	37	3	172	25
„ 9th.....	76	48	5	195	29
„ 16th.....	101	62	1	233	30
„ 23rd.....	94	53	6	268	40
„ 30th.....	122	58	4	328	44
Aug. 6th.....	194	92	5	425	74
„ 13th.....	185	118	9	483	110
„ 20th.....	180	90	5	568	117
„ 27th.....	235	120	7	676	(?)

In the above list no distinction is or can be made between relapsing and other forms of fever; but the Workhouse-books give a classification for the following four weeks.

Classification of Disease in the following weeks.	Typhus.	Simple continued Fever.	Relapsing Fever.	Deaths.	In Hospital.
July 23rd.....	37	43	188	6 Typhus	268
Aug. 6th.....	34	59	332	5 Typhus	425
„ 13th.....	32	42	409	{ 4 Typhus 2 continued 3 Relapsing }	483
„ 20th.....	15	34	519	{ 3 Typhus 2 Relapsing }	568

The characters of the relapsing fever are very similar to those published by Dr. Begbie and Mr. Simon. It begins with pain of the head and limbs, occasionally with distinct rigor, speedily followed by pain of the epigastric region or by pain of the left side over the region of the spleen, or by sickness and vomiting. The vomiting is generally of greenish-coloured bile. There is no eruption on the skin; the tongue is loaded, white and moist, but not tremulous; no sordes; the bowels are generally constipated; no fulness or flatulent distension; no gurgling on pressure over the iliac region. The mucous membrane of the lungs is irritated (bronchitis), but with no amount of secretion. The urine is high-coloured, but of ordinary quantity; as a rule, the chlorides are wanting; the phosphates are in abundance; there are no traces of albumen.

The average duration of the first attack, dating from the time of admission, is seven days; the average period of first convalescence is from six to eight days; the duration of the relapse, or second period, of the fever is from six to eight days; when, if the convalescence proceeds, the patients are considered so far well as to be fit for ordinary diet. At the termination of the first attack, there is almost always profuse perspiration; in a few cases epistaxis, and in one or two cases diarrhoea, have appeared as critical discharges.

In three per cent. of the cases, jaundice has accompanied the fever. In one of the cases of jaundice, the patient was young (18 years); in the others, they were middle-aged or old. At the period of the first convalescence after the critical perspiration, the temperature and the pulse fall below the normal standard of health. Although relapsing fever has been termed famine-fever, the general appearance of the patients does not show an unusual amount of suffering or of previous want. Dr. Kirkpatrick, the House-Surgeon from whose notes the above account of the disease is taken, finds, upon careful inquiry, that none complain of having had insufficient food. The patients are chiefly Irish, or from districts occupied by the Irish; and such people are not only dirty in their persons and overcrowded in their homes, but are accustomed to live on potatoes and farinaceous food, with fish and badly fed meat in small quantities.

The cause of the almost wild-fire spread of this infectious disease is evidently the crowding of persons in houses and the intercommunication of the sick with the healthy. It is common enough to find that the whole of the residents of a house, and the greater number of the residents of a court, have been removed to hospital. Instances where the disease has been sporadic—here and there—without spreading in the neighbourhood are extremely rare, and will only be found in parts of the town occupied by the well-to-do classes. In Leeds Street, there have occurred 18 cases, and 15 of these were in one court; in Love Lane, there were 20 cases, and of these 17 were in one court; in Naylor Street, there were 38 cases, and of these 16 were in one court, and 17 in another. Instances of houses, the inhabitants of which were all attacked by relapsing fever, are found in Addison, Dukinfield, Henry Edward, Milton, Paget, and Sawneypope Streets.

While the disease has spread so largely in the poorer districts of the

town, it is gratifying to know that the registered lodging-houses under constant inspection, though chiefly situated in those districts, have been wonderfully exempt. Since the 1st of June, only 31 cases of infectious diseases, including therein all forms of continued fever, have occurred in registered lodging-houses, and in only one instance did the disease extend beyond the person attacked. In that case the patients were tramps—father, mother, and child.

The accommodation provided for the patients by the select vestry has hitherto been excellent, and quite sufficient. The workhouse fever-hospital proper accommodates 160 patients; and the special wards adjoining it have been arranged to accommodate 140 more. Sheds in Ashfield Street were opened on the 1st of August for 70 patients. The new infant-school of Kirkdale, which is capable of accommodating 450 patients, was appropriated for the purpose on the 8th of August; and the Select Vestry see their way to provide accommodation, without much difficulty, for the reception of 150 to 200 more, by erecting wooden sheds at Kirkdale.

The Health Committee of the borough have co-operated with the parochial authorities in their zealous and praiseworthy efforts to meet the requirements of the epidemic. Daily lists of all cases of fever occurring within the parish and out-townships of the Toxteths, are sent to the municipal offices of the borough. The houses are directed to be limewashed within forty-eight hours by the owners of the premises; the rooms where sickness has occurred are fumigated with chlorine gas, and the clothes and bedding of the patients are taken, free of charge, to the disinfecting apparatus. The Health Committee have likewise directed the periodical watering of the streets and courts of infected districts with a solution of carbolic acid; and a Subcommittee meet every other day for the purpose of issuing the necessary notices required by the Nuisance Removal and Sanitary Acts.

HEADS OF A SCHEME FOR THE ORGANISATION OF THE MEDICAL VOLUNTEER OFFICERS.

THE points necessary for the volunteer medical officers to consider with regard to the hospital service in case of a volunteer force having to take the field will be the following.

1. What is to be the relation of the medical corps of the volunteer forces to the medical establishment of the regular army? Is the administration of the field-hospital service—including that for the carriage of wounded, and for their treatment in field-hospitals and stationary hospitals—to be in charge of administrative medical officers of the regular army or of the volunteer forces?

2. If the administration is to be in charge of the medical officers of the regular army, then the necessary organisation for the purpose exists. The only question will be one as to number of officers required beyond the number already on the roll of administrative officers of the regular army.

3. If the volunteer medical officers are to administer the concerns of their own medical service, then who is to be the responsible chief? who the inspectors and their deputies, for exercising a general supervision over the executive medical officers, and directing the arrangements of the ambulance transport service and of the hospital and sanitary services?

4. The duties that will devolve on the administrative medical officers, as well as those of the executive officers, on a force taking the field, may be seen by reference to the medical regulations of the regular army. The *matériel* authorised for use in the transport of sick and wounded with an army in the field will also be found in the medical regulations. The system on which this transport is to be conducted has yet to be settled. A good deal of information on this subject will be found in Longmore's *Treatise on the Transport of Sick and Wounded Troops*, published by the War Office. Volunteer medical officers should settle a plan for the removal of wounded, with reference particularly to the means of communication in Great Britain—well-made roads to, on, and from, railroads, etc.

5. With regard to the disposal of the wounded in case of an action, the following points should be settled. *a.* Who are to be responsible for giving the first help and bearing the wounded from the places where they are lying? *b.* How are the bearers (when decided upon) to get the necessary training for performing their duties? *c.* Under whose supervision are the bearers to be placed when called upon to perform their duties?

6. It is presumed that the War Department will supply all the necessary hospital *matériel*, and that it will be of the same patterns as the articles of *matériel* in the regular army. *a.* But it is necessary that the volunteer medical officers should be made practically acquainted with the nature of this *matériel*, its objects, and its uses. *b.* It is necessary

that whoever are to act as the hospital servants of the volunteer field-hospitals, should also be acquainted with it; that they should, in addition, be practised in pitching and striking hospital-tents with celerity, in packing and unpacking the carts carrying the hospital equipment, as well as the several canteens and boxes comprising the equipment, and in doing the other duties which will devolve upon them in connection with field-hospitals.

SPECIAL CORRESPONDENCE.

PARIS PREPARING FOR THE RECEPTION OF THE WOUNDED.

[FROM OUR OWN CORRESPONDENT.]

1. *General Trochu on the Principles of Military Hygiene.*—2. *Precautions against Overcrowding: New Ambulances.*—3. *Health of the French Army.*—4. *Small-pox: General Mortality of Paris.*

MEDICAL PREPARATIONS FOR THE SIEGE OF PARIS.—In the imminent prospect of a siege of Paris, it is remembered that the attacks of disease, pestilence, and famine, are far more terrible to besiegers and besieged, and to all armies, than battles; and, naturally, the medical profession is asking how it is proposed to defend Paris against the diseases incident to crowding—incident in a special manner to aggregation of the sick and wounded: to know, in fact, how it is intended to fight against General Typhus, General Dysentery, and General Short Commons. Trochu, Governor of Paris, is fortunately impressed with the risks which he incurs from these and other redoubtable opponents of the same class. His past history and present conduct fully justify this statement. General Trochu is the author of a small octavo volume of 287 pages, entitled *L'Armée Française en 1867*. The eighteenth edition of that remarkable work is now before me. In this place I can do no more than mention the work; and that I do to introduce a few words from a very interesting private letter of the author dated June 13th, 1870, addressed to Dr. Shrimpton, on the subject of army hygienics, in special relation to the doctor's work entitled *The British Army and Miss Nightingale*. From Trochu's letter I take the following sentences: they quite represent the principles now being carried out in Paris. "Je l'ai lue (la brochure) avec le plus grand intérêt. Votre discussion sur les périls de l'encombrement, sur les effets avantageux de la ventilation, etc., répond notamment à des préoccupations et à des convictions que j'ai été bien souvent dans le cas d'exprimer. Enfin, rien n'est plus vrai que le tableau qui vous faites de l'armée anglaise au commencement et à la fin de la guerre de Crimée, et que les causes auxquelles vous rattachez ces deux états si différents, si pleins de contrastes de la même armée. Cette guerre et celle d'Italie ont été fécondes en enseignement dont nous n'avons que médiocrement profité par suite d'un sentiment de vanité ou d'infatuation que je combats énergiquement. Il nous conduit à penser que notre supériorité dans les armes nous exonère du soin d'observer, d'étudier, de rechercher, de comparer. C'est regrettable autant que dangereux."

The "perils of overcrowding" referred to in the above extract are being systematically guarded against in all the arrangements now being made. In the first place, the sick and wounded, who, after the first battles, threatened to fill the hospitals of Paris, are not allowed any longer to remain within the capital. Two or three days ago, I went to the Val-de-Grâce, and found that, of all the wounded received, only two remained: the rest had been removed from all hospitals within Paris. Notwithstanding statements to the contrary in English newspapers, there are, I may say, absolutely none of the sick and wounded allowed to remain in Paris. Many no doubt arrive, but it is only on their passage to other stations. Again, provision is being made for the greatest possible diffusion of the sick soldiers who must necessarily be within our gates. Schools, colleges, and private houses, are being set apart for their reception; and temporary structures are also about to be erected. So far as I can see, these arrangements are being carried out with great care and on the soundest hygienic principles. For example, to give a little series of illustrative cases, there is the Collège Chaptal at Batignolles, a splendid conspicuous building, situated in an elevated healthy situation at the corner of the rue de Rome. It has just been got ready to receive three hundred patients. Here there can be no overcrowding, for a considerably larger number might be accommodated without any such state being produced. This building has been placed at the disposal of the Comité Evangélique Auxiliaire, a branch of the great Société de Secours aux Blessés des Armées de Terre et de Mer, which has its office at the Palais de l'Industrie, and is under the protection of the flag of the international red cross, in accordance with the Geneva Convention. The medical staff of the Collège Chaptal

"ambulance", as it is called, consists of Dr. Gustave Monod, Dr. Marjolin, Dr. Broca, Dr. Gonthier, Dr. Arnal, and Dr. Louis Monod. The daily expense of this hospital is estimated at 1,000 francs (£40). I have seen the gentlemen by whom this estimate was made; and, so far as I can judge by the explanations I received, the expenses are adjusted with an equal regard to economy and an efficient provision for the necessities of the patients. As an example of an "ambulance" on a much smaller scale, similar to many others, I may again refer to Dr. Jules Guérin's twenty beds, mentioned in my last letter. Private individuals and firms are organising, under the red cross, accommodation for from one to ten or twenty sick, all over Paris. From yesterday's list of accessions, now before me, I cite a few illustrations of the wide-spread patriotic movement to which I allude. It will indicate, among other things, the utter impossibility of ever accurately ascertaining the statistics of sick and wounded in the present war, unless steps be now taken to secure daily returns from all "ambulances" in the interior of Paris and elsewhere, as well as from private houses in which one or two patients only are received. With slight abbreviation, I give exact extracts from the list.

"1. M. Cahen, rue de Grenelle, met son hôtel à la disposition des blessés, ainsi que son château de Mainville, dans la Seine-et-Oise, où il y a de la place pour au moins trente malades.

"2. A la Garenne, près Courbevoie, une ambulance de quarante lits par les habitants de la commune. Le drapeau des ambulances flotte sur l'hôpital.

"3. Aux Batignolles, rue des Dames, M. Mutel a organisé cinq lits, et se charge personnellement de tous les soins à donner."

It is not in Paris only that this sort of thing is being done; all over the invaded regions, or near battle-fields, a similar movement prevails. In Alsace and Lorraine, more than 6000 sick and wounded soldiers are lodged in private houses. Lists of these domestic hospitals, and some history of their inmates, may, I trust, be forthcoming at a later date: at present, we only know of them by reading numerous paragraphs like the following in the daily papers.

"M. le baron de Ravinel vient de mettre plusieurs lits à la disposition des blessés dans son château de Corcelles, département du Rhône."

In the reserved garden of the Tuileries, an ambulance is to be organised, under the special direction of Nélaton, at the cost of the Empress. It is to contain one hundred beds.

Within the last few days, there has been a good deal of conversation among medical men about an "ambulance sédentaire"; or, in other words, a military hospital within Paris, to be maintained at the charges of the French press, and directed by Dr. Ricord. Within twelve hours of its becoming known that such a project was on foot, fifty-three medical men inscribed their names at M. Ricord's house as applicants for employment. In consequence of the rapidity with which these numerous adhesions were received, and the certainty that they would continue to flow in, it has been resolved (in accordance with Dr. Ricord's suggestion) that, in addition to the "ambulance sédentaire", with its two hundred beds, there will be formed in each district of Paris a special medical staff to visit the wounded distributed in private houses; and by whom, in the event of Paris being besieged, "ambulances volantes" would be organised for the purpose of giving immediate succour to the wounded and transporting them to "ambulances sédentaires."

The old Debtors' Prison at Clichy is being converted into an "ambulance sédentaire."

I have only given you specimens of what is being done in preparation for the terrible contingencies which we may so soon have to face. They will suffice to indicate the manner in which our voluntary services are being offered and accepted. The whole of this special service (as I understand the answers I have received to my inquiries) will be under the auspices of the "Société de Secours", and direct sanction of General Trochu, Governor of Paris.

HEALTH OF THE FRENCH ARMY.—Fever and dysentery are rather prevalent among a portion of MacMahon's army. I have just had a conversation with a person who, on Saturday last, was in an ambulance containing fifty patients near Rheims. All the cases were either fever or dysentery. The ambulance to which I refer was a private gentleman's house; the patients had every comfort, and were well attended to.

SMALL-POX: GENERAL MORTALITY OF PARIS.—The number of deaths for the week ending August 19th indicates a slight increase in the mortality of the epidemic. There is also an increase in general mortality. The returns for the last four weeks stand thus:

Week end. July 29.	Week end. Aug. 5.	Week end. Aug. 12.	Week end. Aug. 19.
227	151	176	187

The deaths from all causes during the same week are thus reported:

Week end. July 29.	Week end. Aug. 5.	Week end. Aug. 12.	Week end. Aug. 19.
1195	1126	1122	1165

In the week ending Friday, 26th August, the deaths from small-pox were 99—a great and hopeful diminution. The deaths from all causes for the week were 1120.

ASSOCIATION INTELLIGENCE.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Newcastle-upon-Tyne, August 9th, 1870.

PRESENT:—W. D. Husband, Esq. (in the Chair); Dr. Chadwick; Dr. Charlton; Dr. Falconer; Dr. H. Barnes; Mr. Clayton; Dr. Embleton; Mr. Reginald Harrison; Dr. Kelly; Dr. Philipson; Dr. Procter; Dr. Sibson; Mr. Heckstall Smith; Dr. Stewart; Dr. A. T. H. Waters; Dr. E. Waters; Mr. Wheelhouse; and Mr. Williams (General Secretary).

The following resolutions were unanimously adopted.

1. That the Report now read be approved, and presented to the meeting of the Council.

2. That Mr. Ernest Hart be elected Editor of the BRITISH MEDICAL JOURNAL.

3. That those gentlemen whose names have been printed and circulated with the notice of this meeting, be elected members of the Association.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, August 31st, 1870.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE first meeting of the fourteenth session, 1870-71, will be held at St. Bartholomew's Hospital, Rochester, on Tuesday, September 13th, 1870, at 3.30 P.M.

Dinner will be provided at 6 P.M.

The fourteenth session opens under altered circumstances; for, by the new bye-laws, the six districts are recognised as subdivisions of the Branch, and are brought into strict relations with the Council.

The idea of districts first occurred to the late Mr. James Dulvey, of Brompton; and the first meeting of the West Kent District was held on December 11th, 1857.

The subdivisions of a Branch into districts marks an era in the history of the Association; and it is probable that the example set by the South-Eastern will be followed by the other Branches.

The Honorary Secretary of the district will be elected at the *last meeting* of each session (in April or May); but, since the present Secretary goes out of office at once, an acting appointment must be made at Rochester on September 13th.

The present Secretary would feel thankful for a successor, because of ill health.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary*.

Rochester, August 30th, 1870.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT MEDICAL MEETINGS.

THE September meeting of the members of the above District will be held on Tuesday, the 13th, at 2.30, at the County Lunatic Asylum, Hayward's Heath; Dr. BYASS, of Cuckfield, in the Chair. Dr. Williams, the Superintendent, will conduct the members through the wards from 3.0 to 4.30.

Dinner will be provided at the Station Hotel punctually at 5.30. Charge, not including wine, 5s.

The Asylum is about a mile and a half from the station. Dr. Williams invites the members and their friends to luncheon there at 1.30. All members of the South-Eastern Branch are privileged to attend the above, and to introduce friends.

Gentlemen desirous of making communications to the meeting, are requested at once to inform me; the District Honorary Secretary, Mr. Mudd, not being at home.

G. F. HODGSON,

Honorary Secretary of the South-Eastern Branch.

52, Montpellier Road, Brighton, September 1870.

MEDICAL EDUCATION FOR WOMEN.—Fourteen ladies are studying at the University of Zurich, twelve of whom are in the department of medicine, and two in philosophy. One of these ladies is from Boston, two from London, one from Edinburgh, eight from Russia, one from Finland, and one from Switzerland.

CORRESPONDENCE.

DOUBLE AORTIC DISEASES.

SIR,—In the number of your JOURNAL for Aug. 13 a letter appeared from Dr. George W. Balfour, of Edinburgh, in which he endeavoured to show that in a paper of mine on Double Aortic Disease, which you were good enough to publish on July 23rd, I had given “a very absurd interpretation of a very simple case.” I have a great distaste for controversial medicine, and have almost invariably resisted the temptation to plunge into it, however provocative the occasion may have been; for I have observed that very little good ever comes of it, and that its effects on the combatants are very much that of senatorial eloquence on the member of Parliament who boasted, that while he had heard many speeches that had changed his opinion he had never heard one that had changed his vote; moreover, it is among the things that “do gender strifes.” But, in the present instance, the subject is so interesting to me, and the mistake into which Dr. Balfour has fallen in his efforts to correct me is so important, and at the same time one so easily made, that I both feel inclined, and think it right to forego my habitual repugnance to medical controversy; besides, Dr. Balfour is evidently so intelligent a man, is so much interested in the subject himself, and displays so thorough an acquaintance with its literature, that I think his letter deserves an answer at my hands.

What he endeavours to show is, that in the case which is the subject of my commentary I have completely misinterpreted the physical signs; that of the two murmurs which existed, the first, which I called systolic, was diastolic, and the second, which I called diastolic, was systolic, and, therefore, that the impulse that coincided with it was an ordinary systolic impulse, and not a diastolic one as I thought; that the radial pulse was in this case postponed, and that all this error arose from my ignorance of the postponement of the pulse in cases of aortic regurgitation.

Now, I think that I shall be able to show, not only that Dr. Balfour is wrong in his strictures on my paper, but that, independently of the pulse, there are numerous landmarks in the case, sufficient to establish the correctness of my views, and to have prevented the error into which Dr. Balfour has fallen, if he had given them his careful attention.

Dr. Balfour says (with a boldness which I confess I almost envy) that I must be “perfectly unaware that the relation of the pulse to the cardiac sounds varies in disease, and that one of the most marked variations is retardation in aortic regurgitant disease.” Now, it strikes me that to define exactly what facts a person does or does not know, whom you have never seen or conversed with in your life, and of the furniture of whose mind you are necessarily perfectly ignorant, is rather a hazardous feat of diagnosis; and I think Dr. Balfour will be of this opinion when he reads the following extract from one of my Hospital case-books (vol. 6, page 245); the case was one of Aortic Regurgitation; the notes were taken by myself, and I shall be very happy at any time to show Dr. Balfour the original manuscript; it is as follows.

“I find in this case the interval between the heart’s impulse and the radial pulse greater than usual—very conspicuous—the pulse being strikingly postponed. Can this arise from the volume of blood sent by the ventricle into the aorta finding an arterial system laxly, instead of tensely, filled with blood? I suppose there can be no doubt that the instantaneous propagation of the heart’s pulsations to the recesses of the arterial system depends upon the tension of the arterial column of blood, upon the unity and oneness of that column, upon the tension being such that the movement of one particle involves a contemporaneous and equal movement of contiguous particles. The later the contents of the arterial system, the more free the movements of the particles of blood among one another, and the less tense and rigid the arterial walls, the less immediate and instantaneous will be the propagation of the stroke of the ventricle, the more fluctuous and wave-like will it be, and the more will it be spent in the dilatation of the arterial calibre. I think anyone will realise this for himself in contemplating the difference there would be in the transmission of an impulse through a long India-rubber tube tensely filled with fluid, and through one laxly filled. The one would be by an instantaneous ‘thrill’, the other by a leisurely propagated wave. We see just the same thing in the fluctuation of ascites; if the abdominal distension is tight a tap on one side gives a vibration on the other that seems to be absolutely synchronous with it, but if the distension is loose a sensible interval elapses between the tap on the one side and the impact of the little succeeding wave of the fingers applied to the other. If this is so, the postponement of the radial pulse in relation to the systole might be valuable corroborative evidence (and, in the absence of murmur, valuable substantive evidence) of the existence of aortic regurgitation.”

From this Dr. Balfour will see, not only that I was acquainted with the fact of which he declares me to be “perfectly unaware,” but that I had arrived at it by personal observations, and not from reading any book; and that I had set to work, as well as I could, to explain its physical cause satisfactorily to my own mind.

But while I am acquainted with the fact I am also acquainted with its extreme rarity. I have taken with my own hand within the last four years full and detailed notes of about eighty cases of organic Heart-Disease; of these, about fifteen have been cases of aortic regurgitation, and I think I may say with confidence that in none of them, except that of Thomas Jared, to which I have referred, has this phenomenon of postponed arterial pulsation been sufficiently pronounced to attract my attention. Those who have watched my practice, and have seen the kind of scrutiny to which I subject my heart cases, will not, I think, be inclined to believe that such a phenomenon would have escaped me in any case in which it had appreciably existed. If it had existed to such a degree as to explain my overlooking it on the principle on which Dr. Balfour charges me with overlooking it in the case on which he comments, then, in every such instance there should have been in my opinion, diastolic impulse; but such was not the case. In every instance of aortic regurgitation, except that of Thomas Jared, the pulse has appeared to me to coincide with the first sound of the heart to the same degree as in health or in mitral disease. I should, therefore, infer, from my own practice, that the percentage occurrence of this phenomenon was one case in fifteen, or thereabouts, and even then to so slight a degree as not possibly to give rise to the confusion with which Dr. Balfour credits me; for to do that the pulse ought to be postponed two-thirds of each cardiac interval!

If, then, any appreciable postponement of the pulse is so rare and so inconsiderable, it does not impair the value of the pulse as a test of the sounds and murmurs of the heart in obscure and doubtful cases. I fall back upon it for evidence every day of my life, with results that ever increasingly satisfy me of its extreme value; indeed, I cannot understand the intelligent and satisfactory prosecution of auscultation without constant reference to it.

There were several points about the case that showed conclusively which was the systolic, and which was the diastolic murmur. But there was one glaring fact that of itself should have rendered impossible the mistake into which Dr. Balfour has fallen, and which I cannot but think would, if duly recognised, have prevented his writing his letter at all. I will not follow Dr. Balfour’s example and charge him with ignorance of that with which he is probably quite well acquainted; but I think I may say he has in this case overlooked, or momentarily forgotten, the value of convection in determining the localisation and nature of cardiac murmurs. It is quite clear (the *post mortem* examination left no doubt as to that, to say nothing of the physical signs) that both murmurs were aortic. Now, of these two murmurs the first, which coincided with the pulse, and which I maintain to have been systolic, was not heard except at the base; while the second, which did not coincide with the pulse, but followed it, and which I maintain to have been diastolic, was plainly heard down to the apex—was, indeed, *loud* at the apex. Now, this difference is the *rule* with regard to systolic and diastolic aortic murmurs, and its inversion is a thing inconceivable; it is a law not more universal than it is universally acknowledged; every intelligent second-year’s student is familiar with it; and, though I would not settle this, or any question by reference to authority (for I have learned, and especially in matters of physical diagnosis, “*nullius in verba magistri jurare*”), yet I may refer Dr. Balfour to the author whom he himself quotes, and point out to him that Dr. Walshe insists on this difference of direction in which these two murmurs are respectively conducted. And yet, if Dr. Balfour’s view is correct, if, as he maintains, the second of these two sounds, that coincided with the impulse, was systolic, and the first diastolic; then we have a direct aortic murmur conducted down to the apex and loudly audible there, and a coexistent regurgitant murmur whose audibility is confined to the base. Now, will Dr. Balfour for one moment affirm that he has ever seen such a case as this? I hardly think he will. It would not be more contrary to my daily observation, and to all that I have ever read, than it would be to all the laws of physics, which are very unmanageable and inexorable things. I cannot but believe that Dr. Balfour will candidly admit that, if he had sufficiently weighed this single fact alone, it would have prevented his impugning the correctness of my interpretation of my case.

Again, the two murmurs were in pairs, there were a first and a second, running into one another, then separated by an interval, and then the two murmurs again, close together. Now if, as Dr. Balfour affirms, the first of these two sounds, which coincided with the pulse, was diastolic, and the second systolic, then we have an inversion of the natural rhythm of the heart, we have the diastole immediately followed by the systole and the pause inserted between the systole and the suc-

ceeding diastole. Has Dr. Balfour, either in health or disease, ever heard such a rhythm as that? I think he will hardly say he has.

Again, I state that the loud rough murmur that terminated abruptly, the second of the two, was flatter and harsher at the left margin of the sternum, and softer at the right. This murmur, which was the one that was audible down to the apex and coincided with the impulse, Dr. Balfour maintains to have been systolic. Has Dr. Balfour ever heard an aortic systolic murmur of greater intensity at the left margin of the sternum than the right? I think he will hardly say he has.

Again, this abrupt termination of the second element of the double murmur at its height—what was it? It was evidently produced by the sudden closure of the orifice at which the murmur was produced; it had all the character of the abrupt termination of presystolic murmur by the closure of the mitral valve—the sudden eclipse of a culminating sound. Now, if the impulse in this case was a systolic impulse, as Dr. Balfour maintains, then the sudden stoppage of the murmur that coincided with it must have depended on closure of the mitral orifice. But a murmur brought to a sudden stop by mitral closure can be neither more nor less than *præsystolic* murmur—the murmur of mitral harrowing. Did Dr. Balfour ever hear a *præsystolic* murmur of maximum intensity at the base, or one in which, after death, no mitral narrowing existed? I think he will hardly say he has. “But”, Dr. Balfour may say, “why should not the second element of the double murmur which coincided with the impulse, and which I affirm was, like it, systolic, have been abruptly terminated by the diastolic closure of the aortic valves immediately following upon it?” Because in that case it would be impossible to account for the other murmur, which Dr. Balfour maintains to have been diastolic or regurgitant. How could a regurgitant murmur take place after the closure of the aortic valves; nay, more, after an appreciable interval of silence succeeding that closure. No; by adopting the hypothesis he has assumed, Dr. Balfour involves himself in inextricable difficulties, and places himself in a dilemma from which there is no escape.

So far for the general issue raised—the systolic or diastolic nature respectively of the two murmurs, and the consequent systolic or diastolic nature of the impulse that accompanied one of them. But there are two or three other points on which I must just say a word.

a. Dr. Balfour says that, according to me, “the cardiac movements have nothing in themselves distinctive of systole or diastole, but are systolic or diastolic according to the relation they bear to the pulse.” Now, I would by no means say this, nor does anything in my paper say so. I think there are some forms of impulse that are eminently distinctive of systole, but that there is a form of systolic impulse that is very like diastolic impulse.

b. Again—“an apex-beat, therefore, and the ventricular contraction on which it depends, as well as the sound which accompanies it, may be either systolic or diastolic according to the relation it bears to the pulse.” Now, if there is anything in my paper implying my belief that a ventricular contraction can, under any circumstances, be diastolic, my interpretation of my case would, indeed, deserve the epithet of “absurd”, which Dr. Balfour gives it.

c. Dr. Balfour appears to be incredulous of “such notions as a diastole with a ventricular impulse”, etc. I may remind him that Dr. Hope, Dr. Walshe, and other authorities on cardiac diseases are not troubled with a similar incredulity; and I may assure him that diastolic impulse is by no means a rare thing; I have seen two cases of it since the one described in my paper, in which the presence of a mitral regurgitant murmur left no doubt of its diastolic character.

d. I will only call attention to one more error of Dr. Balfour's; he says—“We have thus a heaving ventricular systole, accompanied by a loud rough systolic *bruit*, preceding the radial pulse by the full half of a cardiac pulsation, and followed by a soft and faint diastolic *bruit* into which it runs.” Now, anyone who looks at my paper will see that this is precisely what it did *not* do; it was separated from it by the entire cardiac pause. It was the *soft* murmur that ran into the *rough* one, and not the *rough* into the *soft* one; and that makes all the difference. It was this very relation of the two murmurs—this running of the *soft* into the *rough*—that confirmed my opinion of the systolic character of the first, and the diastolic character of the second.

So far for the *matter* of Dr. Balfour's letter, with which, except as regards those errors and shortcomings in data and reasoning which I have endeavoured to point out, I have no fault to find. With regard to its *manner*—its tone and taste—I will merely say that I hope in my reply I have avoided imitating it as much as possible, and have treated my correspondent with that friendly and respectful consideration which, as members of a liberal profession and fellow-workers in the same interesting subjects, we all owe to one another. It is a pity to see a tone so needlessly offensive imported into the discussion of a scientific question.

I am, etc.,

HYDE SALTER.

SIR,—Notwithstanding the respect I entertain for the learning and ability of Dr. Hyde Salter, I must say that I look upon the views advocated by him in your issue of 23rd July, regarding “a case of double aortic disease”, as purely hypothetical, and am convinced that he has arrived at unsound conclusions with respect to the nature of the physical signs. I shall not occupy space by going over his positions *seriatim* and showing in detail the untenable character of his views, but shall proceed at once to lay before you the chief grounds on which I have arrived at a different conclusion.

In aortic regurgitation, the visible pulsation of the arteries at the root of the neck, etc., is due chiefly to the concussion of the retrograde diastolic current and the onward systolic current; and, in cases where the regurgitation is excessive, the resistance to the onward current is so great that the interval between the apex-beat and the radial pulse may be so prolonged as to make the second sound of the heart synchronous with the pulse at the wrist. Again, as a rule, an aortic regurgitant murmur begins with the second sound of the heart, and does not terminate abruptly, but becomes gradually inaudible; whereas an aortic direct murmur, when associated with an aortic regurgitant, almost invariably ends abruptly. Moreover, when the heart is much hypertrophied, and the aortic valves are a mass of atheroma, the systolic murmur is usually loud and rough.

It would have been much more satisfactory had Dr. Salter noticed the relation of the heart-stroke to the *carotid* pulse. As there was nothing unusual or peculiar about the *post mortem* appearances of the heart, I should be inclined to suppose that there had been nothing very unusual or peculiar in the physical signs during life. This view of the case prevents the necessity of supposing a pre-diastolic murmur and a diastolic impulse, and is at the same time more consistent with the physical signs and the *post mortem* appearances.

I am, etc.,

August 4th, 1870.

Q. E. D.

JUST REPRESENTATION OF THE WHOLE PROFESSION.

SIR,—It is too late now to discuss the expediency of getting the Medical Bill rejected for the sake of having the profession at large represented on the Council; but, as the Association have adopted that decided course, we are, I think, bound to consider how fair and full representation can be best secured, party spirit kept down, and the formation of a clique prevented. I believe this can be done only by some plan which will secure the representation of minorities as well as majorities; and probably the adoption of Mr. Hare's plan, or of some modification of it, would be most effectual. If it be worth while to postpone an useful Act to make it more perfect, it is surely worth while to consider how to make it as perfect as possible.

I am, etc.,

P. H. HOLLAND.

Pelham Street, S.W., 23rd August, 1870.

THE POOR-LAW MEDICAL SERVICE OF GREAT BRITAIN AND IRELAND.

EMPLOYMENT AND TENURE OF MEDICAL OFFICERS.

It has long been a moot question with the authorities whether the union doctor should give his time entirely to the poor, or should be allowed to augment his income by private practice. If he be compelled to attend exclusively on paupers, his daily private practice cannot come into competition with his public duties. But, on the other hand, it is found that the ablest practitioners are not content with purely parochial work, and that salaries such as guardians allow can scarcely be expected generally to secure the exclusive employment of well-marked professional skill. The St. Pancras guardians have recently proposed to appoint “district medical officers, who shall devote their whole time to the duties of their office without engaging in private practice.” The Poor-law Board, however, has decided against the proposal, observing that “if the present staff were increased from six to eight medical officers, as originally contemplated, the requirements of the out-door sick poor would be fully satisfied.” A further order, signed by the President of the Board, and by the Home Secretary and Chancellor of the Exchequer, directs that the appointment of medical officers shall be permanent, and that they shall not be dismissed except for sufficient cause. This permanence of office we have long claimed for medical officers; and Mr. Göschen has deserved their thanks and the thanks of the public for according it.

A FINE EXAMPLE.

AT the usual weekly meeting of the guardians of the South Dublin Union, held on the 18th instant, Alderman Bonsall in the chair, it was resolved, by a majority (including Mr. Purcell, Q.C., who spoke in favour of the measure, but did not vote) of two to one, to increase the salaries of the city and rural dispensary medical officers and apothecaries in the union from £100 to £125 per annum each. The number of officers whose salaries are thus raised is twenty.

This rare and valuable example of guardians displaying an honourable appreciation of the worth of professional medical services, and estimating them at their real value, not at the lowest quotable market price, deserves grateful record. We trust it may prove to be an example fertile in like consequences; and we call the attention to it of our contemporaries in the daily press, with the request that they will award the just meed of praise to the guardians of the South Dublin Union, and will use the record of this act to point their moral while it adorns their tale.

THE POOR-LAW SERVICE.

SIR,—In your last week's issue, you call attention to the recent resignation of the medical officer of one of the districts of the Hollingbourne Union, on the ground of the insufficiency of his stipend; you then comment severely on the fact that twelve medical gentlemen have sent in applications for the vacant appointment, and you proceed to point out the advisability of gentlemen who have resigned their appointments, putting on record the reasons which have induced them so to do; and further urge that medical gentlemen should hesitate in applying for vacancies which have been created by the fact that the stipends were insufficient.

I agree with you that it is desirable that intending applicants for vacant appointments should possess full information as to the reasons which have induced the previous holders to resign; but as a former medical officer, and one desirous, above all things, of improving the status and increasing the efficiency of the Poor-law Medical Service, I enter my protest against the line of argument which would place the members of our profession in such a position as would cause the general public to regard Poor-law medical reformers in the light of trades unionists; and I do so the more energetically as, in consequence of my representative character, I have been strongly advised by some eminent members of the House of Commons to urge this view publicly on would-be candidates for such appointments.

I regret that twelve gentlemen should have been found to apply for this vacancy; but had the number been double, I should not have been surprised. Neither you nor either of your contemporaries have, to my knowledge, alluded to the melancholy fact that between one and two hundred applications were made for an appointment in the gift of the Central Metropolitan Asylum Board, and which is solely explicable by that which is perfectly well known to all those who have paid attention to the subject, viz., that our profession is much overstocked, and that the poverty of too many of its members is the reason why candidates in such numbers are to be found for these miserable appointments.

Now, I contend that the first duty of guardians and the Poor-law Board should be so to apportion districts and stipends that full opportunity should be afforded the medical officer fairly to perform his duty. Taking advantage of the necessities of the applicant to make a bargain, which, if he honestly carries it out, must result in a certain pecuniary loss, is contrary to the best interests of the community. The facts which I have collected on the subject have satisfied me, and are beginning to convince the public, that a large proportion of our excessive Poor-law expenditure is traceable to the imperfections in our system of medical relief; and as this Hollingbourne Union is a striking instance of the correctness of my views, I will lay before your readers some statistics which I have extracted from official documents. The Hollingbourne Union has an area of 53,947 acres; its population at the last census was 13,584; at the previous one, 13,751; population is therefore diminishing. In 1852, the year after the latter census, indoor maintenance cost £1,313:14; out-door relief, £2,861:5; total under all heads, £6,383:18, this being at the rate of 9s. 2d. per head of population—medical relief included in this return being put at £335. By the last report I find the maintenance had risen to £1,808; out relief to £3,556; total under all heads, £8,444, or an advance to 12s. 7d. per head, whilst medical relief, which had to cope with all the additional sickness and pauperism represented by this advance, had only been augmented by £4, the total cost last year being £339 only.

To show more fully the folly of the vicious economy adopted by these Hollingbourne Solons in their arrangements for dealing with the great factor of English pauperism, namely, the sickness of the working classes, let me state that if the same imperfect system which prevails in this little rural union universally existed throughout England and Wales, the total expenditure on the poor would amount to the enormous sum of £14,000,000, instead of the more modest outlay of £7,673,100, as given in the last report of the Poor-law Board, which amount, by the bye, the community hold even now to be sufficiently onerous.

In conclusion, permit me to express the opinion that only by the elevation and reiteration of such facts as these will public attention be so far excited as to perceive the necessity for a radical change of system. Then, and not till then, will there be any hope that the claims of the profession to generous consideration in the provisions for medical relief to the poor will obtain a fair hearing.

33, Dean Street, Soho, August 30th, 1870.

I am, etc.,

JAMES RODES.

OBITUARY.

WILLIAM J. CLEMENT, ESQ., M.P. FOR SHREWSBURY.

WE regret to announce the death of Mr. William James Clement, at his residence, The Council House, Shrewsbury, August 29th, 1870. Mr. Clement was the eldest son of the late Mr. William Clement, who for upwards of half a century was a respected medical practitioner at Shrewsbury, where the deceased member was born about the year 1804. He was educated at Shrewsbury School under Dr. Butler, at Middlesex Hospital, under Sir Charles Bell, and at the University of Edinburgh, and was, until his election to Parliamentary honours, in large consulting practice as a surgeon in his native city, of which he was also an alderman, and served as Mayor of Shrewsbury about sixteen years ago, and again in 1864. He was also Fothergillian Medallist of the Medical Society of London, an honorary Fellow of the Royal College of Surgeons, a Fellow of the Society of Apothecaries in London, and surgeon to the 1st Battalion of Shropshire Rifle Volunteers. He was known in his profession as the author of *Observations in Surgery and Pathology*, and of many contributions to the leading medical journals. In 1864 he was presented with a magnificent piece of plate upwards of one thousand ounces in weight, and subscribed by all classes in Shropshire. He was first elected M.P. for that city in 1865, and was re-chosen at the general election of December 1868, at the head of the poll. The late Mr. Clement married, in 1845, Tryphena, second daughter of Mr. W. P. Freme, of Wefere Hall, Flintshire. Mr. Clement had highly cultivated literary tastes, and was on terms of intimacy with the late Lord Macaulay, Mr. Justice Talfourd, Mr. Charles Dickens, and others. He was a Justice of the Peace, and Deputy-Lieutenant of Merionethshire, a Magistrate for the borough, and Honorary Fellow of the Royal College of Surgeons. Mr. Clement was a member of the Association, and took considerable interest in the prosperity of the Shropshire Ethical Branch, which, on a late occasion, he entertained at his residence.

THE LATE DR. JOHN WILSON.

THE death of Dr. John Wilson, R.N., Honorary Physician to the Queen, a highly respected naval medical officer, who rose to the highest rank by merit, was last week announced. The *Army and Navy Gazette* gives an interesting account of his services and career. He entered the navy in 1813, when twenty-four years old, serving in the *Goliath*, under the celebrated Barry O'Meara, as surgeon, who went with Napoleon to St. Helena. After constant employment in active service at the North American, West Indian, and Brazilian Stations, he was paid off in 1833. He was then engaged some time in compiling the earliest volumes of naval medical statistics, which were the forerunners of the present annual blue-books. He was Inspector of Hospitals in the *Minden* during the war in China, and is favourably known as an author by his *Medical Notes on the War in China*. After periods of half-pay, he served as Medical Inspector at Haslar, and in March 1855 was made Inspector of Greenwich Hospital, a post from which he retired in 1861. He was the first of the series of Blane medalists.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—First M.B. Examination. Examination for Honours.—Anatomy.

First Class.

Benham, Henry James (Exhibition and Gold Medal), University College
Russell, Ebenezer Geer (Gold Medal), Guy's Hospital

Second Class.

Greenfield, William Smith, University College
Birt, George, Sydenham College, Birmingham

Physiology, Histology, and Comparative Anatomy.

First Class.

Benham, Henry James, (Gold Medal), University College } equal
Coupland, Sidney, University College
Russell, Ebenezer Geer, Guy's Hospital

Second Class.

Greenfield, William Smith, University College

Organic Chemistry and Materia Medica and Pharmaceutical Chemistry.

First Class.

Nankivell, Charles Atkinson (Exhibition and Gold Medal), University College
Greenfield, William Smith, University College } equal
Russell, Ebenezer Geer, Guy's Hospital
Birt, George, Sydenham College, Birmingham

Second Class.

Coupland, Sidney, University College
Benham, Henry James, University College

NAVAL MEDICAL SERVICE.—Names of the successful candidates who passed the recent competitive examination for admission into the Naval Medical Service, held at the London University between the 8th and 11th August, in the order of merit in which they passed, and the number of marks obtained.

	No. of Marks.
Browne, Samuel Haslett, M.D. Queen's College, Belfast	2435
Colahan, William Henry, M.D. Queen's College, Galway	2235
Harvey, Christopher, Westminster Hospital	1905
Alloway, Thomas Johnson, McGill University, Montreal	1875
Haines, Charles Henry, M.D. Queen's College, Cork	1795
McCalman, Robert Gilmour, M.B. University of Aberdeen	1770
Campbell, John, M.B. University of Glasgow	1745
Taylor, Frederick, M.B. University of Dublin	1395
FitzMaurice, Nicholas FitzHenry, Queen's College, Cork	1325
Laslett, Frederic William, Guy's Hospital	1325

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, August 18th, 1870.

Hosegood, Samuel, Williton, Somerset
Joseph, Joshua Raphael, Merrick Square, Borough

The following gentleman also on the same day passed his first professional examination.

Jackson, Thomas William, Guy's Hospital

The following gentlemen passed on August 25th.

Harding, Alfred William, Percy Street, W.C.
Perkins, Whitfield, Malmesbury
Phillips, George Arthur, Whitwell, near Welwyn
Rawlings, John Adams, Swansea
Turner, Henry Crockford, Lewes

The following gentlemen also on the same day passed their first professional examination.

Addy, Boughton, St. Thomas's Hospital
Grayson, Francis Dorrell, Guy's Hospital
Maisey, Frederick Thomas, Guy's Hospital
Morris, Enoch, London Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

- BRIGHTON AND HOVE DISPENSARY—Resident Medical Officer and Dispenser for the Western Branch: applications, Sept. 5th; election, Oct. 4th; duties, Nov. 1st.
- CAHERCIVEEN UNION, co. Kerry—Medical Officer for the Valencia Dispensary District: applications, Sept. 13th; election, 14th.
- CITY DISPENSARY, Watling Street—Physician: applications, Sept. 10th; Committee, 12th.
- CLONMEL DISTRICT LUNATIC ASYLUM—Resident Medical Superintendent: applications, Sept. 12th.
- GLOUCESTERSHIRE LUNATIC ASYLUM, near Gloucester—Two Assistant Medical Officers: applications, Sept. 5th.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Resident Clinical Assistant: applications, Sept. 3rd; Medical Committee, 5th.
- JERSEY GENERAL DISPENSARY—Resident Visiting and Dispensing Officer: duties, October 1st.
- LETTERKENNY DISTRICT LUNATIC ASYLUM, co. Donegal—Apothecary: Sept. 14th.
- LIMERICK UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Annacotty Dispensary District: Sept. 19th.

MALE LOCK HOSPITAL, Dean Street, Soho—House-Surgeon: applications, Sept. 5th.

METROPOLITAN FREE HOSPITAL, Devonshire Square—Surgeon: applications, Sept. 5th.

NEWPORT UNION, Monmouthshire—Medical Officer for the Marshfield District: applications, 16th; election, 24th.

ST. BARTHOLOMEW'S HOSPITAL, Rochester—Assistant Surgeon: Oct. 13th.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Medical Officer for Out-Patients: applications, Sept. 30th.

SALOP INFIRMARY, Shrewsbury—Dispenser: applications, Sept. 10th.

SHERBORNE UNION, Dorset—Medical Officer and Public Vaccinator for the North West District: applications, Sept. 14th; election, 22nd.

SADDELL, Argyleshire—Parochial Medical Officer.

SURREY DISPENSARY, Great Dover Road—House-Surgeon: applications, Sept. 26th; Committee, 27th; election, Oct. 6th.

SUSSEX LUNATIC ASYLUM, Hayward's Heath—Assistant Medical Officer: applications, Sept. 3rd.

UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine: applications, Oct. 1st.

WHITECHAPEL UNION—Public Vaccinator for the entire Union: applications, Sept. 5th; election, 6th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

HUMBY, W. W., Esq., appointed Medical Officer to the National Sanatorium, Bournemouth.

RUGG, B. Alfred, Esq., appointed Resident Medical Officer to the Bournemouth General Dispensary.

*VINCENT, Osman, Esq., appointed Surgeon to the Great Northern Hospital, *vice* Henry Arnott, Esq., resigned.

BIRTHS.

MALINS.—On August 27th, at Cradley, the wife of *E. Malins, M.D., of a son.

EAMES.—On August 28th, at the Asylum, Letterkenny, Ireland, the wife of *James Alexander Eames, M.D., Resident Medical Superintendent, of a daughter.

MARRIAGE.

*DRURY, Charles D. Hill, M.D., of Pullam St. Mary, near Harlestone, Norfolk, to Fanny, second daughter of Robert FERRY, Esq., of Sunderland, at Bishopwearmouth, on August 24th.

DEATHS.

*ASHFORTH, George Morris, M.D., late of Market Overton, Rutland, suddenly, of aneurism of aorta, at Dr. Lowe's, Anglesey, near Gosport, on August 10th. Friends at a distance accept this intimation.

JOHNSON, David, Esq., Surgeon, late of New Hall Street, Birmingham, at the house of his mother-in-law, Mrs. Thomas Walker, of Birchfield, near Birmingham, aged 41, on August 24th.

*SUMMERS, Llewellyn John, Esq., Surgeon, of Wolverhampton, at Edinburgh, aged 47, on July 24th.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, August 1st; The New York Medical Gazette, August 13th; The Parochial Critic, August 31st; The New York Medical Record, August 18th; The Boston Medical and Surgical Journal, August 18th; The Madras Mail, June 20th; The Gardeners' Chronicle, August 27th; The Poor-Law Chronicle, August 23rd; The Shield, August 22nd; The Harrogate Advertiser, August 27th; The Bradford Telegraph, August 27th; The Scotsman, August 2nd; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. H. Quincke, Berlin; Dr. Goldammer, Berlin; Dr. Joseph Rogers, London; M.R.C.P.; Mr. Lawson Tait, Wakefield; Dr. A. Ransome, Manchester; Mr. T. Watkin Williams, Birmingham; Dr. A. T. H. Waters, Liverpool; Mr. R. B. Benson, Pulverbach; Dr. Corfield, London; Dr. George Johnson, London; Mr. J. Croft, London; Mr. T. H. Hill, London; Dr. J. C. M'Donald, Kingston, Jamaica; Mr. R. H. Spedding, Dundalk, Ireland; Mr. A. Pole, Walls-by-Lerwick, Shetland; Mr. H. Terry, Northampton; Dr. Gervis, London; Dr. C. B. Taylor, Nottingham; Mr. Morant Baker, London; Dr. J. Styrap, Shrewsbury; Dr. Eames, Letterkenny; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. J. J. Hill, Lambton, New South Wales; Dr. R. Barnes, London; Mr. Joseph Lister, Edinburgh; Dr. Andrew Clark, London; Dr. F. J. Brown, Rochester; Mr. Reginald Harrison, Liverpool; Mrs. M. A. Baines, London; Dr. Falconer, Bath; Dr. Phillips, London; Dr. Rumsey, Cheltenham; Dr. S. Muspratt, Harrogate; Dr. Moore, Dublin; Dr. E. Charlton, Newcastle-upon-Tyne; Dr. Geissé, Bad Ems; Dr. Hermann Weber, London; Mr. A. B. Steele, Liverpool; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. Winn, London; Dr. Embleton, Newcastle-upon-Tyne; Dr. J. Burdon Sanderson, London; Mr. Jonathan Hutchinson, London; Mr. Fleischmann, Cheltenham; Dr. G. Goddard Rogers, London; Mr. C. Trotter, Stockton-on-Tees; Mr. Armstrong, Newcastle-on-Tyne; Mr. Hallows, Maidstone; Our Paris Correspondent; Mr. Rugg, Bournemouth; Mr. W. Humby, Bournemouth; Dr. Laycock, Edinburgh; Mr. G. F. Hodgson, Brighton; Dr. Sibson, London; Dr. Russell, Birmingham; Dr. Struthers, Aberdeen; Dr. Gee, Liverpool; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

A SUBSCRIBER asks what sum per month it is reasonable for him to charge for attending miners, their wives and families, midwifery excluded (medicines, etc., being found by him), nine miles from his residence.

THE VICTIMS OF SCARLATINA.

WE can but express our satisfaction that the terrible record which we last week published of the victims of scarlatina has not fallen upon unattentive ears. It has been universally quoted by the most important organs of public opinion throughout the country, and in many instances with such comment as we hope will serve to emphasise the warning. The *Pall Mall Gazette* has the following pertinent note on the subject.

"It is to be hoped that the plain manner in which the BRITISH MEDICAL JOURNAL has put before the public the price we pay for legislative inaction in sanitary matters will lead to such strong pressure upon the Home Secretary before next session, that he will be compelled to lift a finger for the preservation of our lives. Four hundred and seventy thousand persons have died of scarlet fever and its allied disease, diphtheria, in the last twenty-two and a half years. Had these victims of one type of zymotic disease been soldiers whose lives had been sacrificed on the battle-field to inefficiency at the War Office, the whole nation would quiver with indignation; yet there can be little doubt that by far the larger proportion of those who have died of scarlet fever might have been alive now but for the utter inefficiency of our complicated sanitary laws and the neglect of domestic legislation which it is the business of the Home Office to initiate. One simple measure alone, which we have before pointed out, would probably have saved half, if not three-fourths, of the lives thus wasted. Disinfecting establishments in each district are the first steps necessary to put a stop to this horrible mortality. Under present arrangements, bedding and clothing are allowed to spread infection far and wide. Among the poor, in nine cases out of ten, no steps are taken to disinfect these articles, and among the wealthier classes the very steps taken to purify the bedding of scarlet-fever patients only serve to disseminate the infection more widely, for the upholsterer who takes away the mattresses mixes them with other goods of the same kind, and for every family whose furniture is thus purified, probably another family is attacked. Then, again, those who are able to afford it have the walls of the rooms in which the patient has been lying stripped of their paper, but no care is taken to see that the paper itself is destroyed. Until we have disinfecting establishments, with proper officers attached to them to see to these matters, fever will continue to spread and carry off its thousands, and until we have a Home Secretary who will make it compulsory on local authorities to take such measures as are dictated by common sense and experience for preventing the spread of infection and enforcing better house arrangements with the view of reducing the chances of disease, we shall still continue to die of scarlet fever at the rate of not less than forty thousand a year, that being the estimated number of deaths for last year, a rate which is annually increasing at compound interest."

It is precisely in the hope of helping by an accumulation of such facts as are especially calculated to impress the public mind, that we last week requested, and now repeat the request, that those of our readers who become acquainted with instances in which scarlatina is spread by the omission of precautions on the part of individuals or local authorities, will communicate them to us for publication. In this way, the reiterated publication of illustrative facts may be made to produce an effect which occasional declarations, however impressive, fail to produce. We trust that each one of our associates will consider this an appeal addressed to himself personally, and will favour us by assistance in a work which aims exclusively at the public good, and may not improbably render good service to the nation, and add a laurel to the wreath of Public Medicine.

NOTICE.—It is requested that all Letters, etc., intended for the Editor or the Publisher of the BRITISH MEDICAL JOURNAL be addressed solely to the Office, 37, Great Queen Street, London, W.C.

WE have to express our thanks for their letters and communications to Dr. Goddard Rogers; Sir William Jenner, Bart.; Mr. Fleischmann, Cheltenham; Dr. Morris, Spalding; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Embleton, Newcastle-upon-Tyne; Dr. Chadwick, Leeds; Dr. Charlton, Newcastle-upon-Tyne; Mr. Joseph Lister, Edinburgh; Dr. E. Waters, Chester; Mr. Husband, York; Dr. Rumsey, Cheltenham; etc.

TREATMENT OF DIARRHŒA.

SIR,—As the treatment of infantile diarrhœa is of some interest at present, I send you a short account of some trials I have been making lately of an old remedy—the gum Arabic. I have used it now either as mucilage or powder in some thirty or forty cases, varying in age from a few days to several years. I have no details of the cases; but can say that, since I began to use it, I have had no deaths.

There are three forms of infantile diarrhœa common at present. 1. Green stools, usually complicated with vomiting; 2. Simple diarrhœa, with very fetid stools; 3. An almost constant involuntary discharge *per anum* of a pure fluid. In the first and third of these forms, a little grey powder added, in the proportion of one part to twenty of powdered gum Arabic, and given in doses of five grains, has a rapidly beneficial effect. In the other form, mucilage, one part to three of water, is all that is required. The good effects of the mucilage can only be attributed to its mechanical action on the mucous surface of the bowel, sheathing it, so to speak, and allowing the acrid vitiated juices to pass away.

I am, etc.,

Stockton-on-Tees, August 1870.

ROBERT W. FOSS, M.B.

DR. MORRIS'S (Spalding) paper shall appear in an early number.

DR. SHERIDAN MUSPRATT.—We regret that the advertisement has been overlooked. It shall, of course, appear. We must decline, however, to insert the letter in answer to our review. We have already advised all our readers who are interested in the study of human nature to buy the biography. Those who do so will be able to judge whether the notice of it was well founded. We are very glad that Professor White and Dr. Muspratt found it "more amusing than annoying". It was not intended to annoy; and we can only regret that it has amused Dr. Muspratt so much as to induce him to regard it as "uncalled-for, scurrilous, and untruthful."

THE RAPID PRESSURE TREATMENT OF ANEURISM.

SIR,—Had Mr. Ellis heard the discussion to which he alludes in your issue of August 20th, I doubt if he would have rushed so heedlessly into print. The case narrated by Mr. Russell could not claim the title he gave to it, and it was complicated by an attempt at Mr. Hart's flexion treatment. All the progress we have made in the conservative treatment of aneurism is due to the Dublin surgeons; and when Mr. Ellis has cured a femoral aneurism in five hours, as I have done, by Reed's compressor, he may speak of rapid pressure treatment. The use of chloroform in any surgical condition is not one that can lay any claim to novelty; at least, since the year 1850. Its use during the pressure treatment of aneurism is not required when Reed's effective instrument is used, and with any other with which I am acquainted. I could imagine its use dangerous, because it would mask the patient's amount of tolerance of pressure. The Newcastle School has done enough for surgery, to be able to allow this hasty claim to pass by.

I am, etc.,

August 1870

LAWSON TAIT, F.R.C.S.E.,
Member of the Surgical Society of Ireland, etc.

WE defer till the appearance of the Students' Number the abstract of Sir John Gray's Return on the Regulations of the Examining Bodies. It is very useful to Parliament; but, of course, contains chiefly matter which is thoroughly known to our readers, and they will not thank us for presenting to them twice such singularly tasteless and indigestible food.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

TREATMENT OF ENLARGED TONSILS.

SIR,—In answer to the inquiry of "Country Practitioner", I beg to say that a professional friend of the highest eminence in Dublin assures me that he finds sulphate of potash, administered daily for a month or six weeks, almost a specific for enlarged tonsils in children, the result of delicacy. He gives from five to fifteen grains every morning, with a small quantity of rhubarb and aromatic. The dose should be such as to produce mere laxity of the bowels, and should be at once diminished if it produce purging.

I am, etc.,

Woodview, Portlaw, August 1870.

JAMES MARTIN.

DR. RUMSEY.—In the daily papers of August 24th. Unfortunately, we have not a copy at hand.

DR. DEVILLE (Harrogate) writes:—"In the JOURNAL of August 13th, I find in the report of the Annual Meeting of the Metropolitan Counties Branch, that it is stated that 'at the second meeting, on April 29th, Dr. Ford Anderson read a paper on Provident Dispensaries, their Object and Practical Working.' 1. Has this paper been printed? 2. Is there any other published treatise on the same subject procurable, and where? 3. Also, an exposition of the rules which govern them?"

* * Dr. Anderson's paper and the discussion thereon were published in the JOURNAL of May 21st.—With regard to the other questions, our correspondent should apply by letter to Dr. Anderson, who, we doubt not, will afford every information. His address is 28, Buckland Crescent, Belsize Park, London, N.W.

ANILINE DYE.

SIR,—Could you inform me if there is any method of counteracting the poison arising from the scarlet aniline dye? I purchased some stockings which contained a mixture of scarlet worsted, and, on wearing them recently on a shooting expedition, I found the legs, feet, and over the soles of the feet, covered with pimples, which caused severe irritation. I had the stockings placed in boiling water, thinking this would surely remove the poison; but, on wearing the stockings again, found the poison as strong as before.

I believe the matter has been discussed before in your JOURNAL, hence my troubling you. If any correspondent knows of any process by which the stockings can be rendered harmless, I shall be thankful to have the remedy.

Forres, N.B., August 1870.

I am, etc.,

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EDUCATIONAL NUMBER.

PLAIN TRUTH TO MEDICAL STUDENTS.

THE medical student of 1870 enters upon a career beset with difficulties but studded with rewards. The heir of centuries of research and devotion, he has to bear the weight of responsibilities ever increasing, and to uphold a standard which must be borne yet higher, and over steep and difficult paths. A higher national standard of education requires that he shall bring to his special studies the culture befitting a liberal profession; and the increasing application of exact modes of diagnosis and research in treatment demands, at his hands, an acquaintance with branches of science collateral to medicine, formerly not generally required. On this subject it is right to speak very plainly. Notwithstanding improvements in the standard of preliminary educational requirements, our licensing bodies are perforce at this moment with a second-rate standard of mere schoolboy acquirements, which is by no means equal to the just demands of medical science, and which affords a very insufficient guarantee for the future of our profession in this country. The lamentable mediocrity of preliminary acquirements which they accept is the real hindrance to the progress of medicine as a science in this country. It is unnecessary to dissimulate the truth. The miserable inferiority in scientific research, the dearth of original work, the want of exactness, the poverty of physiological investigation, the ignorant impatience of "unpractical detail" which we all have to deplore so much in the mass of professional work at this day are due to the inadequate preliminary cultivation of our students, to their defective training in scientific method, the small base on which the pyramid of medical lore is made to stand. The solemn deprecation of excessive devotion to microscopic research; the empty sneer at chemical physics; the idle and mischievous disregard of instruments of precision—the sphygmograph, the thermometer, the laryngoscope, the ophthalmoscope—are all the expressions of a Philistine ignorance. There is one enemy against which the English student needs to be earnestly cautioned—it is what he calls his "common sense." It is almost as dangerous at the outset as that nondescript cloak of contented ignorance which often makes him in after life an enemy to science and a danger to mankind, and which he then calls his "experience." As a student, we beseech him to trust to nothing but hard-going laborious cultivated research and study. He cannot be too earnestly warned to fit himself for his work by a thorough mathematical training, by a sound knowledge of languages, by real mental discipline acquired in a working devotion to natural science. It is on this basis that he must build his clinical aptitude and judgment. The inferiority of English to German medicine is due to this inferiority of preliminary training. We earnestly counsel all students into whose hands these pages will fall to ask themselves how far they are fitted to undertake the career which they are about to enter. If we could persuade nine-tenths of them to pause yet a year or two, and to devote that time to a more thorough mental culture and preliminary scientific training, we should render an inestimable service to them, and materially improve the prospects of British Medicine.

CHANGES IN THE HOSPITALS AND MEDICAL SCHOOLS.

SUBJOINED is a statement of the changes which have taken place in the *personnel* of the hospitals and schools of medicine since the issue of our last educational number. It will be seen that several well-known names disappear from their accustomed places; some, as those of Risdon Bennett, Hilton, Partridge, Odling, and Prichard, by retirement; others, unfortunately, as Sir J. Y. Simpson, Nunneley, and Moore, by death. The modifications made in the teaching arrangements of some of the hospitals consist chiefly in provisions for more effectually giving practical instruction in special as well as in the general departments of medicine and surgery.

At St. Bartholomew's Hospital there have been some important changes. Dr. Farre has resigned the office of Physician, and has been appointed Consulting Physician. Dr. Southey, the Senior Assistant Physician, has consequently been promoted to a physicianship, and the vacancy occasioned thereby has been filled by the appointment of Dr. Hensley. A new department—the "Casualty department"—has been instituted. The medical casualty patients are under the charge of the Junior Assistant-Physician (Dr. Hensley) and the Casualty Physicians—Dr. Hollis, Dr. Wickham Legge, and Dr. Thorne Thorne. Mr. Morratt Baker, as Casualty-Surgeon, has, with the aid of the House-Surgeons and Dressers, charge of the Surgical Casualty Department. The new ophthalmic wards have been placed under the charge of Mr. Henry Power and Mr. B. J. Vernon. Mr. Power lectures on Ophthalmic Surgery, in place of Mr. Vernon. Dr. Duckworth succeeds Dr. Gee as Physician to the Skin Department, and Lecturer on Diseases of the Skin. In the School, Dr. Odling has resigned the Lectureship on Chemistry, and is succeeded by Dr. Matthiessen.

At Charing Cross Hospital, Dr. J. Watt Black has succeeded Dr. Parson as Physician-Accoucheur and Lecturer on Midwifery. Dr. Beigel has been appointed Physician to the newly instituted department of Skin-Diseases, and will give lectures on the subject. Mr. E. Bellamy, the Demonstrator of Anatomy, has been appointed Assistant-Surgeon to the Hospital; and the chair of Botany has been filled by the appointment of Dr. E. Dowson.

At St. George's Hospital, Mr. Brudenell Carter has been appointed Ophthalmic Surgeon and Lecturer on Ophthalmic Surgery in the room of Mr. Power, whose appointment to St. Bartholomew's Hospital is mentioned above. Dr. Cavafy succeeds Dr. Bright as Lecturer on Comparative Anatomy. Dr. J. W. Ogle will deliver Clinical Lectures in the winter in place of Dr. Fuller, and Dr. Barclay will take the summer course in place of Dr. Ogle. The summer Clinical Lectures on Surgery will be delivered by Mr. Holmes, in place of Mr. Henry Lee.

Guy's Hospital has lost the valuable service of Mr. Hilton, who has resigned, and has been appointed Consulting Surgeon. Mr. Cooper Forster has been promoted to the office of Surgeon; and Mr. H. G. Howse has been appointed to the resulting vacancy in the office of Assistant-Surgeon. In the School, Dr. Taylor has resigned the Lectureship of Chemistry, retaining that of Medical Jurisprudence; he is succeeded in the chair of Chemistry by Dr. Debus and Dr. Stevenson, the former of whom will take charge of Practical Chemistry. A Lectureship on Hygiene has been instituted; the first course will be delivered by Dr. Hilton Fagge in the summer of 1871.

At King's College, Sir William Fergusson has resigned the Professorship of Surgery, and has been succeeded by Mr. John Wood. Mr. Partridge has retired from the office of Surgeon to the Hospital; Mr. John Wood has consequently been appointed full Surgeon, and Mr. Royes Bell Assistant-Surgeon.

Under the rule limiting the tenure of office at the London Hospital, Mr. Curling last year resigned his post as Surgeon, and was appointed Consulting Surgeon. The vacancy thereby occasioned was filled by the promotion of Mr. Rivington to the office of Surgeon. Mr. J. M'Carthy and Mr. H. A. Reeves have been appointed Assistant-Surgeons. The

staff of Assistant-Physicians has been increased to five; Dr. W. B. Woodman being appointed to the office. Mr. Hutchinson has retired from the departments of Diseases of the Eye and of the Skin. The former is under the charge of Mr. James Adams and Mr. Tay; the latter under that of Mr. M'Carthy. Mr. Reeves is associated with Mr. Rivington in the Aural Department. Dr. Andrew Clark has resigned the Lectureship in Medicine, and is succeeded by Dr. Langdon Down. Dr. Hughlings Jackson has retired from the Lectureships in Physiology and on Practical Histology; in the former he is replaced by Dr. W. B. Woodman, while the duties of the latter are undertaken by Dr. Woodman and Dr. Fenwick, his colleague in the lectureship on Physiology.

At St. Mary's Hospital, Mr. Allen has been appointed Aural Surgeon, and Lecturer on Aural Surgery. Dr. Cheadle succeeds Dr. Sieveking as Lecturer on *Materia Medica*; and Mr. Lidderdale replaces Mr. Watson as Assistant Demonstrator of Anatomy.

A vacancy having occurred in the Surgical Staff of the Middlesex Hospital through the lamented death of Mr. C. H. Moore, Mr. Hulke has been appointed full Surgeon, and his place as Assistant-Surgeon has been filled by the appointment of Mr. Henry Arnott, the lately Surgical Registrar to the Hospital. Dr. Greenhow has been appointed Physician to the Hospital; and the vacant Assistant-Physicianship will probably be filled by the appointment of Dr. Cayley. Mr. De Morgan will deliver alone the course of Lectures on Surgery, in which he formerly had Mr. Moore as his colleague. Dr. Burdon Sanderson and Mr. Hulke have retired from the chair of Physiology, and are succeeded by Dr. Ferrier. Dr. Brunton has been appointed Lecturer on *Materia Medica*; and Dr. Divers has been associated with Dr. Greenhow as Lecturer on *Medica Jurisprudence*.

At St. Thomas's Hospital, Dr. Risdon Bennett and Dr. Goolden have retired from the office of Physician; the former has been appointed Consulting Physician. Dr. Clapton has been appointed full Physician; and the office of Assistant-Physician at present remains vacant. Dr. Bristowe will deliver the lectures on General Pathology in place of Mr. Simon; and Dr. W. Rhys Williams, of the Bethlem Hospital, has been appointed to the newly instituted lectureship on Mental Diseases.

Dr. George Harley has resigned the post of Physician to University College Hospital; the vacancy has not been filled by any promotion, but Mr. F. T. Roberts, M.B., has been appointed an Assistant-Physician. Dr. Michael Foster, having been appointed Professor of Physiology at Cambridge, has resigned the chair of Practical Physiology and Histology in University College, and is succeeded by Dr. Burdon Sanderson, lately one of the Lecturers on Physiology at the Middlesex Hospital. Mr. Rushton Parker and Mr. G. D. Thane succeed Mr. Roberts in the Demonstratorship of Anatomy.

At the Westminster Hospital, Dr. Potter has been appointed to the new office of Assistant Obstetric Physician. Mr. Pearse is associated with Mr. Mason in the lectureship on Anatomy; Dr. Anstie with Dr. Basham in that on Medicine; and Mr. Mason with Mr. Hothouse in that on Surgery. Dr. Lee is Demonstrator of Morbid Anatomy, in place of Dr. Cavafy.

At Queen's College, Birmingham, no change has taken place beyond the retirement of Mr. J. Hinds from the office of Demonstrator of Anatomy. The staff of the two hospitals remains unaltered.

In the Bristol Medical School, Mr. E. C. Board succeeds Dr. H. Marshall as Lecturer on Medical Jurisprudence. A lectureship on Comparative Anatomy has been instituted, the duties of which have been entrusted to Mr. Atchley. There is no change in the staff of the General Hospital; at the Royal Infirmary, Mr. Augustin Prichard has retired from the office of Surgeon, and has been appointed Consulting Surgeon. The vacancy has been filled by the appointment of Mr. C. Steele as Surgeon.

The staff of Lecturers in the Leeds School of Medicine has undergone no other change than the retirement of Mr. Price from the Lectureship on Midwifery, the duties of which are now performed by Mr. W. Hall alone. At the Hospital, the vacancy caused by the death of

Mr. Nunneley has been filled by the appointment of Mr. T. R. Jessop as Surgeon; and Mr. J. A. Nunneley, Mr. Seaton, and Dr. Land, have been appointed Surgeons to the Eye and Ear Department.

At the Liverpool Royal Infirmary School of Medicine, Mr. Bickcrsteth has resigned the lectureship on Surgery, and is succeeded by Mr. R. Harrison, who is replaced in the lectureship on Anatomy by Mr. W. M. Banks. Dr. Whittle lectures alone on Medical Jurisprudence, Mr. J. C. Brown having retired. Dr. Braidwood has been appointed Demonstrator of Histology and Experimental Physiology; and Mr. E. A. Browne succeeds Mr. Banks as one of the Demonstrators of Anatomy.

At the Sheffield School of Medicine, the only change is the appointment of Mr. Hallam as Demonstrator of Pathology and Microscopy, in place of Mr. Batt.

The Newcastle-on-Tyne College of Medicine has become the University of Durham College of Medicine at Newcastle; and attendance at it counts as attendance in the University. There is no change in the *personnel* of the school. At the Newcastle Infirmary, Dr. C. J. Gibb has retired from the office of Surgeon; Mr. Luke Armstrong has consequently been promoted from the Senior Assistant-Surgeonship; and Mr. C. S. Jeaffreson has been appointed Assistant-Surgeon.

In the University of Aberdeen, no change has occurred in the staff of Professors. Dr. Keith has resigned the office of Surgeon to the Royal Infirmary; and Dr. A. Ogston has been appointed Junior Surgeon.

The University of Edinburgh has lost Sir James Simpson, and his nephew, Dr. Alexander Simpson, has been elected Professor of Midwifery in his room. Dr. Sanders has been appointed Professor of General Pathology in the University, and a Lecturer on Clinical Medicine.

In the Glasgow University, Dr. G. H. B. Macleod has been appointed Professor of Surgery, succeeding Mr. Lister on his translation to Edinburgh as Professor of Clinical Surgery. The staff of the Glasgow Royal Infirmary has been increased by the appointment of Dr. McLaren as Physician.

OPENING OF THE MEDICAL SCHOOLS.

THE subjoined is a list of the Medical Schools in England and Scotland, with the date of their opening, and the names of the gentlemen appointed to deliver introductory addresses. Where no name is inserted, it is to be understood that there is no special introductory lecture.

St. Bartholomew's Hospital—October 3rd.
 Charing Cross Hospital—Mr. Hancock—October 3rd, 8 P.M.
 St. George's Hospital—Mr. Brodhurst—October 3rd, 2 P.M.
 Guy's Hospital—Mr. Bader—October 1st, 2 P.M.
 King's College—Mr. John Wood—October 3rd, 3 P.M.
 London Hospital—Dr. Sutton—October 3rd, 4 P.M.
 St. Mary's Hospital—Mr. Gascoyen—October 1st, 3 P.M.
 Middlesex Hospital—Dr. Cayley—October 3rd, 3 P.M.
 St. Thomas's Hospital—Dr. Jervis—October 1st, 2 P.M.
 University College—Mr. Berkeley Hill—October 3rd, 3 P.M.
 Westminster Hospital—Dr. Sturges—October 3rd, 8 P.M.
 Bristol Medical School—October 3rd.
 Birmingham (Queen's College)—Mr. Berry—October 1st.
 Leeds School of Medicine—Mr. E. Atkinson—October 3rd, 12 noon.
 Liverpool Royal Infirmary School of Medicine—Dr. J. C. Brown—October 3rd, 3 P.M.
 Manchester Royal School of Medicine—Mr. L. H. Grindon—October 3rd, 12 noon.
 Newcastle College of Medicine—Dr. Nesham—October 3rd, 2 P.M.
 Sheffield School of Medicine—Rev. J. L. Short—October 1st.
 Aberdeen University—October 26th.
 Edinburgh University—Sir A. Grant, Bart., LL.D.—November 1st.
 „ Royal Colleges of Physicians and Surgeons—Dr. Joseph Bell—November 1st, 11 A.M.
 Glasgow University—Dr. Young—October 25th,
 „ Anderson's University—October 26th.

The Dublin Medical Schools open their Dissecting-Rooms on October 1st, but lectures do not begin until the end of the month.

REGULATIONS

OF

THE GENERAL MEDICAL COUNCIL AND
MEDICAL LICENSING BODIES.

SESSION 1870-71.*

THE GENERAL MEDICAL COUNCIL.

Recommendations and Opinions on Preliminary Examination.

THAT Testimonials of Proficiency granted by the National Educational Bodies, according to the subjoined list, may be accepted, the Council reserving the right to add to, or take from, the list. I.—*Universities of the United Kingdom.* Oxford: Examination for a Degree in Arts; Responsions; Moderations; Local Examinations (Senior), Certificate to include Latin and Mathematics. Cambridge: Examination for a Degree in Arts; Previous Examination; Local Examinations (Senior), Certificate to include Latin and Mathematics. Durham: Examinations for a Degree in Arts; Examination for Students in their Second and First years; Registration Examination for Medical Students; Local Examinations (Senior), Certificate to include Latin and Mathematics. London: Examination for a Degree in Arts; Matriculation Examination. Aberdeen, Edinburgh, Glasgow, or St. Andrew's: Examination for a Degree in Arts; Preliminary Examination for Graduation in Medicine or Surgery. Edinburgh: Examination of (Senior) Candidates for Honorary Certificates under the Local Examinations of the University of Edinburgh. Dublin: Examination for a Degree in Arts; Entrance Examination. Queen's University (Ireland): Examination for a Degree in Arts; Entrance Examination; Examination for the Diploma of Licentiate in Arts; Previous Examination for B.A. Degree. II.—*Other Bodies named in Schedule (A) to the Medical Act.* Royal College of Surgeons of England: Examination conducted, under the superintendence of the College of Surgeons, by the Board of Examiners of the Royal College of Preceptors. Society of Apothecaries of London: Examination in Arts. Royal College of Physicians, Edinburgh, and Royal College of Surgeons, Edinburgh: Preliminary Examination in General Education, conducted by a Board appointed by these two Colleges combined. Faculty of Physicians and Surgeons of Glasgow: Preliminary Examination in General Literature. Royal College of Surgeons in Ireland: Preliminary Examination, Certificate to include Mathematics. Apothecaries' Hall of Ireland: Preliminary Examination in General Education. III.—*Examining Bodies, in the United Kingdom, not included in Schedule (A) to the Medical Act.* Royal College of Preceptors: Examination for a First Class Certificate. IV.—*Colonial and Foreign Universities and Colleges.* University of Calcutta, Madras, or Bombay: Entrance Examination, Certificate to include Latin. University of McGill College, Montreal, of Toronto, of King's College, Toronto, of Queen's College, Kingston, of Victoria College, Upper Canada, of Fredericton, New Brunswick, or of Sydney: Matriculation Examination. University of King's College, Nova Scotia: Matriculation Examination; Responsions. University of Melbourne: Matriculation Examination, Certificate to include all the subjects required by the General Medical Council. Codrington College, Barbadoes: English Certificate for Students of two years' standing, specifying the subjects of Examination; Latin Certificate, or "Testamur." Tasmanian Council of Education: Examination for the Degree of Associate of Arts, Certificate to include Latin and Mathematics. Christ's College, Canterbury, New Zealand: Voluntary Examinations, Certificate to include all the subjects required by the General Medical Council.—N.B. A Degree in Arts of any University of the United Kingdom, or of the Colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council, is considered a sufficient Testimonial of Proficiency.—That it be recommended to the Licensing Boards not to accept the Certificate of proficiency in General (preliminary) Education from any of the Bodies, the names of which are contained in the list annually circulated, unless such Certificate testify that the Student to whom it has been granted has been examined in—1. English Language, including Grammar and Composition.† 2. Arithmetic, including Vulgar and Decimal Fractions;

Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin, including Translation and Grammar. And in one of the following *Optional Subjects*:—Greek; French; German; Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.—That Students who cannot produce any of the Testimonials referred to in the first Recommendation be required to pass an Examination in Arts, established by any of the Bodies named in Schedule (A) to the Medical Act, and approved by the General Medical Council.—That Certificates of Proficiency, to be received from all Bodies legally authorised to examine in General Education in Great Britain and Ireland, and from the several Licensing Bodies enumerated in Schedule (A) to the Medical Act in Great Britain and Ireland, shall bear evidence that the Candidates have been examined and approved in at least the above subjects.—That, in the case of Certificates received from similar Educational and Licensing Bodies in other parts of the Empire and Foreign Countries, satisfactory evidence shall be given to the Medical Council, or Branch Councils, that such Certificates are equivalent to those recognised in the United Kingdom.—That it shall be delegated to the Executive Committee to prepare annually and lay before the Council for recognition a list of Examining Bodies, whose Examinations shall fulfil the conditions of the Medical Council as regards Preliminary Education.

Registration of Medical Students.

Every Medical Student shall be registered in the manner prescribed by the General Medical Council.—No Medical Student shall be registered until he has passed a Preliminary Examination, as required by the General Medical Council.—The commencement of the course of Professional Study recognised by any of the Qualifying Bodies, shall not be reckoned as dating earlier than fifteen days before the date of Registration.—The Registration of Medical Students shall be placed under the charge of the Branch Registrars.—Each of the Branch Registrars shall keep a Register of Medical Students according to a form, containing the Date of Registration, the Name, the Preliminary Examination and Date, and the Place of Medical Study.—Every person desirous of being registered as a Medical Student, shall apply to the Branch Registrar of the division of the United Kingdom in which he is residing, according to the annexed form,* which may be had on application to the several Qualifying Bodies, Medical Schools, and Hospitals; and shall produce or forward to the Branch Registrar a Certificate of his having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of Medical Study.—The Branch Registrar shall enter the Applicant's name and other particulars in the Students' Register, and shall give him a Certificate of such Registration.—Each of the Branch Registrars shall supply to the several Qualifying Bodies, Medical Schools, and Hospitals, in that part of the United Kingdom of which he is Registrar, a sufficient number of blank Forms of Application for the Registration of Medical Students.—The several Branch Councils shall have power to admit special exceptions to the foregoing Regulations as to Registration, for reasons which shall appear to them satisfactory.—A copy of the Register of Medical Students, prepared by each of the Branch Registrars, shall be transmitted, on or before the 31st December in each year, to the Registrar of the General Council; who shall, as soon as possible thereafter, prepare and print, under the direction of the Executive Committee, an Alphabetical List of all Students registered in the preceding year, and supply copies of such authorised List to each of the Bodies enumerated in Schedule (A) to the Medical Acts, and through the Branch Registrars to the several Medical Schools and Hospitals.—The several Qualifying Bodies are recommended not to admit, after October, 1870, to the final Examination for a Qualification under the Medical Acts, any Candidate (not exempted from Registration) whose name had not been entered in the Medical Students' Register at least four years previously.—In the case of Candidates from other than Schools of the United Kingdom, the Branch Councils shall have power to admit exceptions to

3. To explain the grammatical construction of one or two sentences. 4. To point out the grammatical errors in a sentence ungrammatically composed, and to explain their nature. 5. To give the derivation and definition of a few English words in common use. Provided always that an examination may be accepted as satisfactory that secures, on the part of the candidate passing it, a sufficient grammatical knowledge of English.

* *Form of Application for Registration as a Medical Student.*—I hereby apply to be registered as a Student in Medicine, in conformity with the Regulations of the General Council of Medical Education and Registration of the United Kingdom, for which purpose I submit the following particulars. [Name of applicant (to be written in words at length); Surname; Christian name; Preliminary examination; Date of preliminary examination; Place of medical study; Applicant's signature; Address; and Date of application. To the Registrar of the Branch Council for —.]

N.B.—The above Form of Application, duly and legibly filled up, must be forwarded to the Registrar, post free, and be accompanied by a Certificate of the applicant's having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of Medical Study.

* To save space, we omit those portions of the Recommendations of the General Medical Council and of the Regulations of the Examining Bodies, which are not of direct importance to medical students.

† The General Medical Council will not consider any examination in English sufficient that does not fully test the ability of the candidate—1. To write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. 2. To write a portion of an English author to dictation.

this Recommendation.—* * The Branch Councils are desired to take means to make these Regulations known to the Medical Students at the various Medical Schools.

Age for Licence to Practise.

That the age of twenty-one be the earliest age at which a Candidate for any Professional Licence shall be admitted to his final Examination; that the age shall, in all instances, be duly certified; and that a Return of any exceptions to this Recommendation allowed by the Licensing Bodies, together with the reasons for such exceptions, be transmitted to the Branch Council of that part of the United Kingdom in which they have been granted.—That no Licence be obtained at an earlier period than after the expiration of forty-eight months subsequent to the Registration of the Candidate as a Medical Student.

Professional Education.

That the course of Professional Study required for a Licence shall comprehend attendance during not less than Four Winter Sessions, or Three Winter and two Summer Sessions, at a School recognised by any of the Licensing Bodies mentioned in Schedule (A) to the Medical Act.—That the following are the subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered:—1. Anatomy; 2. General Anatomy; 3. Physiology; 4. Chemistry; 5. Materia Medica; 6. Practical Pharmacy; 7. Medicine; 8. Surgery; 9. Midwifery; 10. Forensic Medicine. "Chemistry" should include a knowledge of the principles of Chemistry, and of those details of the science which bear on the study of Medicine. "Medicine and Surgery" should include a knowledge of systematic and Clinical Medicine and Surgery, and also of Morbid Anatomy.—That it be recommended to the several Licensing Bodies that the courses of instruction required by them be framed in such a manner as to secure a due share of attention, both to Preparatory Branches and to those more strictly connected with the Practice of Medicine and Surgery; and that it be suggested accordingly to these Bodies, that their Regulations should be such as to prevent attendance upon Lectures from interfering with Hospital and Clinical Study.—That the Council will view with approbation any encouragement held out by the Licensing Bodies to Students to prosecute the study of the Natural Sciences before they engage in studies of a strictly Professional character.

Professional Examination.

That it is desirable that the different Licensing Bodies should combine their Examinations, when this is practicable, so as to secure that the knowledge of every practitioner whose name appears on the Register shall have been tested in all the subjects of Professional Education which the Council has determined to be essential, as above enumerated.—That the Professional Examination for any Licence be divided into two parts; the first embracing the primary or fundamental branches directly connected with the Practice of Medicine and Surgery. That the former be not undergone till after the close of the Winter Session of the second year of Professional Study; and the latter, or final Examination, not till after the close of the prescribed period of Professional Study.—That the Examination in Physics, Botany, and Natural History may be undergone at an earlier period than the first Professional Examination.—That the Professional Examinations be conducted both in writing and orally; and that they be practical in all branches in which they admit of being so.—That not less than two Examiners, or one Examiner with an Assessor, should be present at every Oral Examination.—That the Oral Examinations should be so far public as to be open at least to the Medical and Surgical Graduates, or Members of the Examining Body.—That the questions to be answered in writing should be so numerous, and embrace such a variety of the details of each subject, as may adequately test the proficiency of the Candidate; and that they should be submitted to the whole body of Examiners for consideration and revision, if desirable, before being proposed to the Candidates.—That the written answers should be submitted to more than one of the Examiners.—That excellence in one or more subjects should not be allowed to compensate for failure in others.—That if a Candidate be rejected for failure in any one subject, he should be re-examined in all.—That Examiners should only be elected for definite periods, with power of reappointment.—That the Professional Examinations be held by the several Licensing Bodies, except in special cases, at stated periods, to be publicly notified.—That returns from the Licensing Bodies in Schedule (A) be made annually, on January 1st, to the General Medical Council, stating the number and names of the Candidates who have passed their First as well as their Second and Third Examinations, and the number of those who have been rejected at the First and Second and Third Examinations respectively.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.*

BYE-LAWS RELATING TO MEMBERS.

I. The Members of the College, present and future, shall be alone eligible to the Fellowship. They shall have the use of the Library and Museum, subject to the Regulations relating thereto, and shall be admitted to all Lectures, and shall enjoy such further privileges as may from time to time be defined by the Bye-Laws; but they shall not be entitled to any share in the government, or to attend or vote at general meetings, of the Corporation. II. All persons who have been admitted before February 16th, 1859, Licentiates of the College, shall be entitled to be admitted Members of the College, provided that they have, since their admission as Licentiates, obeyed the Bye-Laws, and do accept such Membership, and engage henceforth to obey the Bye-Laws of the College. III. Any Extra-Licentiate who shall have produced testimonials as to character satisfactory to the Censors, and shall have assured the said Censors that he is not engaged in the practice of Pharmacy, and who shall comply with such other regulations as are required by the Bye-Laws of the said Corporation, may be proposed to the College to be admitted a Member of the College. IV. Any person who shall have satisfied the College touching his acquirements in general Science and Literature, and his knowledge of Medicine, Surgery, and Midwifery, and who shall comply with the Bye-Laws and Regulations of the College, may be proposed to the College to be admitted a Member of the College. V. Every Candidate for the Membership of the College, under the last Bye-Law, who shall have commenced his Professional Studies after September 1861, shall satisfy the Censors' Board that previously to the commencement of his Professional Studies he has obtained a Degree in Arts from some University of the United Kingdom or of the Colonies, or from some other University specially recognised by the Medical Council, or that he has passed Examinations equivalent to those required for a Degree in Arts. All other Candidates for Membership shall be examined on the subjects of General Education by the President and Censors of the College. VI. Every Candidate for Membership shall furnish proof that he has attained the age of twenty-five years. VII. Every Candidate shall produce a Testimonial from a Fellow or Member of the College, satisfactory to the Censors' Board, to the effect that, as regards moral character and conduct, he is a fit and proper person to be admitted a Member of the College. VIII. Every Candidate (*except such as shall be admissible under the provisions of Sections xv and xvi*) shall produce proof of his having been engaged in Professional Studies during a period of five years, of which four years at least shall have been passed at a Medical School or Schools recognised by the College. IX. Every Candidate (*except such as shall be admissible under the provisions of Sections xv and xvi*) shall produce evidence, satisfactory to the Censors' Board, of having studied the following subjects. [The subjects are the same as those required for the Licence (see next page); but Morbid Anatomy must be attended during six months, and Clinical Medicine during *three Winter and three Summer Sessions*.] He must also give evidence of having attended diligently during three Winter Sessions and three Summer Sessions the Medical Practice, and *during three Winter Sessions and Two Summer Sessions the Surgical Practice*, of an Hospital containing at least 100 beds; of having been engaged during six months in the Clinical Study of Diseases peculiar to Women; and of having served the office of Clinical Clerk in the Medical Wards during at least six months. X. Every Candidate who has prosecuted his studies abroad, whether in part or to the full extent required by the preceding Bye-Law (*except such as shall be admissible under the provisions of Section xvi*), shall, nevertheless, bring proof of his having attended, during at least twelve months, the Medical Practice of an Hospital in the United Kingdom containing at least 100 beds. XI. If the Censors' Board doubt the sufficiency of the Certificates and Testimonials produced by any Candidate, or his fitness, in any respect, for admission to Examination, they may submit the case to a General Meeting of the Fellows. XII. No Candidate shall be admitted to Examination who is engaged in trade; or who dispenses medicine, or makes any engagement with a Chemist, or any other person, for the supply of medicines; or who practises Medicine or Surgery in partnership by deed or otherwise, so long as that partnership continues. XIII. No Candidate shall be admitted to Examination who refuses to make known, when required by the President and Censors, the nature and composition of any remedy he uses. XIV. Every Candidate (*except in cases specially exempted under Sections xv and xvi*) shall give proof of his acquirements by written answers to questions placed before him, and shall be examined

* The requirements printed in italics apply to candidates who commence their Professional Education in the United Kingdom on or after October 1st, 1867; and to candidates who commence their Professional Education at a recognised Foreign or Colonial School on or after October 1st, 1868.

viva voce at three separate Examinations, and shall be approved by the President and Censors, or by the major part of them. xv. Any Candidate who has already obtained the Degree of Doctor or Bachelor of Medicine at an University in the United Kingdom, wherein the Courses of Study, and the Examinations to be undergone by the Students previously to graduation, shall have been adjudged by the Censors' Board to be entirely satisfactory, shall be exempt (if the Censors shall think fit) from all or any part of the Examinations hereinbefore described, except such as relate to the Third or Pass Examination; the nature and extent of which Examination shall, in the case of each Candidate, be determined by the Censors' Board. Every Candidate for the Membership will, however, be required to translate into English a passage from a Latin author, and he will have the opportunity of showing a knowledge of Greek, or of one or more of the modern European languages. xvi. If any Candidate who has attained the age of forty years shall produce Testimonials not merely satisfactory as to his moral character and conduct, and his general and professional acquirements, but further showing that he has improved the art or extended the science of Medicine, or has at least distinguished himself highly as a Medical Practitioner; the Censors' Board, having well weighed and considered these Testimonials, may, if they see fit, submit them to the Fellows at a General Meeting, and it shall be determined by the votes of the Fellows present, or of the majority of them, taken by ballot, whether the Candidate shall be admitted to examination, which shall, in every such case, be as full and complete as the Censors may deem sufficient. xvii. Any Candidates who shall produce satisfactory evidence of having passed an Examination on Anatomy and Physiology, conducted by any of the Bodies named in Schedule (A) to the Medical Act, and recognised by the College as requiring a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on the subjects of the Primary Examination. xviii. Any Candidate who shall have obtained a Degree in Surgery, at an University in the United Kingdom, after a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy, and the Principles and Practice of Surgery. xix. Any Candidate who shall have passed the Examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, after a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery. xx. Every Candidate approved by the Censors' Board, shall be proposed, at the next General Meeting of Fellows, as qualified to become a Member of the College; and if the majority of the Fellows present shall consent, he shall, on complying with the Regulations prescribed by the Bye-Laws, be admitted a Member of the College. The Fee to be paid for admission as a Member of the College shall be Thirty Guineas.

Every Candidate for the Membership of the College (except such as shall be admissible under the provisions of Sections xv and xvi of the Bye-Laws) will be required to pass the following Examinations.

The First Examination, on Anatomy and Physiology, will be conducted on successive days as follows. First Day: *Evening*, from seven to ten, by written questions. Second Day: *Evening*, commencing at seven o'clock, *viva voce*, on Dissections and Preparations.

The Second Examination will be conducted on successive days, as follows. First Day: *Evening*, from seven to ten, by written questions on Surgical Anatomy, and on the Principles and Practice of Surgery. Second Day: *Morning*—The Candidate's practical knowledge will be tested, either at the College or in the Surgical Wards of a Hospital. *Afternoon*, from one to four, on Materia Medica, and on Chemistry in its applications to Pathology, Pharmacy, and Toxicology.* (This Examination will be conducted partly by written questions and partly in a practical manner.) *Evening*, commencing at seven o'clock, by written questions on Midwifery and the Diseases Peculiar to Women.

The Third, or Pass Examination, will be conducted on successive days as follows. First Day: *Afternoon*, from two to six, by written questions on Medical Anatomy and on the Principles of Medicine. Second Day: *Afternoon*, from two to six, by written questions on the Practice of Medicine, including the *Principles of Public Health*, and on Psychological Medicine. Third Day: The Candidate's practical knowledge will be tested, either at the College or in the Medical Wards of a Hospital. Fourth Day: *Afternoon*, commencing at three o'clock, *viva voce*, on Medical Anatomy, and on the Principles and Practice of Medicine.

Candidates will not be admitted to the First Examination until after the termination of the second Winter Session of Professional Study at a

recognised Medical School, nor to the Second Examination until after the termination of four years of Professional Study, nor to the Third or Pass Examination until after the completion of the required Course of Professional Study.—Any Candidate who shall be rejected at the First Examination, will not be readmitted to Examination until after the lapse of three months, and will be required to produce a Certificate of the performance of Dissections, or other Professional Study, satisfactory to the Examiners, during that time.—Any Candidate who shall be rejected at the Second Examination, will not be readmitted to Examination until after the lapse of Six months, and will be required to produce a Certificate of Attendance on the Practice of a recognised Hospital during that time, and also of Attendance on Clinical Lectures.—Any Candidate not approved by the Censors' Board at the Third or Pass Examination, will not (except by special permission of the College) be readmitted to Examination until after the lapse of a Year.—Every Candidate must give Fourteen days' notice in writing to the Registrar of the College, of his intention to present himself for Examination, at the same time transmitting the following Certificates. *For the Primary Examination*: Evidence of having passed an Arts Examination; and, in the case of those who shall have commenced Professional Studies after 1861, evidence of having previously obtained a Degree of Arts from some University of the United Kingdom, or of the Colonies, or from some other University specially recognised by the Medical Council, or that he has passed examinations equivalent to those required for a Degree in Arts; of having been duly registered as a Medical Student; and of having completed the second Winter Session of Professional Study at a recognised Medical School. *For the Second Examination*: Evidence of having completed four years of Professional Study; of having attained the age of 21 years; of Instruction and Proficiency in the Practice of Vaccination; and of having attended not less than twenty labours. *For the Pass Examination*: Proof of having attained the age of 25 years; a Testimonial from a Fellow or Member of the College; evidence of having completed the required course of Professional Study.

Blank Forms of the required Certificates of attendance on Hospital Practice and on Lectures may be obtained on application at the College.

Examinations of Candidates for the Membership of the College will take place as follows. *First Examination*, commencing on Tuesdays, October 4th and December 6th, 1870. *Second Examination*, commencing on Tuesdays, October 10th and December 12th, 1870. *Third, or Pass Examination*, commencing on Thursday, October 20th, 1870.

BYE-LAWS RELATING TO LICENTIATES.

The College will, under its Charter, grant Licences to practise Physic, including therein the Practice of Medicine, Surgery, and Midwifery (which Licences are not to extend to make the Licentiates Members of the Corporation), to persons who shall conform to the following Bye-Laws.

Every Candidate for the College Licence (except when otherwise provided by the Bye-Laws) is required to produce satisfactory evidence to the following effect.

I.—Of having attained the age of 21 years.

II.—Of moral character.

III.—Of having passed, before the commencement of Professional Study, an Examination in the subjects of General Education recognised by the College.

IV.—Of having been registered as a Medical Student in the manner prescribed by the General Medical Council.

V.—Of having been engaged in Professional Studies during four years, of which at least three Winter Sessions and two Summer Sessions shall have been passed at a recognised Medical School or Schools, and one Winter Session and two Summer Sessions in one or other of the following ways: 1. Attending the practice of a Hospital or other Institution recognised by the College for that purpose. 2. Receiving instruction as the Pupil of a legally qualified Practitioner, holding any Public Appointment which affords opportunities, satisfactory to the Examiners, of imparting a practical knowledge of Medicine, Surgery, or Midwifery. 3. Attending Lectures on any of the required subjects of Professional Study at a recognised place of instruction.*

VI.—Of having attended, during three Winter Sessions and two Summer Sessions, the Medical and Surgical Practice at a recognised Hospital or Hospitals, and of having been engaged during six months in the Clinical Study of Diseases peculiar to Women.

VII.—Of having studied the following subjects: Anatomy (with Dissections), Two Winter Sessions;† Physiology, Two Winter Sessions; Chemistry, Six Months; Practical Chemistry, Three Months; Materia

* Candidates who shall have passed the first examination for the Licence at this College before October 1st, 1867, are exempted from re-examination on Materia Medica, and on Chemistry in its application to Pharmacy.

* Professional Studies commenced *before* the candidate shall have passed an examination in the subject of General Education, will not be recognised by the College.

† The Winter Session comprises a period of six months, and the Summer Session a period of three months.

Medica, Three Months; Practical Pharmacy, Three Months;* Botany, Three Months† Morbida Anatomy, Two Winter Sessions;‡ Principles and Practice of Medicine, Two Winter Sessions;§ Principles and Practice of Surgery, Two Winter Sessions;|| Clinical Medicine, and Clinical Surgery, each Two Winter Sessions and Two Summer Sessions¶ Midwifery and Diseases Peculiar to Women, Three Months;** Forensic Medicine, Three Months.

VIII.—Of having passed the Professional Examination.

Examination for the Licence.

Every Candidate for the College Licence, before he is admitted to Examination, will be required to sign a Declaration, stating whether he has or has not been rejected within Three Months by any of the Examining Boards included in Schedule (A) to the Medical Act.

The First Examination, and the Second Examination as far as the end of the second day, are conducted at the same hours and on the same subjects as the First and Second Examinations for the Membership. The remainder of the Examination is as follows. Third Day: *Evening*, from seven to ten, by written questions on Medical Anatomy, and on the Principles and Practice of Medicine, including the Principles of Public Health. Fourth day: *Morning*—The Candidate's practical knowledge will be tested, either at the College or in the Medical Wards of a Hospital. *Evening*, commencing at seven o'clock, *viva voce*, on the Principles and Practice of Medicine, Surgery, and Midwifery.

Candidates will not be admitted to the First Examination until after the termination of the Second Winter Session of Professional Study at a recognised Medical School, nor to the Second or Pass Examination until after the termination of four years of Professional Study. After October 1870, the College will not admit to the Pass Examination any Candidate (not exempted from Registration) whose name had not been entered in the Medical Students' Register at least four years previously.

Any Candidate who shall be rejected at the First Examination, will not be re-admitted to Examination until after the lapse of Three Months, and will be required to produce a Certificate of the performance of Dissections, or other Professional Study satisfactory to the Examiners, during that time. Any Candidate who shall be rejected at the Second or Pass Examination, will not be re-admitted to Examination until after the lapse of Six Months, and will be required to produce a certificate of attendance on the Practice of a recognised Hospital during that time, and also of attendance on Clinical Lectures.

Every Candidate intending to present himself for Examination, is required to give fourteen days' notice in writing to the Registrar of the College, at the same time transmitting the following certificates. *For the First Examination*—Evidence of having passed an Arts Examination; of having been duly registered as a Medical Student; and of having completed the Second Winter Session of Professional Study at a recognised Medical School. *For the Second, or Pass Examination*—Evidence of having completed four years of Professional Study; of having attained the age of 21 years; of Instruction of Proficiency in the Practice of Vaccination; and of having attended not less than twenty labours. A testimonial of Moral Character is required of every Candidate. Blank forms of the required certificates of attendance on Hospital Practice and on Lectures may be obtained on application at the College.

The exemptions in Clauses XVII, XVIII, and XIX of the Regulations regarding the Membership, are applicable also to Candidates for the Licence; and any Candidate who shall have obtained a Degree in Medicine at an University recognised by the College, after a course of Study and Examination satisfactory to the College, shall be exempt from re-examination on the subjects of the Primary Examination.—Any Registered Medical Practitioner, whose Qualification or Qualifications shall have been obtained before the 1st day of January, 1861, having been, with the consent of the College, admitted a Candidate for the Licence,

* By Practical Pharmacy is meant instruction in the Laboratory of a Registered Medical Practitioner, or of a Member of the Pharmaceutical Society of Great Britain, or of a Public Hospital or Dispensary recognised by the College.

† This Course of Lectures may be attended prior to the commencement of Professional Studies; and any candidate producing satisfactory evidence that Botany formed one of the subjects of his Preliminary Examination, will be exempt from attendance on this course.

‡ This includes attendance and instruction in the *Post Mortem* Room during the period of Clinical Study.

§ It is required that the Principles of Public Health should be comprised in this Course of Lectures, or in the Course of Lectures on Forensic Medicine.

|| The attendance on the Lectures on Medicine and Surgery must not commence earlier than the second Winter Session at a recognised Medical School.

¶ The attendance on the Lectures on Clinical Medicine and Clinical Surgery must not commence until after the first Winter Session at a recognised Medical School. By Clinical Medicine and Clinical Surgery are meant special Study and Instruction at the bedside, with Lectures on Cases.

** Certificates must also be produced of attendance on not less than twenty Labours, and of Instruction and Proficiency in Vaccination.

will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the Professional Examination as his qualifications may seem to the Examiners to render in his case unnecessary.*

The Fee for the College Licence is Fifteen Guineas, of which Five Guineas are to be paid on admission to the First Examination, which Fee will not be returned to any Candidate rejected at this Examination, but will be allowed in the Fee for the Licence; and he will be admitted to one subsequent First Examination without the payment of an additional Fee.† Any Candidate who shall be rejected at the Second or Pass Examination will have the Fee, paid on admission to this Examination, returned to him, less Three Guineas.

Licentiatees of this College shall not compound or dispense medicines except for patients under their own care.

Examinations of Candidates for the College Licence will take place as follows. *First Examination*, commencing October 3rd, and December 5th, 1870. *Second, or Pass Examination*, commencing October 10th, and December 12th, 1870.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

REGULATIONS RESPECTING THE DIPLOMA OF MEMBER.

Section I.—Preliminary General Education and Examination.

CANDIDATES who commenced their Professional Education on or after the 1st of January, 1861, will be required to produce one or other of the following certificates:—1. Of Graduation in Arts at an University recognised for this purpose; viz., Oxford; Cambridge; Dublin; London; Durham; Queen's University in Ireland; Edinburgh; Glasgow; Aberdeen; St. Andrew's; Calcutta; Madras; Bombay; McGill College, Montreal; and Queen's College, Kingston, Canada. 2. Of having passed an Examination for Matriculation, or such other Examination as shall, in either case, from time to time be sanctioned by the Council of this College, at an University in the United Kingdom, or at a Colonial or Foreign University recognised by the Council of this College.‡ 3. Of having passed the Preliminary Examination for the Fellowship of this College. 4. Of having passed the Preliminary Examinations of the Royal Colleges of Surgeons in Ireland and of Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow. 5. Of having passed the Examination in Arts of the Society of Apothecaries of London, or of the Apothecaries' Hall of Ireland. 6. Of having passed the First-Class Examination of the Royal College of Preceptors. 7. Testamur of the Codrington College, Barbadoes. 8. Degree of Associate of Arts granted by the Tasmanian Council of Education, with a certificate that the student has been examined in Latin and Mathematics. 9. Candidates who shall not be able to produce one or other of the foregoing certificates, will be required to pass an Examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of this College.§

* Forms of Application may be obtained of the Registrar of the College.

† The Fee must be paid within three days prior to the day on which the Examination commences.

‡ The following are the Examinations at present recognised under this Clause (No. 2), viz.: Oxford—Responsions or Moderations; Middle-Class Examinations, Senior, the Certificates to include Latin and Mathematics. Cambridge—Previous Examination; Middle-Class Examinations, Senior, the Certificates to include Latin and Mathematics. Dublin—Entrance Examination. London—Matriculation Examination. Durham—Examination of Students in Arts in their second and first years; Middle-Class Examinations, Senior, the Certificates to include Latin and Mathematics; Registration Examination for Medical Students. Queen's University in Ireland—Two years' Arts Course for Diploma of Licentiate in Arts; Preliminary Examinations at end of B.A. Course; Middle-Class Examinations, the Certificates to include Latin and Mathematics; Matriculation Examinations. Edinburgh, Aberdeen, Glasgow, and St. Andrew's—Preliminary or Extra Professional Examinations for Graduation in Medicine. Calcutta, Madras, and Bombay—Matriculation Examinations. Canada: McGill College, Montreal; University College, Toronto; Queen's College, Toronto; University of Laval, Quebec—Matriculation Examinations. Queen's College, Kingston—Matriculation Examination; Preliminary Examination of Students in Medicine. University of Melbourne—Matriculation Examination, with a Certificate that the Student has passed an Examination in Latin. New York, Bellevue Hospital Medical College—Matriculation Examination.

§ The following are the subjects of the Examination (No. 9) during the year; viz.—Part I. *Compulsory Subjects*. 1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English Grammar. 4. Writing a short English composition: such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple or compound, of Vulgar Fractions, and of Decimals. 6. Questions on the Geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English History; that is, the succession of the Sovereigns and the leading events of each reign. 8. Mathematics: Euclid, Books I and II; Algebra to Simple Equations inclusive. 9. Translation of a passage from the second book of *Cæsar's Commentaries De Bello Gallico*.—Part II. *Optional Subjects*. Papers will also be set on the following seven subjects; and each candidate will be required to offer himself for examination on one subject at least, at the option of the candidate; but no candi-

Section II.—Professional Education.

I. Professional Studies prior to the date at which the candidate shall have passed an Examination in General Knowledge, in conformity with the Regulation in the preceding Section, are not recognised.

II. The following will be considered as the commencement of Professional Education:—1. Attendance on the Practice of a Hospital, or other Public Institution recognised by this College for that purpose. 2. Instruction as the Pupil of a legally qualified Surgeon, holding the appointment of Surgeon to a Hospital, General Dispensary, or Union Workhouse, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council. 3. Attendance on Lectures on Anatomy, Physiology, or Chemistry, by Lectures recognised by this College. *The commencement of professional study otherwise than by attendance on Lectures in recognised Medical Schools, or by attendance on the Practice of recognised Hospitals, will not be admitted until a certificate thereof shall be furnished to the Secretary for registration at the College, by the practitioner whose pupil the candidate shall have become, or by the Medical Superintendent of the Hospital or other Institution to the practice of which he shall have entered, and will, consequently, date only from the reception of such certificate by the Secretary; the certificate to be accompanied by proof of having passed the necessary Preliminary Examination in General Knowledge.*

III. Candidates will be required to produce the following certificates, viz.:—1. Of being twenty-one years of age. 2. Of having been engaged, subsequently to the date of passing the Preliminary Examination, during four years, or during a period extending over not less than four Winter and four Summer Sessions, in the acquirement of professional knowledge. 3. Of having attended Lectures on Anatomy during two Winter Sessions. 4. Of having performed Dissections during not less than two Winter Sessions. 5. Of having attended Lectures on General Anatomy and Physiology during one Winter Session. 6. Of having attended a Practical Course of General Anatomy and Physiology during another Winter or a Summer Session, consisting of not less than thirty meetings of the Class.* 7. Of having attended Lectures on Surgery during one Winter Session. 8. Of having attended a Course of Practical Surgery during a period occupying not less than six months prior or subsequent to the Course required by the preceding Clause 7.† 9. Of having attended one Course of Lectures on each of the following subjects, viz.: Chemistry;‡ Materia Medica; Medicine; Forensic Medicine; Midwifery (with practical instruction, and a certificate of having personally conducted not less than ten labours); Pathological Anatomy during not less than three months. 10. Of having studied Practical Pharmacy during three months. 11. Of having attended a three months' course of Practical Chemistry (with Manipulations), in its application to Medical Study. 12. Of Instruction and Proficiency in the Practice of Vaccination.§ 13. Of having attended,

date will be allowed to offer himself for examination on more than four subjects:—1. Translation of a passage from the first Book of the *Anabasis* of Xenophon. 2. Translation of a passage from X. B. Saintine's *Picciola*. 3. Translation of a passage from Schiller's *Wilhelm Tell*. Besides these translations into English, the candidate will be required to answer questions on the Grammar of each subject, whether compulsory or optional. 4. Mechanics: the questions will be chiefly of an elementary character. 5. Chemistry: the questions will be on the elementary facts of Chemistry. 6. Botany and Zoology: the questions will be on the Classification of Plants and Animals. The quality of the handwriting and the spelling will be taken into account. N.B. Each candidate (who has not already paid the amount) is required to pay a Fee of £2 on the morning of the first day of the Examination, prior to his admission thereto. The next Examination will be held on or about the third Tuesday or Wednesday in December. The exact dates of the Examination are duly advertised when fixed in the Medical Journals; and candidates are required to send in the prescribed forms of application not less than three weeks before the commencement of each Examination. NOTE. A candidate, in order to qualify for the Fellowship, is required to pass in the subjects numbered 1 and 2, and in one, at his option, of the subjects numbered 3, 4, 5, and 6, Part II, in addition to the compulsory subjects contained in Part I.

* By the Practical Course referred to in Clause 6, it is meant that the learners themselves shall, individually, be engaged in the necessary experiments, manipulations, etc.

† The Course of Practical Surgery referred to in Clause 8, is intended to embrace instruction in which each pupil shall be exercised in practical details, such as in—the application of Anatomical facts to Surgery, on the living person, or on the dead body; the methods of proceeding and the manipulations necessary in order to detect the effects of diseases and accidents, on the living person, or on the dead body; the performance, where practicable, of the operations of Surgery on the dead body; the use of Surgical Apparatus; the examination of diseased structures, as illustrated in the contents of a museum of Morbid Anatomy and otherwise.

‡ The Course of Lectures on Chemistry included in Clause 9 will not be required in the case of a candidate who shall have passed a satisfactory Examination in this subject in his Preliminary Examination.

§ In the case of Candidates who commenced their Professional Education on or after the 1st of October, 1868, the Certificate of Instruction in Vaccination will only be received from recognised Vaccine Stations, or from recognised Vaccine Departments in Medical Schools or Hospitals, or other Public Institutions, where the appointed Teacher of Vaccination is not liable to frequent change, and where ample means for study are provided by not less than such a number of cases (eight or ten on an average weekly) as may be found, after due inquiry, to be sufficient for this

at a recognised Hospital or Hospitals, the Practice of Surgery during three Winter* and two Summer† Sessions. 14. Of having been individually engaged, at least twice in each week, in the observation and examination of Patients at a recognised Hospital or Hospitals, under the direction of a recognised Teacher, during not less than three months.‡ 15. Of having, subsequently to the first Winter Session of attendance on Surgical Hospital Practice, attended, at a recognised Hospital or Hospitals, Clinical Lectures on Surgery during two Winter and two Summer Sessions. 16. Of having been a Dresser at a recognised Hospital, or of having, subsequently to the completion of one year's professional education, taken charge of Patients under the superintendence of a Surgeon during not less than six months, at a Hospital, General Dispensary, or Parochial or Union Infirmary recognised for this purpose, or in such other similar manner as, in the opinion of the Council, shall afford sufficient opportunity for the acquirement of Practical Surgery. 17. Of having attended during the whole period of attendance on Surgical Hospital Practice (see Clause 13) demonstrations in the *Post Mortem* Rooms of a recognised Hospital. 18. Of having attended, at a recognised Hospital or Hospitals, the Practice of Medicine and Clinical Lectures on Medicine during one Winter and one Summer Session.

Notice.—Clauses 6, 8, 11, 14, and 17, and the Notes to Clauses 6, 8, 9, 12, and 14, together with the courses of Lectures on Forensic Medicine and Pathological Anatomy mentioned in Clause 9, are applicable to Candidates who shall commence their professional education on or after the 1st of October, 1870.

N.B. Blank forms of the required certificates may be obtained on application to the Secretary, and all necessary certificates will be retained at the College.

Section III.—Concerning Certificates, etc.

1. Certificates will not be received on more than one branch of science from one and the same lecturer; but Anatomy and Dissections will be considered as one branch of science. 2. Certificates will not be recognised from any Hospital in the United Kingdom, unless the surgeons thereto be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the teachers in such School be members of some legally constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the teachers in such School be members of one of the legally constituted Colleges of Surgeons in the United Kingdom. 3. No Metropolitan Hospital will be recognised by this College which contains less than 150, and no Provincial or Colonial Hospital which contains less than 100 patients. 4. The recognition of Colonial Hospitals and Schools is governed by the same regulations, with respect to number of patients and to courses of lectures, as apply to the recognition of Provincial Hospitals and Schools in England. 5. Certificates of attendance upon the practice of a recognised Provincial or Colonial Hospital unconnected with, or not in convenient proximity to, a recognised Medical School, will not be received for more than one winter and one summer session of the hospital attendance required by the regulations of this College; and in such cases Clinical Lectures will not be necessary, but a certificate as having acted as Dresser for the period of at least six months will be required. 6. Certificates will not be received from candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on Lectures and Hospital Practice within fifteen days from the commencement of the Session; nor from Candidates who have studied in the provincial schools in England, unless their names shall be duly returned from their respective schools. 7. Candidates who shall have pursued the whole of their studies in Scotland or Ireland will be admitted to examination upon the production of the certificates required respectively by the College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland, from Candidates for their diploma. Candidates who shall have pursued the whole of their studies at recognised Foreign or Colonial Universities will be admitted upon the production of the several certificates required for their Degree by the authorities of such Universities. 8. Members

purpose at each place.—The Certificates of attendance on the several Courses of Lectures must include evidence that the Student has attended the Practical Instructions and Examinations of his Teacher in each Course.

* The Winter Session comprises a period of six months; and, in England, commences on the 1st of October and terminates on the 31st of March.

† The Summer Session comprises a period of three months; and, in England, commences on the 1st of May and terminates on the 31st of July.

‡ It is intended that the Candidate should receive the instruction required by Clause 14 at an early period of his attendance at the Hospital.

§ At their first registration in October, candidates will be required to produce a certificate of having passed one or other of the Preliminary Examinations in General Knowledge recognised by this College.

or Licentiates of any legally constituted College of Surgeons in the United Kingdom, Graduates in Surgery of any University recognised for this purpose by this College. 9. Graduates in Medicine of any legally constituted College or University recognised for this purpose by this College, will be admitted to examination on producing their Diploma, Licence, or Degree, together with proof of being twenty-one years of age. In each of these cases, 7, 8, and 9, the Candidate will also be required to produce a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four years, or a period extending over four winter and four summer sessions, in the acquirement of professional knowledge.

Section IV.—Professional Examination.

This Examination is divided into two parts. 1. The First or Primary Examination, on Anatomy and Physiology, is partly written and partly demonstrative on the recently dissected Subject, and on prepared parts of the Human Body. 2. The Second or Pass Examination, on Surgical Anatomy and the Principles and Practice of Surgery and Medicine, is partly written, partly oral, and partly on the practical use of Surgical Apparatus. *In the Pass Examination, on and after the 31st of March, 1871, the knowledge of candidates will be tested by the practical examination of patients.* [A Candidate can claim exemption from examination in Medicine under the following conditions, viz.: a. The production by the Candidate of a Degree, Diploma, or Licence in Medicine entitling him to register under the Medical Act of 1858, or a Degree, Diploma, or Licence in Medicine of a Colonial or Foreign University approved by the Council of the College. b. A declaration by the Candidate, prior to his admission to the Final Examination for Membership or Fellowship, that it is his intention to obtain either of the Medical Qualifications mentioned in the foregoing paragraph, in which case the Diploma of the College will not be issued to him until he shall produce either the said Medical Qualification or proof of having passed the several examinations entitling him to receive the same.] 3. The Primary Examinations are held in the months of January, April, May, July, and November, and the Pass Examinations generally in the ensuing week respectively. 4. Candidates will not be admitted to the Primary Examination, until after the termination of the Second Winter Session of their attendance at a recognised school or schools; nor to the Pass, or Surgical Examination, until after the termination of the fourth year of their professional education. 5. The fee of Five Guineas, paid prior to the Primary Examination, and allowed on the whole fee of Twenty-two Pounds* payable for the Diploma, is retained; and after any two consecutive failures at the Primary Examination, the Candidate is required to pay an *additional* fee of Five Guineas prior to being again admitted to that Examination, which *additional* fee is also retained. 6. Five guineas, part of the sum of sixteen pounds fifteen shillings, the balance of the whole fee due for the Diploma and paid prior to the Pass Examination, is retained; and after any two consecutive failures at the Pass Examination, the Candidate is required to pay an *additional* fee of five guineas prior to being again admitted to the said Pass Examination, which *additional* fee is also retained. 7. A Candidate having entered his name for either the Primary or Pass Examination, who shall fail to attend the meeting of the Court for which he shall have received a card, will not be allowed to present himself for examination within the period of three months from the date at which he shall have so failed to attend. 8. A Candidate referred on the Primary Examination is required, prior to his admission to re-examination, to produce a certificate of the performance of dissections during not less than three months subsequently to the date of his reference. 9. A Candidate referred on the Pass Examination is required, prior to his admission to re-examination, to produce a certificate of at least six months' further attendance on the Surgical Practice of a recognised hospital, together with Lectures on Clinical Surgery, subsequently to the date of his reference.

REGULATIONS RELATING TO THE DIPLOMA OF FELLOW.

Section I.—Preliminary Examination.

Candidates must produce Certificates of graduation in Arts at an University recognised for this purpose;† or of having passed such examinations in Arts as shall from time to time be required for graduation in Medicine at Oxford, Cambridge, Dublin, London, or Durham. Candidates who shall not be able to produce one or other of the foregoing Certificates will be required to pass an Examination conducted by the Board of Examiners of the Royal College of Preceptors.‡

* This sum of twenty-two pounds is exclusive of the fee of two pounds paid for the Preliminary Examination.

† See Regulation for Diploma of Member, Section i, Clause 1.

‡ For the Subjects, see Note to Section i, Clause 9, pages 270 and 271.

Section II.—Professional Education

I. Except in the cases and instances hereinafter provided for to the contrary, every Candidate for admission to the First or Anatomical and Physiological Examination for the Fellowship is required to produce, in addition to certificates of the same kind as are described in Section II, Clauses 3, 5, 6, 10, and 11 of the Regulations for the Membership, Certificates of having passed the Preliminary Examination; of having performed Dissections during three Winter Sessions; of having attended one Course of Lectures on Comparative Anatomy and one Course of Lectures on Chemistry.

II. Except in the cases and instances provided for to the contrary, every Candidate before his admission to the Second or Professional Examination is required to produce, in addition to the certificates described in Section II, Clauses 7, 8, 9 (except Chemistry, included in First Examination), 12, 14, and 15 of the Regulations for the Diploma of Member, certificates of being twenty-five years of age; of having been engaged for six years in the acquirement of professional knowledge in Hospitals or Schools of Anatomy, Surgery, and Medicine recognised by the Council of the College (or, if the Candidate be already a Member of the College, certificates of having been engaged for two years in the acquirement of professional knowledge in recognised Hospitals and Schools, in addition to the Certificates required for the Diploma of Member); of having performed operations on the dead body under the superintendence of a recognised Teacher; of having attended the Surgical Practice of a recognised Hospital or Hospitals during four Winter and four Summer Sessions, and the Medical Practice during one Winter and one Summer Session; of having attended, during three Winter and two Summer Sessions, demonstrations in the *Post Mortem* Rooms of a recognised Hospital; and of having served the office of House-Surgeon or Dresser for not less than six months.

III. In the case of a Candidate who shall have taken by Examination the Degree of Bachelor or Master of Arts in any University in the United Kingdom recognised by the Council for this purpose, it shall be sufficient for him to produce a Certificate or Certificates that he has been engaged for five years (instead of six years) in the acquirement of professional knowledge in Hospitals or Schools of Anatomy, Surgery, and Medicine recognised by the Council of the College.

IV. Any Member of the College shall, after the expiration of eight years from the date of his Diploma, be entitled to be admitted to the professional examination for the Fellowship upon the production of a Certificate, signed by three Fellows, that he has been for eight years in the Practice of the profession of Surgery, and that he is a fit and proper person to be admitted a Fellow if upon examination he shall be found qualified.

Section III.—Professional Examinations.

The Examinations are held twice in the year, in May and November, and at such other times as the Council may appoint. They occupy not less than two days. The subjects of the first Examination are the same as for the Membership; the second Examination, on Pathology, Therapeutics, and the Principles and Practice of Surgery and Medicine,* is partly written, partly *visu voce*, and partly on the practical use of Surgical Apparatus, and includes the examination of Patients, and operations on the dead body.—The Fees are: for the First Examination Five Guineas, to be allowed on the fee for the Diploma of Fellow, but to be retained in case of rejection; for the Second Examination Five Guineas (if the Candidate be a Member) over and above charges for stamps, to be retained in case of rejection; Twenty-five Guineas (if he be not a Member) over and above charges for stamps, of which Five Guineas will be retained in case of rejection.† A Candidate whose qualifications are found insufficient on his Anatomical and Physiological Examination cannot present himself for re-examination until after the expiration of six months; and a Candidate whose qualifications shall be found insufficient upon his Pathological and Surgical Examination cannot present himself for re-examination until after the expiration of one year, unless the Court of Examiners shall otherwise determine.

SOCIETY OF APOTHECARIES, LONDON.

REGULATIONS RELATING TO ALL CANDIDATES FOR EXAMINATION.

EVERY Candidate intending to offer himself for examination must give notice on or before the Monday previous to the day of examination, and must at the same time deposit all the required Testimonials, with the

* For the condition of exemption from examination in Medicine, see Regulations respecting the Diploma of Member, Section iv, Clause 2. A Candidate who has passed an examination in Medicine for the Membership will not be required to pass any further examination in Medicine for the Fellowship.

† The sum of £2, paid on the Preliminary Examination, will be allowed against these amounts.

fec, at the Office of the Beadle, where attendance is given every day, except Sunday, from ten to four o'clock; Saturdays, ten to two. The Examination of Medical Students is divided into two parts, and is conducted partly in writing, and partly *viva voce*.

The *First Examination*, which may be passed after the Second Winter Session, embraces the following subjects:—Physicians' Prescriptions; Anatomy and Physiology; General and Practical Chemistry; Botany and Materia Medica.

The *Second Examination*, at the termination of Medical Studies, includes: Principles and Practice of Medicine; Pathology and Therapeutics; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology.

Testimonials required of Candidates.

For the *First Examination*—1. Of having passed an Examination in Arts, recognised by the Medical Council; 2. Of having completed the Curriculum of Study to the close of the second Winter Session. For the *Second or Pass Examination*—1. A Certificate of having completed five years' apprenticeship (which may include the period spent at the hospital), of being twenty-one years of age, and of good moral conduct. 2. Of having passed the First Examination. 3. Of having completed the prescribed Curriculum of Study according to the Schedule, including a personal attendance of twenty cases of Midwifery; and of having received instructions in Practical Vaccination. 4. Of having served the office of Clinical Clerk at a recognised hospital during the period of six weeks at least. 5. Of having been examined at the Class-Examinations instituted by the various Lecturers and Professors of the respective Medical Schools and Colleges.

The fee for a Certificate of Qualification to practise is Six Guineas, the half to be paid at the First Examination.

Course of Study.

Every Candidate whose attendance on Lectures shall have commenced on or after October 1, 1863, must attend the following Lectures and Medical Practice during not less than three Winter and two Summer Sessions (each Winter Session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each Summer Session to extend from May 1 to July 31). *First Year: Winter Session:* Chemistry; Anatomy and Physiology; Dissections. *Summer Session:* Botany; Materia Medica and Therapeutics; Practical Chemistry.—*Second Year: Winter Session:* Anatomy and Physiology, including Dissections and Demonstrations; Principles and Practice of Medicine; Clinical Medical Practice. *Summer Session:* Midwifery and Diseases of Women and Children, and Vaccination; Forensic Medicine and Toxicology; Clinical Medical Practice.—*Third Year: Winter Session:* Principles and Practice of Medicine; Clinical Medical Lectures; Morbid Anatomy; Clinical Medical Practice.—No certificates of Lectures or of Anatomical Instruction delivered in private to particular Students, apart from the ordinary classes of recognised Public Medical Schools, can be received by the Court of Examiners.—All Students are required *personally* to register the several tickets of admission to Lectures and Medical Practice within the first fifteen days of the months of October and May.

Modified Examinations.

All Graduates in Medicine of British Universities will be admitted to a Practical Examination in Medicine and Midwifery only.—Licentiates of the Royal College of Physicians, London; of the Royal College of Physicians, Edinburgh; of the Royal Colleges of Physicians and Surgeons, Edinburgh; of the King and Queen's College of Physicians, Ireland; of the Faculty of Physicians and Surgeons, Glasgow; and of the Apothecaries' Hall, Dublin, will be admitted to a *viva voce* Examination in Medicine, Midwifery, Forensic Medicine, and Toxicology.—Members of the Royal College of Surgeons, England; Licentiates of the Royal College of Surgeons, Edinburgh; and Licentiates of the Royal College of Surgeons, Ireland, possessing a surgical qualification only, will be admitted to a first and second Examination on one evening. The first, or *viva voce* Examination, will include the subjects of Physicians' Prescriptions, Visceral Anatomy, Physiology, Chemistry, Materia Medica, Botany, and Pharmacy; the second, which is partly written and partly *viva voce*, will include the subjects of Practice of Medicine, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Toxicological Chemistry.—Any Candidate who has passed his first Examination for the Licence of the Royal College of Physicians, London; the Licence of the King and Queen's College of Physicians, Ireland; the joint Licence of the Royal Colleges of Physicians and Surgeons, Edinburgh; or for the single Licence of the College of Physicians, Edinburgh; the Licence of the Faculty of Physicians and Surgeons, Glasgow; the first Professional Examination for the Degree of M.B., or Master in Surgery in the Universities of Oxford, Cambridge, or London; or the second part

of the Professional Examination for the Degree of M.D., or Master in Surgery in the Universities of Edinburgh, Aberdeen, St. Andrew's, and Glasgow; or the first Examination for Medical and Surgical Degrees in the Irish Universities; or the first Examination for the Licence of the Apothecaries' Company, Dublin, will be admitted to a single Examination in Materia Medica, Therapeutics, Medicine, Pathology, Midwifery, and Toxicology, part of which Examination will be conducted in writing.

Candidates who desire to avail themselves of the Modified Examination for Senior Candidates must produce evidence—1. That they are more than forty years of age. 2. That they have served an apprenticeship of five years to an Apothecary; or at least that they have been engaged in such a course of study as shall be considered "serving after the manner of an apprentice, for five years," in conformity with the Act of 1815. 3. Of good moral conduct. 4. That they have attended such Lectures and Hospital Practice as were required of Students when their Medical Studies commenced, or such as shall be deemed equivalent. The Examination of the above Candidates will consist—In the Translation of Physicians' Prescriptions; in such parts of Chemistry and Materia Medica as bear upon the Practice of Medicine and on Toxicology; in Visceral Anatomy; in the Practice of Medicine, including the Diseases of Women and Children; and in Midwifery. Candidates, unless registered, will be required to produce their diploma.

Any Candidate who presents himself for the first Examination, and is rejected, may be admitted to re-examination at the expiration of *three months*. A Candidate who presents himself for the Second or Pass Examination, and is rejected, cannot be admitted to re-examination until the expiration of *six months*. A Candidate who presents himself for the first and second Examinations in one evening, and is rejected on either, cannot be admitted to re-examination until the expiration of *six months*.

Examination in Arts.

This Examination will be held at the Hall of the Society on Friday and Saturday, January 27th and 28th, April 28th and 29th, September 29th and 30th, 1871.—The Examination will be conducted by means of Printed Papers.—Candidates will be examined in the following branches; and no Candidate will be approved unless he show a competent knowledge of each branch of the Examination:—1. The English Language; 2. The Latin Language; 3. Mathematics; 4. One of the following subjects, at the option of the Candidate; (a) Greek; (b) French; (c) German; (d) Natural Philosophy.*

Candidates applying to be admitted to any Examination must pay the fee (One Guinea) at least one week before the Examination; and must sign their names in the Candidates' Book between 11 A.M. and 3 P.M. o'clock, not later than the previous Thursday.

If a Candidate fail to pass the Examination, the fee will not be returned to him; but he will be admissible to any subsequent Examination in Arts without the payment of an additional fee, upon giving the usual notice, and signing the Candidates' Book.

Certificates in Arts granted by any of the Bodies whose Certificate is recognised by the Medical Council will be accepted from Candidates who present themselves at the Professional Examination at the Hall, as equivalent to their having passed the above Examination.

UNIVERSITY OF OXFORD.

DEGREES IN MEDICINE.

EVERY Student must reside either in one of the Colleges or Halls, or in a Licensed Lodging-House for three years. During these three years he has to pass two Examinations in Arts, and one in either Mathematics, Natural Science, or Law and Modern History; when, if he obtain a first, second, or third class, he can take his B.A. degree; if he do not gain such honours, he has to pass a third Examination *in Literis Hu-*

* The following is the Syllabus of Subjects for Examination in 1871. 1. English. The leading features of its History. Its Structure and Grammar. English Composition. [The Books recommended for study in this subject are Adams's *Elements of the English Language* and Trench *On the Study of Words*.]—2. Latin. January: Horace, *Odes*, Books I and II. April: Virgil, *Georgics*, Books I and II. September: Cicero, *Orat. in Catilinam*, Books I and II. Re-translation of easy sentences. Grammatical Questions will be introduced into the Latin Paper, and each Candidate will be expected to give satisfactory answers to these.—3. Mathematics: The Ordinary Rules of Arithmetic; Vulgar and Decimal Fractions; Addition, Subtraction, Multiplication, and Division of Algebraical Quantities; Simple Equations; The First Two Books of Euclid.—4. (a) Greek: Homer, *Iliad*, Books I and II; Grammatical Questions. (b) French: *Telemachus*, Books I and II; Translation from English into French; Grammatical Questions. (c) German: Schiller's *Song of the Bell*; Translation of short Sentences from English into German; Grammatical Questions. (d) Natural Philosophy: Mechanics; Hydrostatics and Pneumatics. [The Book recommended for study in this subject is Snowball's *Cambridge Course of Elementary Natural Philosophy*.]

manioribus. A Student deciding to graduate in Medicine must, after passing the requisite Examination for the degree of B.A., spend two years in study prior to a Scientific Examination for the Degree of Bachelor of Medicine, unless he shall have taken a first or second class in the Natural Science School, when he may go in at the first opportunity for the first M.B. Examination. Two years after passing this Examination, and after four years of Professional and Scientific Study, he may go in for the second or practical Examination for the M.B. Degree. These four years of medical study may be spent either in or out of Oxford, in an approved Medical School.

The M.B. degree confers the License to practise. For the Degree of Doctor in Medicine a dissertation has to be publicly read three years after taking the M.B. Degree.

The Medical Examinations take place annually in Michaelmas Term.

The instruction in Natural Science is carried on at the Museum, where the following Teachers have their Departments.

Regius and Clinical Professor of Medicine: H. W. Acland, M.D., LL.D., F.R.S.

Savilian Professor of Astronomy: C. Pritchard, M.A., F.R.S.

Savilian Professor of Geometry: H. J. S. Smith, M.A., F.R.S.

Professor of Experimental Physics: R. B. Clifton, M.A., F.R.S.

Professor of Natural Philosophy: Bartholomew Price, M.A., F.R.S.

Professor of Geology: J. Phillips, M.A., D.C.L., F.R.S.

Professor of Mineralogy: M. H. N. Story-Maskelyne, M.A.

Professor of Chemistry: Sir B. C. Brodie, Bart., M.A., F.R.S.

Linacre Professor of Physiology: G. Rolleston, M.D., F.R.S.

Professor of Zoology: J. O. Westwood, M.A., F.L.S.

Lee's Reader in Anatomy: J. B. Thompson, B.A.

Demonstrator in Anatomy: C. Robertson, Esq.

Medical Chemistry: C. C. Poole, M.B.

Demonstrator in Chemistry: T. H. G. Wyndham, M.A.

Radcliffe Librarian: H. W. Acland, M.D., LL.D., F.R.S.

Sub-Librarian: Mr. John Haines.

Sherardian Professor of Botany (Botanical Gardens): J. S. Lawson, M.A.

Lee's Reader in Chemistry (Christ Church): A. G. V. Harcourt, M.A., F.R.S.

Lee's Reader in Physics: A. Reinold, M.A.

Scholarships of about the value of £75 are obtainable at Christ Church, Magdalen, and other Colleges, by competitive Examination in Natural Science. Every year a Radcliffe Travelling Fellowship is competed for by any one who, having taken a first-class in any of the Public Examinations of the University, or having obtained some University Prize or Scholarship open to general competition, proposes to study medicine. The travelling Fellows receive £200 a year for three years, half this period being spent in study abroad.

UNIVERSITY OF CAMBRIDGE.

DEGREES IN MEDICINE AND SURGERY.

Degree of Bachelor of Medicine.

A STUDENT proceeding to this degree must—1, Reside in the University two-thirds of each of nine terms; 2, Pass the previous Examination;* 3, Pursue medical study for five years, unless he have obtained honours in the Mathematical, Classical, Moral Sciences, or Natural Sciences Tripos, in which case only four years are required. Of this time of five years he must spend six terms in medical study in the University† after passing the previous Examination, unless he has obtained honours in one of the above-mentioned Triposes, in which case four terms only are required.—A student who has not graduated in Arts is required, before keeping the terms of medical study, in addition to passing the previous Examination, to pass in Algebra either in the Examination for the additional subjects of the previous Examination (which he may do in his

* A student who is, at least, in his second term of residence, may be admitted to the Previous Examination, and also to the Examination in the Additional Subjects, held in the Lent Term, provided he presents to the Registry a Certificate from the Master of his College, or his *locum tenens*, stating that he has declared that it is *bonâ fide* his intention to register himself as a medical student and to study medicine in the University. But in order that such a student may be admitted to the Examination for any Tripos, or to the Degree of Bachelor of Arts or Bachelor of Law, a Certificate from the Regius Professor of Physic that he has been *bonâ fide* engaged in Medical Study, including Hospital Practice, subsequently to having passed the Previous Examination, and also Certificates that he has attended three Courses of Medical Lectures subsequently to his having passed the Previous Examination, must be presented to the Council.

† That is, by attending, in each Term, Courses of Lectures delivered in the University on two of the following subjects; viz., Chemistry, Botany, Human Anatomy and Physiology, Comparative Anatomy, Materia Medica and Pharmacy, Pathology; or, instead of two Courses of Lectures, by attending one Course of Lectures and the Medical Practice of Addenbrooke's Hospital.

second term of residence or in any subsequent term), or in the general Examination for the ordinary B.A. Degree.

There are three Examinations for the Degree of Bachelor of Medicine, conducted partly by written answers, and partly *vivâ voce*. The Examinations include chemical analysis, the recognition and description of specimens (healthy, morbid, and microscopical), dissections, and the examination of patients.

The subjects of the first Examination are—1, Mechanics and Hydrostatics; 2, Chemistry with Heat and Electricity; 3, Botany.* The student may present himself for this Examination at any time after passing the previous Examination. He must produce certificates of having diligently attended one course of Lectures on Chemistry, including Manipulations, and one course on Botany.

The subjects of the second Examination are—1, Elements of Comparative Anatomy;† 2, Human Anatomy and Physiology; 3, Pharmacology. Before presenting himself for this Examination, the student must have completed two years of medical study, the time of medical study required to be spent in the University being included in these two years. He must have attended hospital practice during one year, have practised dissection during one season, and must produce certificates of having diligently attended a course of Lectures on each of the following subjects:—1, Elements of Comparative Anatomy; 2, Human Anatomy and Physiology; 3, Materia Medica and Pharmacy; 4, Pathology.

The subjects of the third Examination are—1, Pathology and the Practice of Physic (two papers); 2, Clinical Medicine; 3, Medical Jurisprudence.—Before presenting himself for this Examination, the student must have completed the course of medical study, must have attended Hospital practice during three years, and must produce certificates of having attended one course of Lectures on each of the following subjects:—1, Principles and Practice of Physic; 2, Clinical Medicine; 3, Clinical Surgery; 4, Medical Jurisprudence; 5, Midwifery.

After these Examinations have been passed, an Act must be kept in the Schools. The Candidate reads a thesis, composed in English by himself on some subject approved by the Professor; the Professor brings forward arguments or objections in English for the Candidate to answer, and examines him *vivâ voce* as well as on questions connected with his thesis as on other subjects in the faculty of a more general nature. The exercise must continue at least one hour.

Degree of Doctor of Medicine.

This may be taken by a Bachelor of Medicine in the ninth term after his inauguration. He is required to produce certificates of having been engaged five years in medical study, to keep an Act similar to that for M.B., and write an extempore essay. He pays ten guineas to the Professor of Physic for the Act.—A Master of Arts may proceed to the Degree of M.D. in the twelfth term after his inauguration as M.A. without having taken the Degree of M.B. He must pass the three Examinations for M.B., and keep the Act, for the M.D. Degree. He must produce certificates of having been engaged five years in medical study, and the same certificates of attendance on Lectures and Hospital Practice are required as of the Candidate for the Degree of M.B.; but he is not required to have kept medical terms in the University.

Degree of Master in Surgery.

The subjects of the Examination for this Degree are—1, Surgical Anatomy; 2, Pathology and the Principles and Practice of Surgery; 3, Clinical Surgery; 4, Midwifery.—Before admission to this Examination, the Candidate must have passed all the Examinations for the Degree of M.B., and must produce certificates of having attended the surgical practice of a Hospital for three years, of having been House-Surgeon or Dresser for six months, and of having attended—1, a second course of Lectures on Human Anatomy; 2, one course of Lectures on the Principles and Practice of Surgery; 3, Lectures on Clinical Surgery, during one year; 4, ten cases of Midwifery; 5, of having practised Dissection during a second season.—The Examination takes place at the same time as those for M.B., and in a similar manner. The Candidate is required to perform operations on the dead body, and to examine patients in the Hospital.‡

* Students who have obtained Honours in the Mathematical, Classical, Moral Sciences, or Natural Sciences Tripos, or passed the general Examination for the B.A. Degree, are not required to be examined in Mechanics and Hydrostatics; and those students who have obtained Honours in the Natural Sciences Tripos are not required to be examined in Botany or Chemistry, with Heat and Electricity, if they have passed with credit the Examination in the Tripos in those subjects. Students who have passed the special Examination in Botany for the B.A. Degree, are not required to be examined again in that subject.

† Students who have obtained honours in the Natural Sciences Tripos, and passed with credit the examination in Comparative Anatomy for that Tripos, are not required to be examined again in that subject.

‡ A notice is published early in the Michaelmas and Easter Terms, stating when the examinations for Medical and Surgical Degrees respectively commence, and the date when candidates are required to send to the Regius Professor of Physic notices

The Lectures by the Medical Professors and Teachers in the University begin in October. The following are given in the course of the year.

Pathology and Practice of Medicine: H. J. H. Bond, M.D.
Chemistry: G. D. Liveing, M.A.
Anatomy: G. M. Humphry, M.D., F.R.S.
Botany: C. C. Babington, M.A., F.R.S.
Materia Medica: W. W. Fisher, M.D.
Surgery: G. M. Humphry, M.D., F.R.S.
Clinical Medicine: G. E. Paget, M.D.; P. W. Latham, M.D.; J. L. Bradbury, M.B.
Clinical Surgery: C. Lestourgeon, M.A.; G. M. Humphry, M.D.
Practical Chemistry: G. D. Liveing, M.A.
Practical Anatomy: E. Carver, M.B., M.A.

UNIVERSITY OF LONDON.

DEGREES IN MEDICINE AND SURGERY.

THE following Examinations for Degrees in Medicine are held in the University of London. Each takes place once yearly.

Preliminary Scientific Examination, commencing on the third Monday in July.

Bachelor of Medicine (M.B.) First Examination: Last Monday in July.

Bachelor of Medicine (M.B.) Second Examination: First Monday in November.

Bachelor of Surgery (B.S.): Tuesday following the fourth Monday in November.

Master in Surgery (M.S.): Fourth Monday in November.

Doctor of Medicine (M.D.): Fourth Monday in November.

The Certificates in each case must be transmitted to the Registrar at least fourteen days before the commencement of the Examination.

The fee for each Examination is Five Pounds.* If a Candidate withdraw or fail to pass either of the Examinations, the fee is not returned; but he is admitted without further payment, to *two* subsequent Preliminary Scientific, First M.B., Second M.B., or B.S. Examinations, or to *one* subsequent M.S. or M.D. Examination, provided that he give notice to the Registrar at least fourteen days before the commencement of the Examination.

Bachelor of Medicine.

Every Candidate for the Degree of Bachelor of Medicine shall be required—1. To have passed the Matriculation Examination, or to have taken a Degree in Arts in either of the Universities of Sydney, Melbourne, or Calcutta (provided in the last case, that Latin has been one of the subjects in which he has passed.). 2. To have passed the Preliminary Scientific Examination.† 3. To have been engaged in his Professional Studies during four years subsequently to Matriculation or Graduation in Arts, or one or more of the Medical Institutions or Schools recognised by this University; one year, at least, of the four to have been spent in one or more of the recognised Institutions or Schools in the United Kingdom. 4. To pass Two Examinations in Medicine.

First M.B. Examination.—The Candidate must produce Certificates:—1. Of having completed his nineteenth year. 2. Of having passed the Preliminary Scientific Examination at least one year previously. 3. Of having been a Student during two years at one or more of the Medical Institutions or Schools recognised by this University; and of having

of their intention to offer themselves for Examination and the necessary Certificates. Each candidate sends Three Guineas to the Professor with the notice of his intention to offer himself for his First Examination. Schedules defining the range of subjects in the First Examination, and of the Comparative Anatomy in the Second Examination, also Schedules for the requisite Certificates, and a List of the Schools of Medicine recognised by the University, may be obtained, on application, from the Regius Professor of Physic.

* For the Degree of Doctor of Medicine, the Fee will continue to be Ten Pounds to all such as, having taken their M.B. Degree under the former Regulations, shall not have paid the fee of Five Pounds at the Preliminary Scientific Examination.

† Candidates for the Degree of M.B. are strongly recommended by the Senate to pass the Preliminary Scientific Examination before commencing their regular Medical Studies. For the Preliminary Scientific Examination, a Candidate must have completed his seventeenth year, and have either passed the Matriculation Examination or taken a degree in Arts in either of the Universities of Sydney, Melbourne, or Calcutta (provided in the last case that Latin be one of the subjects in which he has passed). Candidates are examined in Mechanical Philosophy, including Statics, Dynamics, Hydrostatics, Hydraulics, Pneumatics, and Optics; Natural Philosophy, including Heat, Electricity, and Magnetism; Inorganic Chemistry; Botany and Vegetable Physiology; Zoology. They must show a competent knowledge in all the subjects of Examination. Candidates who matriculated previously to January 1861, are not required to pass the Preliminary Scientific Examination in any other subjects than Chemistry and Botany; and they are allowed to pass the Preliminary Scientific Examination and the First M.B. Examination in the same year, if they so prefer.

attended a Course of Lectures on each of three of the following subjects: Descriptive and Surgical Anatomy; General Anatomy and Physiology; Comparative Anatomy; Pathological Anatomy; Materia Medica and Pharmacy; General Pathology; General Therapeutics; Forensic Medicine; Hygiene; Obstetric Medicine and Diseases peculiar to Women and Infants; Surgery; Medicine.* 4. Of having Dissected during two Winter Sessions. 5. Of having attended a Course of Practical Chemistry, comprehending Practical Exercises in conducting the more important processes of General and Pharmaceutical Chemistry; in applying Tests for discovering the Adulteration of Articles of the Materia Medica, and the presence and nature of Poisons; and in the examination of Mineral Waters, Animal Secretions, Urinary Deposits, Calculi, etc. 6. Of having attended to Practical Pharmacy, and of having acquired a practical knowledge of the preparation of Medicines. Candidates are examined in Anatomy; Physiology;† Materia Medica and Pharmaceutical Chemistry; Organic Chemistry. Candidates must show a competent knowledge in all the subjects of examination. The Examinations are conducted by Printed Papers and *visà voce* Interrogation, by Demonstration from Preparations and Specimens, and by Dissections.

Examination for Honours.—Any Candidate who has been placed in the First Division may be examined for Honours in (1) Anatomy, (2) Physiology, Histology, and Comparative Anatomy, and (3) Materia Medica and Pharmaceutical Chemistry, and Organic Chemistry. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who distinguishes himself most in each of these three divisions receives an exhibition of £40 *per annum* for the next two years, payable in quarterly instalments; provided that on receiving each instalment he declare his intention of presenting himself at the second M.B. Examination within three years from the time of passing the First M.B. Examination. Under the same circumstances, the First and Second Candidates in each subject receive each a Gold Medal of the value of Five Pounds.

Second M.B. Examination.‡—No Candidate is admitted to this Examination within two Academical years of the time of his passing the First Examination, nor without Certificates:—1. Of having passed the First M.B. Examination. 2. Of having subsequently attended a Course of Lectures on each of two of the subjects for which he had not presented Certificates at the First Examination. 3. Of having conducted at least Twenty Labours.§ 4 and 5. Of having attended the Surgical and the Medical Practice of a recognised Hospital or Hospitals during two years, with Clinical Instruction and Lectures on Clinical Surgery and Clinical Medicine.|| 6. Of having, subsequently to the completion of his attendance on Surgical and Medical Hospital Practice, attended to Practical Medicine, Surgery, and Midwifery, with special charge of patients, in Hospital, Infirmary, Dispensary, or Parochial Union, during six months. 7. Of having acquired Proficiency in Vaccination.¶ The Candidate must also produce a Certificate of Moral Character from a teacher in the last School or Institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. Candidates are examined in the following subjects:—General Pathology, General Therapeutics, and Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine. The Examinations include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry. The Examinations are conducted by Printed Papers and *visà voce* Interrogation; by Practical Examinations on Obstetric

* The subjects numbered 3, 4, and 5, must be attended after taking a Degree in Arts or passing the Matriculation Examination.

† Any candidate is allowed, if he so prefer, to postpone his Examination in Physiology from the First M.B. Examination at which he presents himself for examination in the remaining subjects until the First M.B. Examination in the next or any subsequent year; but such candidate is not admitted to compete for Honours on either occasion; and he cannot be admitted as a candidate at the Second M.B. Examination until after the lapse of at least twelve months after having passed his Examination in Physiology.

‡ Any candidate for the Second M.B. Examination who has passed the First M.B. Examination under the former Regulations, is required to have also passed the Examination in Physiology at some previous First M.B. Examination carried on under the present Regulations; at which Examination he is not allowed to compete for Honours.

§ Certificates on this subject will be received from any legally qualified Practitioner in Medicine.

|| The student's attendance on the Surgical and on the Medical Hospital Practice specified in Regulations 4 and 5, may commence at any date after his passing the Preliminary Scientific Examination, and may be comprised either within the same or within different years; provided that in every case his attendance on Hospital Practice be continued for at least eighteen months subsequently to his passing the First M.B. Examination. Attendance during Three Months in the Wards of a Lunatic Asylum recognised by the University, with Clinical Instruction, may be substituted for a like period of attendance on Medical Hospital Practice. The Senate regard it as highly desirable that candidates for the Degree of M.B. should practically acquaint themselves with the different forms of Insanity by attendance in a Lunatic Asylum.

¶ Certificates on this subject will be received only from the authorised Vaccinators appointed by the Privy Council.

Preparations and Apparatus; by Examination, and Report on Cases, of Medical Patients in the Wards of a Hospital; Demonstration from Specimens and Preparation. Candidates are expected to write Prescriptions in Latin, without abbreviations.

The Senate desire it to be understood that Bachelors of Medicine of the University of London have no right, as such, to assume the title of Doctor of Medicine.

Examination for Honours.—Any Candidate who has been placed in the First Division may be examined for Honours in (1) Medicine, (2) Midwifery, and (3) Forensic Medicine. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who distinguishes himself the most in Medicine receives £50 *per annum* for the next two years, with the style of University Scholar in Medicine, and the Candidates who distinguish themselves the most in Midwifery and in Forensic Medicine receive each £30 *per annum* for the next two years, with the style of University Scholar in Midwifery and in Forensic Medicine respectively. The First and Second Candidates in each of the preceding subjects each receive a Gold Medal of the value of Five Pounds.

Bachelor of Surgery.

The Candidate must produce Certificates:—1. Of having taken the Degree of Bachelor of Medicine in this University. 2. Of having attended a Course of Instruction in Operative Surgery, and of having operated on the Dead Subject. The Examinations are conducted by Printed Papers on Surgical Anatomy and Surgical Operations; by Examination and Report on Cases of Surgical Patients; by Performance of Surgical Operations upon the Dead Subject; by Application of Surgical Apparatus; and by *vivâ voce* Interrogation.

Examination for Honours.—Any Candidate who has passed the B.S. Examination may be Examined for Honours in Surgery. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who distinguishes himself the most receives £50 *per annum* for the next two years, with the style of University Scholar in Surgery. Under the same circumstances, the First and Second Candidates each receive a Gold Medal of the value of Five Pounds.

Master in Surgery.

The Candidate must produce Certificates:—1. Of having taken the Degree of Bachelor of Surgery* in this University. 2. Of having attended subsequently—(a) to Clinical or Practical Surgery during two years in a Hospital or Medical Institution recognised by this University; (b) or to Clinical or Practical Surgery during one year in a Hospital or Medical Institution recognised by this University, and of having been engaged during three years in the practice of his Profession; (c) or of having been engaged during five years in the practice of his Profession, either before or after taking the Degree of Bachelor of Surgery in this University.† 3. Of Moral Character, signed by two persons of respectability. The Examination is conducted by means of Printed Papers and *vivâ voce* Interrogation; and the Candidates are examined in Logic and Moral Philosophy,‡ and in Surgery. If, in the opinion of the Examiners, sufficient merit be evinced, the Candidate who distinguishes himself the most at the Examination for the Degree of Master in Surgery receives a Gold Medal of the value of Twenty Pounds.

Doctor of Medicine.

The Candidate must produce Certificates analogous to those required for Candidates for the Degree of Master in Surgery, but having special relation to Medicine. The Examination is conducted by means of Printed Papers and *vivâ voce* Interrogation; and Candidates are examined in Logic and Moral Philosophy, and in Medicine. If, in the opinion of the Examiners, sufficient merit be evinced, the Candidate who shall distinguish himself the most at the Examination for the Degree of Doctor of Medicine receives a Gold Medal of the value of Twenty Pounds.

A Certificate under the Seal of the University, and signed by the Chancellor, is delivered at the Public Presentation for Degrees to each

* Candidates who have obtained the Degree of Bachelor of Medicine previously to 1866, will be admitted to the Examination for the Degree of Master in Surgery without having taken the Degree of Bachelor of Surgery; and in the case of such candidates, the attendance on Surgical Practice required by Regulation 2, may commence from the date of the M.B. Degree.

† One year of attendance on Clinical or Practical Surgery, or two years of practice, will be dispensed with in the case of those candidates who at the B.S. Examination have been placed in the First Division.

‡ Any Candidate who has taken the Degree either of B.A., B.Sc., or M.D. in this University, is exempted from this part of the Examination; and any Candidate who has passed the Second M.B. Examination, may at any subsequent M.S. Examination present himself for Logic and Moral Philosophy alone, if he so prefer; thereby gaining exemption, if he should pass, from Examination in that subject when he presents himself to be examined for the Degree of Master in Surgery.—An analogous exemption is allowed in the case of Candidates for the degree of M.D.

Candidate who has passed the second M.B. Examination, the Examination for Bachelor and Master in Surgery, and the Examination of Doctor of Medicine.

Candidates who commenced their Medical Studies in or before January 1839, and Practitioners in Medicine or Surgery (prior to 1840), are admitted to Examination under special regulations.

UNIVERSITY OF DURHAM.

REGULATIONS REGARDING DEGREES IN MEDICINE.

EVERY Student in Medicine must have been registered, and no one shall be registered unless he have passed the Registration Examination or such other Examination as the Warden and Senate shall deem equivalent. The Registration Examination is directed to the Rudiments of Religion, Literature, and Science; and is conducted by two or more Examiners nominated by the Warden. The Registration Examination will begin on April 18th and September 19th, 1871, at 9 A.M. on each day.* Application to be made to Arthur Beanlands, Esq., Durham, at least one month before the day of the Examination; to whom also Candidates must, at the same time, send the examination-fee, £1, and the Certificates of Age and Character. Every one who passes that Examination shall receive a Certificate signed by the Examiners without further payment. The Warden has authority, in case of urgency, to appoint an Extraordinary Registration Examination, the fee for which is £2.

A Medical Scholarship, of the annual value of £25, will be awarded by Examination, commencing on Tuesday, October 11th, 1870, and open to all Candidates who have not been duly registered as Students in Medicine. The Scholarship is tenable for four years by a Student pursuing his Medical Studies, and not of sufficient standing to proceed to a Licence in Medicine. The first year at least must be passed at the University, and the remaining period at some recognised Medical School.†

Licence in Medicine.

The Candidate must be of the age of twenty-one years, and must, since his registration, have spent four years in Medical Study at one or more of the Schools recognised by the Licensing Bodies named in Schedule A of the Medical Act, 1858. There are two Public Examinations: the first after two years at least of Medical Study; the second after four years at least of Medical Study, and after having passed the first Examination. No one shall be admissible to either of these Examinations unless he has produced satisfactory testimonials of conduct, and such certificates of attendance on Lectures and Hospital Practice as the Warden and Senate shall require. Each of these Examinations shall be conducted by three or more Examiners, nominated by the Warden and approved by Convocation; and shall be directed to such subjects of Medical Science and Practice as shall have been fixed on by the Warden and Senate.

Bachelor of Medicine.

The Candidate must be of the standing of three terms at least as a Licentiate in Medicine, and of eighteen terms (six years) at least from the date of his Registration or Matriculation.—No one who is not a Bachelor of Arts shall be admissible to the Degree of Bachelor of Medicine, unless he have kept three terms by residence at Durham or at Newcastle, and have passed the final Examination for the Degree of Bachelor of Arts, or an equivalent to it, besides the Examination for the Degree of Bachelor of Medicine, nor unless he have spent one year at least in Medical Study at some School of Medicine in connexion with the University.—The Examination for the Degree of Bachelor of Medicine is directed chiefly to the Practice of Medicine. The details are arranged by the Warden and Senate.

Doctor of Medicine.

The Candidate must be a Bachelor of Medicine of the standing of

* The Subjects of Examination are—*Necessary Subjects.* The History contained in the Acts of the Apostles; English Grammar and Composition; Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Euclid, Books I and II. Latin Grammar, with—In April, Cæsar, *De Bello Gallico*, Books I and II. In September, Virgil, *Æneid*, Lib. I and II.—*Optional Subjects.* Greek Grammar, with Xenophon's *Memorabilia*; French Grammar, with Voltaire's *Charles XII*; German Grammar, with Goethe's *Dichtung und Wahrheit*, Book I; Elementary Questions in Mechanics, Hydrostatics, and Pneumatics. Candidates who intend to pass an examination in any of these subjects, must signify their intention fourteen days before their examination.—The Durham Senior Examination of persons not Members of the University, and the Durham Examination for Students in Arts in their first and second years, are also accepted as qualifications for Registration.

† The Subjects of Examination for a Medical Scholarship on October 11th, 1870, are—The Gospel of St. Mark, in Greek; Latin Grammar; Cæsar, *De Bello Gallico*, Book IV; Arithmetic and Algebra; Euclid, Books I and II; History of England to the end of the Reign of Henry II.

twenty-one terms at least (seven years) from his Registration or Matriculation, and of three terms at least from his admission to the Degree of Bachelor of Medicine; and must perform such exercises as the Warden and Senate require.

Licence in Surgery.

The Candidate must be of the age of twenty-one years, and have spent four years in Medical and Surgical Study since his registration as a Student in Medicine. In other respects, the regulations are similar to those for the Licence in Medicine; but the second Examination is partly in Surgical subjects.—The second Examination for a Licence in Surgery may or may not be passed at the same time with the second Examination for a Licence in Medicine.

Master in Surgery.

The Candidate must be a Licentiate in Surgery, and also a Licentiate in Medicine, and of the standing of eighteen terms (six years) at least from the date of his Registration or Matriculation, and of three terms at least from the date of his admission to the Licence in Surgery.—No one who is not a Bachelor of Arts shall be admissible to the Degree of Master in Surgery, unless he have kept three terms by residence at Durham or at Newcastle, and have passed the final Examination for the Degree of Bachelor of Arts, or an equivalent to it, as hereinafter described, besides the Examination for the Degree of Master in Surgery, nor unless he have spent one year at least in Medical and Surgical Study in some School of Medicine in connexion with the University.—The Examination for the Degree of Master in Surgery shall be directed chiefly to the Practice of Surgery. The details shall be arranged by the Warden and Senate.

The Warden and Senate shall have authority to arrange for Students in the Faculty of Medicine an Examination equivalent to that for the Degree of Bachelor of Arts, by substituting for the Theological part of it an Examination in Hippocrates, Galen, or such other ancient medical author or authors as they may think fit.

Any Student in Medicine who was registered before Easter Term, 1868, shall be entitled to be admitted to the Degree of Master in Surgery on the same conditions as are above required for a Licence in Surgery.

These Regulations shall not interfere with the power of the University to grant Degrees by Diploma to persons of sufficient standing and approved merit.

Fees for Examination and Degrees.—Senior Middle-Class Examination, £1; Examination at the end of First Year, £1; Registration Examination, £1; Extraordinary Registration Examination, £2; Registration, 5s.; each Public Examination in Medicine and in Surgery, £1; Licence in Medicine or Surgery, £3; Degree of Master in Surgery, Bachelor in Medicine, or Doctor in Medicine, each £6.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

REGULATIONS FOR THE LICENCE.

EVERY Candidate for the Licence of the College must produce satisfactory evidence of having completed the age of twenty-one years, of having been engaged in the study of Medicine during at least four years subsequently to Registration as a Medical Student, and of having attended the following courses at an University, or at a Medical School recognised by the College:—Anatomy, Practical Anatomy, Chemistry, Practice of Medicine, Clinical Medicine, and Principles and Practice of Surgery, each a six months' course; Practical Chemistry, Materia Medica and Pharmacy, Physiology or Institutes of Medicine, Clinical Surgery, Midwifery, Medical Jurisprudence, General Pathology or Pathological Anatomy, and Practical Pharmacy, each a three months' course. The applicant must have attended the practice of a Public Hospital (containing not fewer than eighty beds) during not less than twenty-four months, twelve of which must have been spent in attendance on the Medical Wards. He must also have attended for six months the Practice of a Public Dispensary, or have acted for six months as Clinical Clerk or Dresser in a Hospital; or have been engaged during six months as Visiting Assistant to a Registered Practitioner. He must also have attended at least six cases of Labour under the superintendence of a qualified Medical Practitioner. Every applicant, before being admitted to the final Examination, will be required to produce a Certificate that he has studied Vaccination under a competent and recognised Teacher; that he has himself performed the operation successfully under the Teacher's inspection; that he is familiar with the different stages of the Vaccine Vesicle, and with the methods of preserving Lymph; and that he is thoroughly informed in every necessary part of the subject. Every applicant for the Licence must have

passed the Preliminary Examination in Literature and Science before he can be admitted to the Professional Examination.* Masters and Bachelors of Arts of any British or Foreign University, whose course of study may from time to time be approved of by the College, will be exempted from the Preliminary Examination; also those who have passed the Examination of the National Educational Bodies, or of any of the Licensing Boards recognised by the Medical Act.

The Professional Examination will be divided into two parts: (1) Anatomy, Physiology, Chemistry; (2) Materia Medica and Pharmacy, Pathology and Pathological Anatomy, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine, including the Examination of Patients, as well as of various Morbid Products. No Candidate will be admitted to the first Examination until he has completed two, or to the second until he has completed four, years of Professional Study. The Examination will be conducted partly *viva voce*, partly by written papers. The following will be the periods of Examination to October 1870:—1. Preliminary Examinations, October 22 and November 5, 1870; April 22 and July 22, 1871. 2. First Professional Examinations, October 19, 1870; January 18, March 29, May 3, July 5, July 19, and October 18, 1871. The Second Professional Examinations will take place immediately after the conclusion of each of the First Professional Examinations.

Candidates for the Licence of the College who already possess a qualification from a recognised Licensing Body, or who have passed the First Professional Examination before a Qualifying Body (provided it be as extensive as that required by this College), will be at once admitted to the second part of the Examination. Meetings for the Examination of Candidates who already possess a qualification from a recognised Licensing Body will be held on the first Wednesday of every month (with the exception of September and October), and, if necessary, on the following days. Candidates are required to communicate with the Secretary to the College not less than eight days before the date of the Examination at which they propose to appear.

No Candidate is admissible to Examination who has been rejected by any other Licensing Board within three months previous to his Examination.

The Fee payable by a Licentiate is Ten Guineas. If a Candidate be unsuccessful at his Examination, Two Guineas will be retained to defray expenses.

Candidates may be admitted to Special Examination on bringing forward satisfactory reasons and paying an extra Fee of Five Guineas. If the Candidate be unsuccessful, Eight Guineas will be returned to him.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

REGULATIONS FOR CANDIDATES FOR THE DIPLOMA.

THE Regulations regarding Schools of Medicine, Preliminary Examination, and Professional Study and Examination, are similar to those for the Double Qualification (see next page); except that the third course of Medicine and the course of Pathological Anatomy are not required.

Registered Medical Practitioners whose Degree or Licence in Medicine is dated prior to October 1st, 1861, are exempt from the First Professional Examination. The Examinations under this Regulation may take place on the first and third Tuesdays of each month.

At the Second Examination, the Student, in furnishing the statement of his Professional Study, must, if he has been an Apprentice, insert the name of his master, the date of his indenture, and the length of time for which he was bound. If the Candidate have been an Apprentice to a Fellow of the College, he must also produce his discharged indenture.

Recent Dissections, Anatomical Specimens, and articles of the Materia Medica, are employed during the Examinations; and all Candidates are required to write out Formulæ of Prescription. They are also subjected to a Practical Clinical Examination in the Surgical Hospital, including the Application of Surgical Apparatus, Bandages, etc.

No Candidate shall be admissible to Examination who has been rejected by any other Licensing Board within three months preceding his application to be examined.

The Fees are: for the First Examination, £4; for the Second, £6: in each, £2 will be returned to unsuccessful Candidates. The Fee from Candidates who have elsewhere passed the First Professional Examination is £10, of which £2 is retained if the Candidate be unsuccessful.

Special Examinations are held when required, the regulations being the same as in Clause 16 of the regulations for the Professional Examination for the Double Qualification. The Fees are:

* For the Subject, see note to Regulations for Double Qualifications.

£20 for First and Second Examinations, of which £15 will be returned to Candidates remitted on the First Examination, and £6 to Candidates successful in the First, but unsuccessful in the Second, Examination; £17 for Second Examination when the Candidate has passed the First before any other Licensing Board; of this £10 will be returned to the Candidate if unsuccessful; £13 for Second Examination when the Candidate has passed the First Examination before the Examiners of the College; of this £6 will be returned to the Candidate if unsuccessful.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.

DOUBLE QUALIFICATION IN MEDICINE AND IN SURGERY.

THE Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh, while they still continue to give their Diplomas separately, under separate Regulations, have made arrangements by which, after one series of Examinations, the Student may obtain the Diplomas of both Colleges. This Joint Examination is conducted by a Board, in which each body is represented for Examination in those branches which are common to both Medicine and Surgery; but the College of Physicians takes exclusive charge of the Examination in Medicine, and the College of Surgeons of the Examination in Surgery. Students passing that Examination are enabled to register two Qualifications—Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate of the Royal College of Surgeons of Edinburgh.

1. Every Candidate must have followed his course of study in an University, or in an Established School of Medicine, or in a Provincial School specially recognised by the College of Physicians and Surgeons of that division of the United Kingdom in which it is situate. 2. Under the title *Established School of Medicine* are comprehended the Medical Schools of those cities of Great Britain and Ireland in which Diplomas in Medicine or Surgery are granted, and such Colonial and Foreign Schools as are similarly circumstanced in the countries in which they exist.

Professional Education.

1. Candidates commencing Professional Study after September 16, 1866, must have been engaged, during four years after the Examination in General Education, in not less than four Winter Sessions' or three Winter and two Summer Sessions' attendance at a recognised Medical School.* 2. The Candidate must have attended the following separate and distinct Courses of Lectures:—Anatomy, two courses† of six months each, and Practical Anatomy, twelve months; or, at the option of the Candidate, Anatomy, one course of six months, and Practical Anatomy, eighteen months; Physiology, not less than fifty lectures;‡ Chemistry, Practice of Medicine, Clinical Medicine,§ Medicine (a third course, either Practice or Clinical, at option of student),§ Principles and Practice of Surgery, Clinical Surgery,§ Surgery (a third course, either Principles and Practice or Clinical Surgery, at option),§ each six months; Practical or Analytical Chemistry, Materia Medica, Midwifery, and Diseases of Women and Children, Medical Jurisprudence, and Pathological Anatomy,|| each three months.¶ 3. He must also produce certificates:—*a.* Of having attended at least six cases of Labour under the superintendence of a registered Medical Practitioner. *b.* Of having attended, for three months, instruction in Practical Pharmacy. The Teacher signing the certificate must be a Member of the Pharmaceutical Society of Great Britain, or a Chemist and Druggist recognised by either College on special application, or the Superintendent of the Laboratory of a Public Hospital or Dispensary, or a Registered Practitioner who dispenses medicine to his own patients. *c.* Of having attended, for twenty-four months, a Public General Hospital containing, on an average, at least eighty patients. *d.* Of having attended, for six months, the practice of a Public Dispensary specially recognised by

* Candidates commencing study prior to the above date, will be admitted to examination after four Winter Sessions' or three Winter and two Summer Sessions' attendance on Classes at a regular Medical School.

† The two Courses must not be attended in the same Session.

‡ In those Schools of England and Ireland in which two separate Courses of Lectures are delivered at separate hours—one on Anatomy, the other on Anatomy and Physiology—the former of these Courses will be received as a Course of Anatomy, and the other as a Course of Physiology.

§ Two Courses of Clinical Medicine or of Clinical Surgery of Three Months each, if not simultaneous, will be held equivalent to one Course of Six Months. They must be attended during the period of attendance at the Hospital where they are delivered.

|| A Certificate of Attendance at the *Post Mortem* Examinations at a General Hospital will be accepted in lieu of this course.

¶ The six months' courses delivered in Scotland must consist of not fewer than one hundred Lectures, with the exception of Clinical Medicine and Clinical Surgery. The three months' courses must consist of not fewer than fifty Lectures.

either College; or of having been engaged for six months as Assistant to a Registered Practitioner. *e.* Of having been instructed in Vaccination; the certificate to be signed by the Teacher, who must be a Registered Practitioner.—It is strongly recommended to Students to avail themselves of opportunities of attending Lectures on Ophthalmic and Mental Diseases, also on Natural History and Comparative Anatomy; and of obtaining Practical Instruction in the Use of the Microscope.*

Preliminary Examination in General Education.

All Students who intend becoming Candidates for the Diplomas of the Colleges must have passed the complete Examination in General Education,† and have had their names inscribed in the Register of Medical Students instituted by the General Medical Council at the commencement of their Professional Studies.—Testimonials of proficiency granted by the Educational Bodies recognised by the Medical Council will be accepted as sufficient evidence of General Education, and will exempt from the Preliminary Examination.—The Preliminary Examinations will take place on October 22nd and November 5th, 1870, and on April 22nd and July 22nd, 1871.—Students who intend to undergo the Preliminary Examination must give in their names, addresses, and places of birth to the officer of either College, not later than two days before the day of Examination; and must pay a Fee of Ten Shillings, not to be returned in case of rejection; but they will be admissible to re-examination at a future period without paying another fee.—Candidates, the commencement of whose Professional Studies was prior to September 17th, 1866, may pass the Preliminary Examination in General Education at any of the periods previous to the First Professional Examination, but are recommended to do so at the earliest possible period. Candidates under this Regulation, who have not passed a Preliminary Examination in General Education, will be admitted to a special Examination in General Education previously to their First Professional Examination. For this they shall pay a Fee of £1.

Professional Examination.

1. Candidates for the Double Qualification are subjected to two Professional Examinations. 2. Opportunities for both Examinations will be presented six times in each year. On each of these occasions, the Candidates write answers to the questions proposed. The Oral Examinations are conducted on the days immediately succeeding. 3. Unsuccessful Candidates at either the First or Second Examination are remitted to their studies for a period to be determined by the judgment of the Examiners, but not in any case less than three months. 4. The First Examination embraces Anatomy, Physiology, and Chemistry; and takes place not sooner than the end of the Second Winter Session. 5. Candidates who desire to pass the First Professional Examination must apply to the Inspector of Certificates on or before the Saturday preceding the day of Examination;‡ and must produce tickets, and also certificates of attendance on those Courses of Lectures which have reference to the subjects of that Examination. They must also produce evidence of having passed the Preliminary Examination. 6. The sum of £6 must be paid to the Inspector of Certificates for this Examination, not later than 10 a.m. of the day preceding it. This sum will be considered as paid to account of the entire Fee of £16 payable for the two Diplomas. 7. In the case of a Candidate being unsuccessful at this Examination, £4 will be returned to him. 8. The Second Examination embraces Medicine, Surgery and Surgical Anatomy, Midwifery, Pathological Anatomy, Materia Medica and Pharmacy, and

* The following order of study is recommended as a guide to the student, though not enjoined. *First Year*—Anatomy; Practical Anatomy; Chemistry; Practical or Analytical Chemistry; Hospital. *Second Year*—Anatomy; Practical Anatomy; Physiology; Surgery; Materia Medica (the last either in this or the third year); Hospital. *Third Year*—Practice of Medicine; Clinical Surgery; Practical Anatomy; Practical Pharmacy; Clinical Medicine; Pathological Anatomy; Hospital. *Fourth Year*—Surgery or Clinical Surgery; Midwifery and Diseases of Women and Children; Practice of Medicine or Clinical Medicine; Medical Jurisprudence; Practical Midwifery; Hospital.

† The Examination will embrace the following subjects:—1. English language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions. Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin; Translation from one of the two following books, at the option of the candidate, viz.—Cicero in *Catilinam*, Orat. I; or Virgil, *Aeneid*, Lib. II; and of an easy passage from a book not prescribed; Exercises in Parsing, and in rendering English correctly into Latin, the Latin words being supplied. 5. One of the following subjects, at the option of the candidate:—(1) Greek: Xenophon's *Anabasis*, Book III; Homer's *Iliad*, Book I. (2) French: La Fontaine's *Fables*. (3) German: Schiller's *Wallenstein's Tod*. (4) Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics. In Greek, French, and German, parsing of words from the passages given to be translated will be required; also, translation of short sentences from English into the respective languages.

‡ Candidates at a distance are requested to send their Certificates much earlier, so as to give sufficient time for the exchange of one or two explanatory letters; as much disappointment has been occasioned by the discovery of defects in their Course of Study when it was too late to rectify them by the production of documents.

Medical Jurisprudence; and does not take place before the termination of the Winter Session of the last year of study. In the case of Candidates who began their course of Study after September 16th, 1866, it will not take place until four years after the Examination in General Education. 9. Applications for Examination must be made to the Inspector of Certificates not later than the Monday previous to the day of Examination. 10. Every candidate must produce to the Inspector—*a.* Satisfactory evidence of having attained the age of twenty-one years; *b.* A Certificate of having passed the Preliminary Examination, unless this Certificate have been already seen by the Inspector of the Colleges; *c.* A Certificate of registration in the books of the General Medical Council; *d.* A Certificate of having passed the First Professional Examination; *e.* The Certificate of his Classes, etc.; *f.* A tabular statement (for which a printed form will be furnished by the Inspector), exhibiting the full amount of his Professional Education, and distinguishing the Classes, Hospitals, and Dispensaries attended during each Session of his studies. 11. The Fee payable for this Examination, which is £10, must be lodged with the Inspector not later than 10 A.M. of the day preceding the Examination-day. 12. On the production of the above documents, and after receiving the Fees, the Inspector gives the Candidate a letter authorising the Examiners to take him on trial. 13. In case of a Candidate being unsuccessful at the Second Examination, £8 will be returned to him. 14. Candidates who have passed the First Professional Examination in Anatomy, Physiology, and Chemistry, at any of the Licensing Boards recognised by the Medical Act, will be admissible to the Second Professional Examination on producing Certificates of the whole course of Study prescribed, and of having passed their Preliminary and First Professional Examinations. If any of the three subjects of the First Examination have been omitted, such Candidates will have to undergo an Examination on the omitted subjects; and none of the subjects set down in § 8 will be omitted at the Second Examination, even if some of them should have formed part of the First Examination by another Board. The Fee payable by such Candidates is £16, and unsuccessful Candidates will receive back £14. 15. In addition to the Written and Oral Examinations, all Candidates shall be subjected to a Practical Clinical Examination in Medicine and Surgery, which shall include the Examination of Patients, Physical Diagnosis, the Use of the Microscope, Surgical Appliances, Bandages, etc. 16. Candidates desirous of Special Examination on other days than those fixed by the Regulations must prepare a Case to be submitted for the consideration of the authorities of the Colleges, with evidence to show why it was and is impossible for them to avail themselves of the Ordinary Examinations, past or future. They must at the same time produce Certificates of the whole of the prescribed Course of Study and of the Preliminary Examination, and state the earliest and the latest days within which they can present themselves. It is very desirable that all such Candidates, and especially those who are at a distance from Edinburgh, should present their applications as long beforehand as possible. The Fees for Special Examinations are as follows: viz.—£28 for First and Second Examinations, of which £22 will be returned to Candidates remitted on the First Examination, and £10 to Candidates successful in the First, but unsuccessful in the Second Examination. £25 for Second Examination, when the Candidate has passed the First under the conditions of § 14. Of this, £16 will be returned to the Candidate, if unsuccessful. £19 for Second Examination when the Candidate has passed the First before the Examiners of the Colleges. Of this, £10 will be returned to the Candidate, if unsuccessful. 17. No Candidate shall be admissible to Examination who has been rejected by any other Licensing Board within the three months preceding his Examination.

Communications from Candidates to be addressed to DR. GAIRDNER, Inspector and Treasurer of the Double Qualification, at 45, Northumberland Street, Edinburgh. Attention to this will save much time and trouble. It is also requested that Candidates will attend punctually to the dates fixed by the Regulations for lodging their Certificates and for paying their Money. See also the Note relating to Candidates who are at a distance. If these preliminaries are neglected by Candidates, their Examinations may require to be postponed.

The following will be the periods of Examination for the Double Qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh, for the year 1870-71.

First Professional Examinations.—Tuesdays, October 25th, 1870, January 24th, April 4th, May 2nd, July 11th, July 25th, 1871.

Second Professional Examinations.—These will take place immediately after the conclusion of the First Professional Examinations, at each of the above mentioned periods. In no case will they be begun on an earlier day than the Thursday of any period, nor will they usually be later than that day.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

REGULATIONS FOR THE DIPLOMA.

THE Regulations respecting the Curriculum of Professional Study are similar to those of the Royal College of Surgeons of Edinburgh.

Preliminary Examinations in General Literature will be held in the Faculty Hall, during 1870, on October 21st and November 4th, and on April 28th, July 21st, October 20th, and November 3rd, 1871.*

The Examinations will be conducted chiefly by means of Written Papers. Those gentlemen who pass will receive Certificates. Those who are unsuccessful may appear again without paying a second Fee. The Fee is Ten Shillings. Candidates are requested to give in their names to the Secretary at least two days before the Examination, and to give intimation of the optional subject they select.

The *First Professional Examinations* take place on the second Tuesday every month. The *Second Professional Examinations* take place, the written part on the second Tuesday of every month, and the clinical and oral parts on the succeeding day.

The Fee for the Diploma is £10; viz., £4 for the First Examination, and £6 for the Second Examination.

The Examinations are conducted partly in writing and partly orally. Recent Dissections, Anatomical Specimens, Chemical Tests, Articles of the Materia Medica, the Microscope, Surgical Apparatus, and Pathological Specimens are employed at the discretion of the Examiners. Candidates are also subjected, at the Second Examination, to a Practical Clinical Examination at the Hospital.

Candidates for the Diploma of the Faculty, who possess a Qualification to practise, or who have passed the Examination in Anatomy, Physiology, and Chemistry, before any of the Licensing Bodies enumerated in Schedule (A) of the Medical Act, 1858, on complying with the Regulations in other respects, will be admitted to the Second Professional Examination. In such cases, the full Fee is exigible. In the case of unsuccessful Candidates, £2 of the Fee is retained.

A Candidate, on showing a sufficient reason, may be admitted to Examination on a day specially arranged, on paying an extra Fee of £3, which will be forfeited, in addition to the £2 ordinarily retained, in the event of his being remitted to his studies.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

DOUBLE QUALIFICATION IN MEDICINE AND IN SURGERY.

THE Faculty of Physicians and Surgeons of Glasgow, and the Royal College of Physicians and Edinburgh, conjointly grant their Diplomas after one series of Examinations before a Board of Examiners in which each body is represented. The Regulations as to the Curriculum of Study are the same as those for the conjoined Examinations of the Royal Colleges of Physicians and Surgeons of Edinburgh. The Fee for the two Diplomas granted conjointly is £16. The entire Fee for a Special Examination is £5.

The First Examination for the Double Qualification will be held on Thursdays October 6th, 1870; January 12th, April 6th, May 4th, July 6th, August 3rd, and October 5th, 1871. The Second Examination will be held, the written part on each of the above days, and the clinical and oral parts on the succeeding day.

UNIVERSITIES OF EDINBURGH, GLASGOW, ABERDEEN, AND ST. ANDREWS.

REGULATIONS RESPECTING DEGREES IN MEDICINE.

[THE Regulations of these Universities are nearly similar. We therefore give but one statement, noticing points of difference when necessary.]

Three Medical Degrees are conferred by each University; viz., Bache-

* The Examination will embrace the following subjects:—1. English Language, including Grammar and Composition. 2. Latin: Translation from one of the two following Books, at the option of the candidates; viz., the Fourth Book of Cæsar's *Commentaries De Bello Gallico*; Virgil, *Aeneid*, Lib. I; an Exercise in rendering English correctly into Latin, the Latin words being supplied. 3. Arithmetic, to Vulgar and Decimal Fractions inclusive; Algebra, including Simple Equations. 4. Geometry: First two Books of Euclid. 5. One of the following subjects at the option of the candidate. *a.* Natural Philosophy: Mechanics, Hydrostatics, and Pneumatics. *b.* Greek: Xenophon's *Anabasis*, Book II; or Homer's *Iliad*, Book VI. *c.* French: Voltaire, *Histoire de Charles XII.* *d.* German: First Two Books of Schiller's *Geschichte des dreissigjährigen Kriegs.* In the Latin, Greek, French, and German Papers, questions on Grammar will be given.

lor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.) The Degree of C.M. is not conferred on any person who does not also at the same time obtain the Degree of Bachelor of Medicine.

Preliminary Education.

The preliminary branches of extra-professional education are English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and Candidates must also pass a satisfactory Examination in at least two of the following subjects in addition: Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy.* The Examinations on both classes of subjects take place† before the Candidate has entered his Medical Curriculum.‡

A Degree in Arts (not Honorary) in any one of the Universities of England, Scotland, or Ireland, or in any Colonial or Foreign University specially recognised by the University Court, exempts from all Preliminary Examination; [and an Examination in Arts by any Corporate Body, whose Examination has been recognised by the General Medical Council, and also approved by the University Court, shall exempt from Preliminary Examination in Arts on all subjects comprised in the said Examination of the said Corporate Body.]§

Degree of Bachelor in Medicine and Master in Surgery.

Candidates for the Degree of Bachelor of Medicine or Master in Surgery must have been engaged in Medical and Surgical Study for four years—each *Annus Medicus* being constituted by at least two courses of not less than 100 Lectures each, or by one such course, and two courses of not less than 50 lectures each; with the exception of the Clinical Courses, in which lectures are to be given at least twice a week.

Every Candidate for the Degrees of M.B. and C.M. must give sufficient evidence by Certificates—I. That he has studied each of the following departments of Medical Science, viz., Anatomy, Chemistry, Materia Medica, Institutes of Medicine or Physiology, Practice of Medicine Surgery, Midwifery and the Diseases of Women and Children, || General Pathology, ¶ during courses including not less than 100 Lec-

* The Universities of Glasgow, Aberdeen, and St. Andrew's, include Natural History.

† As far as possible.—*Aberdeen*.—At *Glasgow*, the examination in the first class of subjects must take place before the commencement of the Medical Curriculum; and that in the second class previously to the first professional examination (as far as possible, previously to the commencement of professional study).

‡ In Edinburgh, examinations on these subjects will be held on 18th and 19th of October 1870, and 21st and 22nd March 1871. 1. *English*—A portion of an English author must be written to dictation; the grammatical construction of one or two sentences must be explained; the grammatical errors in a sentence ungrammatically composed must be pointed out, and their nature explained; and the derivation and definition of a few English words in common use must be given (see *Bain's English Grammar*, and *Angus on the English Language*). 2. *Latin*—Seventh *Æneid* of Virgil, an easy passage from a Latin Prose Author, and a single passage of English (translated from a Latin Author) to be re-translated into Latin, the more difficult Latin words being given. 3. *Arithmetic*—The Common Rules, including Decimals. 4. *Elements of Mathematics*—Euclid, Books I, II, and III; and the Rudiments of Algebra, including Simple Equations. A knowledge of Euclid alone will not be sufficient. 5. *Elements of Mechanics*—Elementary Mechanics and Hydrostatics.—At the same date, examinations will also take place in the additional subjects, as follows. 1. *Greek*—Second Book of Xenophon's *Anabasis*. 2. *French*—First half of Voltaire's *Charles XII*. 3. *German*—Schiller's *William Tell*. 4. *Higher Mathematics*—Euclid, Books I to VI; Algebra, Trigonometry, and Conic Sections. 5. *Natural Philosophy*—A general knowledge of the Elements of Natural Philosophy, as in *Ganot's Physics*, translated by Atkinson. 6. *Logic*—Fowler's *Elements of Deductive Logic*. 7. *Moral Philosophy*—Stewart's *Outlines of Moral Philosophy*, Part II, with Mc'Cosh's Notes.

In Glasgow, examinations will take place on October 14, 1870, and April 14, 1871, as follows. *First or Elementary Part*, Exercises in all of which are required. *English*—Writing correctly a passage to dictation; Composition of a short Essay on a given theme; Questions in Grammar. *Latin*—Third Book of the *Æneid* of Virgil, and Third Book of *Cæsar De Bello Gallico*: Translations of passages from authors not prescribed, and of English passages into Latin, the principal Latin words being supplied; Questions in Grammar and Construction. *Arithmetic*—the Common Rules, including Vulgar and Decimal Fractions. *Elements of Mathematics*—Euclid, Books I, II, and III; Algebra, as far as Simple Equations. *Elements of Mechanics*—Questions, for which such works as *Tomlinson's Rudimentary Mechanics* may serve as text-books.—*Second Part*, Exercises in two of which, to be selected by the candidate, are required. *Greek*—*Anabasis* of Xenophon, Book I, and the Gospel according to St. John; Translations of passages from Greek authors not prescribed, and of English passages into Greek—the principal Greek words supplied; Questions in Grammar. *French*—Voltaire's *Charles XII*; Translations and exercises as in Latin and Greek. *German*—Schiller's *William Tell*; Translations and exercises as in the other languages. *Mathematics*—Euclid, Books I to VI; Algebra, including Quadratic Equations, and the Rudiments of Trigonometry. *Natural Philosophy*—Such a knowledge of the principles as may be obtained from the Text-books of Golding Bird and Brooke, and *Ganot*. *Natural History*—Geology or Zoology. Text-books—Jukes, Lyell, Dana, R. Jones, Dallas, Milne-Edwards. *Logic*—Whateley's *Logic*, Books II and III. *Moral Philosophy*—The General Principles, as stated in *Dugald Stewart* on the Active Powers, or *Dr. Fleming's Manual*.

§ This portion, enclosed in brackets, is in the Regulations of the University of Edinburgh alone.

¶ Two Courses of Midwifery, of Three Months each, are reckoned equivalent to a Six Months' Course, provided different departments of Obstetric Medicine be taught in each of the Courses.

¶ Or a Three Months' Course of Lectures on Morbid Anatomy, together with a Supplemental Course of Practice of Medicine, or Clinical Medicine.

tures; Practical Anatomy, a course of the same duration as the preceding; Practical Chemistry, three months; Practical Midwifery, three months at a Midwifery Hospital, or a certificate of attendance on six cases from a Registered Medical Practitioner; Clinical Medicine and Clinical Surgery, each a six months' course, or two courses of three months; Medical Jurisprudence, Botany, Natural History, including Zoology, courses of not less than 50 Lectures. 2. That he has attended for at least two years, the Medical and Surgical Practice of a General Hospital which accommodates not fewer than eighty patients. 3. That he has been engaged for at least three months, by Apprenticeship or otherwise, in compounding and dispensing drugs at the Laboratory of a Hospital or Dispensary, Member of a Surgical College or Faculty, Licentiate of the London or Dublin Society of Apothecaries, or a Member of the Pharmaceutical Society of Great Britain.* 4. That he has attended, for at least six months, the out-practice of a Hospital or the practice of a Dispensary, or of a Registered Practitioner. Evidence of a practical knowledge of Vaccination is also required.

One of the four years of Medical and Surgical Study must be in the University granting the Degree sought. Another year must be either in the same University, or in some other University entitled to give the Degree of Doctor of Medicine.† [At St. Andrew's, no one can be received as a candidate for the Degree of Bachelor of Medicine or Master in Surgery unless two years at least of his four years of Medical and Surgical Study shall have been in one or more of the following Universities and Colleges; viz., the Universities of St. Andrew's, Glasgow, Aberdeen, Edinburgh, Oxford, or Cambridge; Trinity College, Dublin; and Queen's College, Belfast, Cork, or Galway.] Attendance during at least six winter months on the Medical or Surgical Practice of a General Hospital which accommodates at least eighty patients, and, during the same period, on a course of Practical Anatomy; and one year's attendance, to the extent of four of the departments of Medical Study required, on the Lectures of Teachers of Medicine in the Hospital Schools of London, or in the School of the College of Surgeons in Dublin, or of such Teachers of Medicine in Edinburgh or elsewhere as shall from time to time be recognised by the Edinburgh University Court, may be reckoned as one of the four years.‡ All Candidates not Students of the University of Edinburgh, availing themselves of the permission of attending the Lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of attendance, enrol their names in a book to be kept by the University for that purpose, paying a Fee of the same amount as the Matriculation Fee.

Every Candidate must deliver, before the 31st day of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—I. A Declaration, in his own handwriting, that he is twenty-one years of age, or that he will be so on or before the day of graduation; and that he will not be, on the day of graduation, under articles of Apprenticeship. 2. A statement of his Studies, general and Professional, accompanied with proper certificates.§

At the Professional Examination, each Candidate is examined, both in writing and *viva voce*—1, on Chemistry, Botany, and Natural History; 2, on Anatomy, Institutes of Medicine, Materia Medica (including Practical Pharmacy), and Pathology; 3, on Surgery, Practice of Medicine, Midwifery, and Medical Jurisprudence; 4, Clinically, on Medicine and on Surgery in a Hospital. The Examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, Natural History, Materia Medica and Pathology, are conducted, as far as possible, by demonstrations of objects placed before the Candidates. Students may be admitted to Examination on the first division of these subjects at the end of their second year, and on the second division at the end of their third year. The Examination on the third and fourth divisions cannot take place until the Candidate has completed his fourth *Annus Medicus*. Candidates may, if they choose, be admitted to Examination on the first two of these divisions at the end of their third year, or to the four Examinations at the end of the fourth year. If any Candidate be found unqualified, he cannot be again admitted to Examination unless he has studied during another year two of the prescribed subjects, either in the University or in some other School of Medicine.

[The above are the Regulations, regarding Professional Examination, of the University of Edinburgh. Those of the other three Universities differ somewhat from those of Edinburgh. They are as follows.

* In the Laboratory of an Hospital or Dispensary, of a Registered Medical Practitioner, or of a Member of the Pharmaceutical Society of Great Britain.—*Glasgow*.

† Entitled to grant Degrees in Medicine.—*Glasgow*.

‡ The other two years may be constituted by attendance upon courses in the great Hospital Medical Schools of London or Dublin; and, in default of such attendance, one of the four years may be constituted by attendance on any general Hospital containing not less than eighty beds, provided attendance has been given at the same time on a course of Practical Anatomy.—*Glasgow*.

§ The Universities of Aberdeen and St. Andrew's require an Inaugural Dissertation to be presented previously to the final examination for M.B. In Edinburgh and Glasgow, no Thesis is now required until the candidate seeks the Degree of M.D.

Every Candidate for the Degrees of Bachelor of Medicine and Master in Surgery shall undergo three Professional Examinations, which will be conducted both in writing and *vivâ voce*, as follows. The First Examination (not to be taken before the end of the second year of study) to include Chemistry, Elementary Anatomy, and Botany.* The Second Examination (not to be taken before the end of the third year) to include Advanced Anatomy, Physiology, and Zoology with Comparative Anatomy.† The third Examination (not to be taken before the end of the fourth year) to include Materia Medica, General Pathology, Surgery, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine, and Clinical Surgery.‡ The Examinations in Anatomy, Chemistry, Physiology, Botany, Zoology, and Materia Medica, will be conducted, as far as possible, by demonstrations of objects exhibited to the Candidates; and those on Medicine and Surgery, in part, by clinical demonstrations. Candidates may be admitted to Examination on the first two of these divisions at the end of the third year, or to the three Examinations at the end of their fourth year. If any Candidate, on Examination, be found unqualified, he shall not be again admitted to Examination unless he shall have completed another year of Medical Study, or such portion of another year as may be prescribed by the Examiners when he is found unqualified.

Degree of Doctor of Medicine.

The Degree of Doctor of Medicine may be conferred on any Candidate who has obtained the Degree of Bachelor of Medicine, and is of the age of twenty-four years, and has been engaged, subsequently to his having received the Degree of Bachelor of Medicine, for at least two years in attendance on a Hospital, or in the Military or Naval Medical Services, or in Medical and Surgical Practice. The Candidate must be a Graduate in Arts, or must, before or at the time of his obtaining the Degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory Examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects; viz., French, German, Higher Mathematics, and Natural Philosophy.§ He must submit to the Medical Faculty a Thesis composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the Professional Examinations for the Degree of Bachelor of Medicine, which he may have made a subject of study after having received that Degree.

Candidates who commenced their Medical Studies in Edinburgh before February 4th, 1861, and in Aberdeen before November 1861, are entitled to be examined for the Degree of Doctor of Medicine, without previously taking that of Bachelor of Medicine, under the Regulations then in force in each University respectively.

The Degree of Doctor of Medicine may be conferred by the University of St. Andrew's on any Registered Medical Practitioner above the age of forty years, whose professional position and experience are such as, in the estimation of the University, to entitle him to that Degree, and who shall, on Examination, satisfy the Medical Examiners of the sufficiency of the professional knowledge; provided always, that Degrees shall not be conferred under this section on a greater number than ten in any one year. Candidates must lodge with the Professor of Medicine—1. A Certificate of Age; 2. Certificates from three Medical Men, of such acknowledged reputation in the Profession, or of such standing in the Medical Schools, as shall satisfy the Senatus of the professional position and experience of the Candidate; 3. A certain portion (viz., £10 : 10) of the Graduation Fees, which sum shall be forfeited, should the Candidate fail to appear at the time appointed for Examination, or should he fail to graduate. The Examination shall be conducted both in writing and *vivâ voce*, and shall include the following subjects—1, Materia Medica and General Therapeutics; 2, Medical Jurisprudence; 3, Practice of Medicine and Pathology; 4, Surgery; 5, Midwifery. As regards the last two subjects—viz., Surgery and Midwifery—a minute knowledge shall not be required from those who do not practise these branches of the profession.

The Graduation Fees in each of the Universities are—for the Degree of M.B., three Examinations, each £5 : 5 = £15 : 15; for the Degree of C.M., £5 : 5 additional; for the Degree of M.D., £5 : 5 additional to that for M.B., together with Government Stamp Duty (£10.)

The Fee for graduating under the old Regulations in Edinburgh is £25; at St. Andrew's, the Fee for the Degree of M.D. under the section relative to Registered Medical Practitioners is £50 Guineas. Stamp Duty is included in both cases.

* And Materia Medica.—*St. Andrew's.*

† And Surgery.—*St. Andrew's.*

‡ Materia Medica and Surgery in the two previous examinations.—*St. Andrew's.*

§ In Greek and in Logic or Moral Philosophy, and in any one of the other optional subjects in the examination in General Education.—*Glasgow.* Natural History added in optional subjects.—*St. Andrew's.*

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

REGULATIONS RELATIVE TO THE LICENCE IN MEDICINE.

EXAMINATIONS for the Licence in Medicine are statedly held on the second Wednesday in each month (except August and September). The name of every Candidate, together with his Schedule and the documents hereafter mentioned, must first be submitted to the College at one of its meetings. These are held regularly on the first Friday in each month (except August and September), and no name can be received later than the Monday previous to such meeting. If permission to be examined is granted, the Candidate may present himself at the next Examination, or at a subsequent one: in the latter case, however, he must intimate his intention three clear days before the Examination.

A Candidate who has not, previously to entering his name, obtained any Medical or Surgical Qualification recognised by the College, must produce—1. Evidence of having been engaged in the study of Medicine for four years. 2. A Certificate of having passed the Preliminary Examination of one of the recognised Licensing Corporations before the termination of the second year of Medical Study. 3. Certificates of having studied at a School or Schools recognised by the College the following subjects; viz.—Practical Anatomy; Anatomy and Physiology, or Institutes of Medicine; Botany; Chemistry; Practical Chemistry; Materia Medica; Practice of Medicine and Pathology; Surgery; Midwifery; Medical Jurisprudence. 4. Certificates of having attended a Medico-Chirurgical Hospital in which regular courses of Clinical Lectures are delivered, together with Clinical Instruction, for twenty-seven months. 5. A Certificate of having attended Practical Midwifery for six months at a recognised Lying-in Hospital, or evidence satisfactory to the College in each individual case of having attended Practical Midwifery. 6. Certificates of Character from two registered Physicians or Surgeons. A Candidate who has already obtained a Medical or Surgical Qualification recognised by the College, is required to fill up a Schedule which will be supplied on application, and to lodge it in the same manner, as a Candidate not previously qualified; but the only documents which he is required to produce are his Diploma or Certificate of Registration, and the Certificate of Practical Midwifery, and Testimonials as to character.

The Examination is conducted, first by printed questions, to be answered in writing, and afterwards *vivâ voce*, and consists of two parts.

The subjects of the First Part or Previous Examination are—Anatomy; Physiology; Botany; Chemistry.

The subjects of the Second Part, or Final Examination, are—Materia Medica; Practice of Medicine; Medical Jurisprudence; Midwifery.

Candidates qualified as follows are required to undergo the *second part* of the Professional Examination *only*; viz.—1. Graduates in Medicine of a University in the United Kingdom, or of any Foreign University approved by the College. 2. Fellows, Members, or Licentiates of the Royal Colleges of Physicians of London or Edinburgh, who have been admitted upon Examination. 3. Graduates or Licentiates in Surgery. 4. Candidates who, having completed the Curriculum above mentioned, have passed the Previous Examination of any of the Licensing Corporations in the United Kingdom. Candidates who are Physicians or Surgeons of five years' standing are further exempted from the written portion of the Final Examination.

Diploma in Midwifery.—Examinations for the Diploma in Midwifery are held every month (except August and September), on the day after that on which the stated Examinations for the Licence in Medicine are held. A Candidate for the Diploma in Midwifery, who is already a Licentiate of the College, is at liberty to present himself at any of the Examinations, provided he intimate his intention a week previously. Candidates for the Licence in Midwifery, who are not Members of the College, are required to fill up a Schedule, and apply for permission in the same way as Candidates for the Licence in Medicine, and will be admitted to Examination on the following Qualifications. The Degree or Licence in Medicine or Surgery from any University or College of Physicians or Surgeons in the United Kingdom, together with a Certificate of having attended a six months' Course of Lectures on Midwifery, and the Certificates specified in paragraphs 5 and 6 of the Curriculum.

Fees.—Fee for Licence in Medicine, £15 : 15; for the Diploma in Midwifery, £3 : 3; for Licence in Medicine and Diploma in Midwifery if taken out within an interval of a month, £16.

Further information and Blank Schedules may be obtained by application personally, or by letter, to the Registrar, College of Physicians, Kildare Street, Dublin.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

REGULATIONS REGARDING DIPLOMAS.

REGISTERED Pupils are admitted to the Preliminary Examination at any period previous to the Final Examination for Letters Testimonial. Students who are not Registered Pupils are also admitted to answer the Preliminary Examination upon payment of ten shillings; but they are not enrolled as Registered Pupils, or entitled to the privileges of such Pupils, until they have paid the full Registration Fee of Five Guineas.* No Student is admitted as a Candidate to the Quarterly Examination, or to the Final Examination for Letters Testimonial, until he has been enrolled as a Registered Pupil.

Letters Testimonial.

Every Registered Pupil shall be admitted to an Examination for Letters Testimonial if he shall have laid before the Council the following documents:—A receipt showing that he has lodged a sum of £21 in the Bank of Ireland to the credit of the President, and for the use of the College, and Certificates that he has passed an Examination in the Greek and Latin languages, and that he has been engaged in the study of his profession for not less than four years.

Examinations are held Quarterly, commencing on the second Tuesday in January, April, July, and October, at which Candidates are divided into two classes—Junior and Senior. The Junior Class must produce Certificates of having attended three courses each of Lectures on Anatomy and Physiology, and on Practical Anatomy with Dissections; two courses of Lectures on Chemistry; one course each of Lectures on Materia Medica, Botany, and Forensic Medicine. This Class is examined in Anatomy, Physiology, and Materia Medica. The Senior Class must produce Certificates of having attended three courses of Lectures on the Theory and Practice of Surgery, and one course each of Lectures on the Practice of Medicine, and of Lectures on Midwifery; also Certificates of Attendance on a recognised Hospital for three Winter and three Summer Sessions. This Class is Examined in Surgery, Operative Surgery, the Practice of Medicine, and form of Prescription.

Candidates for Letters Testimonial or Fellowship of the College, being Licentiates of a College of Physicians or Graduates in Medicines of an University, are examined in General and Descriptive Anatomy, Physiology, the Theory and Practice of Surgery, and Operative Surgery; and, if recommended to the Council for admission as Licentiates, are admitted by the Letters Testimonial. The Examinations are both oral and written. Candidates, whose answering shall be found insufficient, will not be allowed to present themselves a second time until after six months from their first examination.

The Fee for the Junior Examination is £5 : 5; for the Senior, £15 15s.; making, with the Preliminary Examination Fee (10s.) and Registration Fee (£5 : 5), a total of £26 : 15 for Letters Testimonial. Every Candidate rejected at the Quarterly Examination must pay £2 : 2 on applying for re-examination.

Fellowship.

Every Registered Pupil or Licentiate may be admitted to Examination for the Fellowship on producing a Certificate that he is twenty-five years of age, and that he is a Bachelor of Arts, or has been examined with a view to ascertain that he has obtained a liberal Preliminary Education; also a Certificate, signed by two or more Fellows of the College, of good general conduct. He must have been engaged in the acquisition of Professional Knowledge not less than six years (five years being required in the case of Bachelors of Arts), during three of which he must have studied in one or more of the Schools and Hospitals recognised by the Council. The other three years may have passed in any approved School. He must also have acted as House-Surgeon or Dresser in a recognised Hospital; and must have attended the Lectures required of Candidates for Letters Testimonial, together with one course of Lectures on Comparative Anatomy, and one on Natural Philosophy. He must present a Thesis on some Medical subject, or Clinical reports, with observations of six or more Medical or Surgical cases taken by himself.

Licentiates of the College, who may not be able to show that they have followed the course of study specified in the regulations, may, at the expiration of ten years from the date of their Diploma, be admitted to the Examination for the Fellowship, on producing satisfactory evi-

dence that they have conducted themselves honourably in the practice of their profession.

Each Candidate for the Fellowship is examined on two days. The subjects of the First Examination are Anatomy and Physiology (Human and Comparative); those of the Second—Pathology, Therapeutics, the Theory and Practice of Medicine and Surgery, and such other branch of Medical Science as the Council may, from time to time, direct. The Examinations are both Oral and Written. The Candidates must perform Dissections and Operations on the Dead Body. Rejected Candidates cannot present themselves a second time until after one year from the first Examination.

The Fee payable is £21 if the Candidate be a Licentiate, or £36 : 15 if he be a Registered Pupil; provided in either case he intends to reside beyond ten miles from Dublin. Should the Candidate intend to reside in Dublin, or within ten miles thereof, he pays, if a Licentiate, £31 : 10; if a Registered Pupil, £47 : 5. Fellows entering on the country list, who may subsequently settle as Practitioners in Dublin, or within ten miles thereof, must pay £10 : 10 to the College.

APOTHECARIES' HALL OF IRELAND.

REGULATIONS REGARDING THE LICENCE TO PRACTISE.

EVERY Candidate for the Licence to practise is required to undergo a Preliminary and a Professional Education and Examination.* The Arts Examination will be held on the third Friday in January, April, July, and October, at 2 P.M. Answers in writing must be given to printed questions. Unsuccessful Candidates will be remitted to their studies for six months.

Professional Education and Examination.

Every Candidate for the Licence to practise must produce Certificates to the following effects:—1. Of having passed an Examination in Arts previously to entering on professional study. 2. Of being at least twenty-one years of age, and of good moral character. 3. Of Apprenticeship to a qualified Apothecary, or of having been engaged at practical Pharmacy with an Apothecary for a period of three years subsequent to having passed the Examination in Arts. 4. Of having spent four years in Professional Study. 5. Of having attended the following Courses; viz., Chemistry, Principles and Practice of Medicine, and Surgery, each during One Winter Session; Anatomy and Physiology, Demonstrations and Dissections, each during Two Winter Sessions; Botany and Natural History, Materia Medica and Therapeutics, and Forensic Medicine, each during One Summer Session; Practical Chemistry (in a recognised Laboratory), during Three Months; Midwifery and Diseases of Women and Children, during Six Months; Practical Midwifery at a recognised Hospital (attendance upon twenty cases); Instruction in the practice of Vaccination. 6. Of having attended, at a recognised Hospital or Hospitals, the Practice of Medicine and Clinical Lectures on Medicine, during Two Winter and Two Summer Sessions; also the Practice of Surgery and Clinical Lectures on Surgery, during One Winter and One Summer Session. 7. Of having performed Vaccination successfully under a recognised Vaccinator.

The Examination for the Licence to practise is divided into two parts. The First Part comprehends Chemistry, Botany, Anatomy, Physiology, Materia Medica, and Pharmacy. The Second—Medicine, Surgery, Pathology, Midwifery, Forensic Medicine, and Hygiene. The First Part may be undergone at the close of the Second Winter Session; and the Second at the termination of the Fourth Winter Session.

The Examinations will be held on the first and second Mondays in January, April, July, and October.

Candidates who fail to pass the First Part of the Professional Examination will be remitted to their studies for three months. Unsuccessful Candidates at the Pass Examination will not be re-admitted until after six months.

Doctors of Medicine of any of the Universities in the United Kingdom, or Surgeons of any of the Royal Colleges of Surgeons, whose qualifications as such appear in the *Medical Register*, and who, having passed an Examination in Arts, have also served an Apprenticeship, or the required term of Practical Pharmacy, to a qualified Apothecary, may obtain the Licence of the Hall by undergoing an Examination of

* The following are the subjects on which Candidates for the Preliminary Examination will be examined:—The English Language, including Grammar and Composition. Arithmetic, including Vulgar and Decimal Fractions. Algebra, including Simple Equations. Geometry, first two Books of Euclid. Latin and Greek, including Translation and Grammar. In Greek—The Gospel of St. John, the *Memorabilia* of Lucian, or the First Book of Xenophon's *Anabasis*. In Latin—The First and Second Books of the *Aeneid* of Virgil, the *Jugurthine War* of Sallust, or the Third Book of Livy.

* The following are the subjects of Preliminary Examination:—*Compulsory.* 1. *English*, including Grammar, Composition, and the leading events of English History. 2. *Arithmetic*, including Vulgar and Decimal Fractions; Algebra, to Simple Equations. 3. *Geometry*: First Two Books of Euclid. 4. *Latin*: The *Catiline Wars* of Sallust, and the First Three Books of the *Aeneid* of Virgil. 5. *Greek*: The Gospel of St. John, and the First Twenty *Dialogues* of Lucian, or the First Two Books of the *Iliad* of Homer. 6. *French*: *Telemachus* or *Charles XII.*—*Optional.* 1. *Natural Philosophy*: Mechanics, Hydrostatics, and Pneumatics. 2. *Natural History*: The Classification and Elementary Structure of Vegetables and Animals.

one day—the former in Pharmacy, and the latter in Medicine and Pharmacy.

Candidates for the Certificate of an Assistant to an Apothecary, in compounding and dispensing Medicines, will be examined in the *British Pharmacopœia* and in Pharmacy, scientific and practical, including the history and character of Medicines, their preparations and doses, and in the translation of Latin Prescriptions.

UNIVERSITY OF DUBLIN.

DEGREES AND LICENCES IN MEDICINE.

THE degrees in Medicine and Surgery granted by the University are : 1, Bachelor of Medicine; 2, Doctor of Medicine; 3, Master in Surgery. It also grants Licences in Medicine and Surgery.

Bachelor in Medicine.

A Candidate for the Degree of Bachelor in Medicine must be a Graduate in Arts, and may obtain the Degree of Bachelor in Medicine at the same commencement as that at which he receives his Degree of B.A., or at any subsequent commencement, provided the requisite Medical education shall have been completed. The Medical Education is of four years' duration, and comprises attendance on a course of each of the following Lectures: *Winter*—Anatomy; Practical Anatomy; Theoretical and Operative Surgery; Chemistry; Practice of Medicine; Midwifery. *Summer*—Botany; Institutes of Medicine; Materia Medica and Pharmacy; Medical Jurisprudence. *Term Courses*—Heat (Michaelmas); Electricity (Hilary); Magnetism and Comparative Anatomy (Trinity). Two courses of nine months' attendance on the Clinical Lectures of Sir Patrick Dun's or other Metropolitan Hospital recognised by the Board.* Six months' instruction in Practical Midwifery,† including Clinical Lectures. A certificate of personal attendance on Fever cases, with names and dates of cases. Six months' Dissection, and three months' Laboratory Instructions in Chemistry. Any of the Winter or Summer Courses may be attended at any Medical School in Dublin recognised by the Provost and Senior Fellows.‡ The Fee for the *Liceat ad Examinandum* is £5; for the Degree of M.D., £11. Members of the Royal Colleges of Surgeons of Dublin, London, or Edinburgh, who are Graduates in Arts of Oxford, Cambridge, or Dublin, are admissible to the Examination for M.B.

Doctor in Medicine.

A Doctor in Medicine must be M.B. of at least three years' standing, or have been qualified to take the degree of M.B. for three years, and must perform exercises for the degree before the Regius Professor of Physic, in accordance with the Rules and Statutes of the University. Total amount of Fees for this Degree, £13.

Master in Surgery.

The Degree of Master in Surgery can only be obtained by Students who are Bachelors of Arts, and who have completed the professional Curriculum, and passed the Examination required. The Curriculum comprises the following, in addition to the complete course for the M.B. Degree: Theoretical and Operative Surgery, one course; Dissection, two courses; Ophthalmic Surgery, one course. Nine months in Sir Patrick Dun's or other recognised Metropolitan Hospital, with Clinical Lectures. Attendance on the practice of a recognised County Infirmary for two years previously to the commencement of Medical study in Dublin, is allowed to count as one year of Hospital attendance. Candidates are required to perform Surgical Operations on the Dead Subject. Candidates for the Degree of Master in Surgery, who have already passed the Examination for the Degree of Bachelor in Medicine, will be examined in Anatomy and Surgery only. Fee for the *Liceat ad Examinandum*, £5; for the Degree of M.Ch., £11.

University Licences.

Candidates for the Licences in Medicine or Surgery must be matriculated in Medicine, and must have completed two years in Arts and four years in Medical studies.

* The following Hospitals are recognised:—1. Sir Patrick Dun's Hospital; 2. Meath Hospital; 3. House of Industry Hospitals; 4. Dr. Steevens' Hospital; 5. Jervis Street Infirmary; 6. City of Dublin Hospital; 7. Mercer's Hospital; 8. St. Vincent's Hospital; 9. Adelaide Hospital; 10. Mater Misericordiae Hospital.

† Certificates of Practical Midwifery are received from 1. the Rotundo Hospital; 2. the Coombe Hospital; 3. Sir P. Dun's Hospital Maternity; 4. Dr. Steevens' Hospital Maternity.

‡ The following Schools, in addition to the School of Physic of Trinity College, are recognised:—1. The School of the Royal College of Surgeons in Ireland; 2. The Carmichael School; 3. The School of Dr. Steevens' Hospital. 4. The St. Peter Street School; 5. The School of the Catholic University. The recognition is conditional on the Students being furnished with *bonâ fide* Certificates of regular attendance equivalent to that required by the University; i.e., three-fourths of the entire Lectures in each course.

In case the Student should wish to continue the Undergraduate Course in Arts, with a view to the Degree of B.A., his answering in the Matriculation Examination* will be reckoned as equivalent to the Entrance Examination and the Hilary Examination of the Junior Freshman year.

The Medical Course and Examination for the Licence in Medicine is the same as for the Degree of M.B.

A Licentiate in Medicine, on completing his Course in Arts, and proceeding to the Degree of B.A., may become a Bachelor in Medicine, on paying the Degree fees, without further Examination in Medicine. Fee for the *Liceat ad Examinandum*, £5; for the Licence in Medicine, £5.

The Surgical Course and Examination necessary for the Licence in Surgery, are the same as for the Degree of Master in Surgery. Fee for the *Liceat ad Examinandum*, £5; for the Licence in Surgery, £5.

Examinations.

Candidates for Degrees and Licences in Medicine and Surgery are required to pass an examination in the following subjects previously to their Degree Examination: Descriptive Anatomy; Botany; Materia Medica and Pharmacy; Chemistry; and Physics. Two Medical Scholarships, of £20 each for two years, are awarded to the best answers at the previous Examination, on certain conditions. Candidates for Degrees and Licences in Medicine and Surgery are examined at the bedside.

Qualifications in State Medicine.

Doctors of Medicine, who wish to obtain from the University a Certificate of Qualification in State Medicine, can do so on passing an Examination in a limited course of the following subjects: 1. Law; 2. Engineering; 3. Pathology; 4. Vital and Sanitary Statistics; 5. Chemistry; 6. Meteorology; 7. Medical Jurisprudence.

QUEEN'S UNIVERSITY IN IRELAND.

DEGREES OF DOCTOR OF MEDICINE AND MASTER IN SURGERY.

EACH Candidate for the Degree of Doctor in Medicine or Master in Surgery is required—1. To have passed, in one of the Colleges of the Queen's University,* the Entrance Examination in Arts; and to have been admitted a Matriculated Student of the University. 2. To have attended, in one of the Queen's Colleges, Lectures on one Modern Continental Language for six months, and Lectures on Natural Philosophy for six months. 3. To have also attended, in one of the Queen's Colleges, at least two of the Courses of Lectures in the lists given below. For the Second Course of Anatomy and Physiology, and of Practical Anatomy, authenticated certificates will be received from the Professors or Lecturers in recognised Universities, Colleges, or Schools. 4. To pass the First University Examination and the Degree Examination.

The Curriculum shall extend over at least four years, and shall be divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination prior to entering on the second Period.

It is recommended that the first Period shall comprise attendance on the following courses of Lectures:—Chemistry; Botany with Herborisations, and Zoology; Anatomy and Physiology; Practical Anatomy; Materia Medica and Pharmacy; and that the second Period shall comprise attendance on Anatomy and Physiology (second course); Practical Anatomy (second course); Surgery; Midwifery; Medicine; and Medical Jurisprudence. Candidates shall also have attended, during either the first or the second Period, courses of a Modern Continental Language, and Experimental Physics (in one of the Colleges of the University). Also, during the first Period, Practical Chemistry (in a recognised Laboratory), and a Medico-Chirurgical Hospital containing at least sixty beds; together with the Clinical Lectures, at least two each week—a Winter Session of six months. And, during the second Period, Practical Midwifery—a certificate of having attended at a recognised Midwifery Hospital, with the Clinical Lectures, for three months; or of having attended a Midwifery Dispensary for the same period; or of having attended ten cases of Labour, under the superintendence of the Medical Officer of any Hospital or Dispensary where cases of Labour are treated; and a recognised Medico-Chirurgical Hospital, containing at least sixty beds; together with the Clinical Lectures—eighteen months; including either three Winter Sessions of six months each, or two Winter

* The following are the subjects of examination. Homer's *Iliad*, Books I, II (omitting Catalogue of Ships), III; Lucian's *Dialogues* (Walker's edition); Xenophon's *Anabasis*, Books I, II, III; Virgil, *Æneid*, Books I, II, III; Sallust; Horace, *Satires*; Latin Prose Composition; English Prose Composition; English History; Modern Geography; Arithmetic; Algebra, to the end of Simple Equations; Euclid, Books I, II, III.

Sessions of six months each, and two Summer Sessions of three months each.

Medical Examinations are held in June, and in September and October. Each Candidate for Examination must forward to the Secretary, on or before the 1st of June, or the 1st of September, notice of his intention to offer himself as a Candidate, along with his certificates.

First University Examination in Medicine.

The First University Examination may be passed either in June or September. Students may present themselves for the Examination at the termination of the first period of the Curriculum, or at any subsequent period; but they are earnestly recommended not to put off the Examination to the time of the Degree Examination. Before being admitted to Examination, each Candidate must produce satisfactory evidence of having completed the Curriculum for the first Period.

The First University Examination comprises the subjects recommended during the First Period of the Curriculum; any Candidate may also present himself for Examination in Experimental Physics and Modern Languages, if he have already attended, in one of the Queen's Colleges, the prescribed courses.

Competitors for Honours will be examined in all the subjects of the First University Examination, including Experimental Physics and Modern Languages. Two Exhibitions, one consisting of two instalments of £20 each, the other of two instalments of £15 each, will be awarded to the best answers, if of sufficient absolute merit. Candidates who postpone their First Medical Examination until they present themselves at the Degree Examination are not eligible for Honours with the First Examination.

Degree Examinations in Medicine.

Examinations for the Degrees of M.D. and M.Ch. will be held in June and September. The Fee for each Degree is Five Pounds.

Each Candidate must be recommended by the President of his College, and produce Certificates—1. From the Secretary of the Queen's University, that he has passed the Previous Examination, unless the Candidate present himself for both Examinations simultaneously. 2. From the Council of his College, that he has passed a full Examination in the subjects of study prescribed in the entrance course of the Faculty of Arts, and has been admitted a Matriculated Student in the Faculty of Medicine. 3. That he has attended, in the Colleges of the Queen's University, two of the Medical Courses, Lectures on one Modern Language, and Lectures on Experimental Physics. 4. That he has completed all other prescribed courses.

The Examination for the Degree of M.D. comprises the subjects recommended for the second Period of Medical Education, with Experimental Physics and one Modern Language, unless an Examination in these subjects shall have been already passed.

The Examination for the Degree of M.Ch. comprises, in addition, an Examination in Operative Surgery; except in the case of those Candidates who obtained the Degree of M.D. in this University, before 1st January, 1865.

Candidates who take a First Class in Honours will receive a Medal and Prize; Candidates who take a Second Class will receive a Prize; Candidates who take a Third Class will receive a Certificate of Honour.

ARMY MEDICAL SERVICE.

EVERY Candidate desirous of presenting himself for admission to the Army Medical Service must be unmarried, and not under 21 or over 28 years of age. He must produce a certificate from the District Registrar, in which the date of birth is stated; or, if this cannot be obtained, an affidavit from one of the parents or other near relative, who can attest the date of birth, will be accepted. He must also produce a certificate of moral character from the parochial minister, if possible. The Candidate must make a declaration that he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a medical officer in any climate.† He must also attest his readiness to engage for general service, and to proceed on foreign service when required to do so. He must be registered under the Medical Act of 1858 as licensed to practise Medicine and Surgery in Great Britain or Ireland.

* Belfast, Cork, or Galway.

† His physical fitness will be determined by a Board of Medical Officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses. A moderate degree of myopia would not be considered a disqualification, provided it did not necessitate the use of glasses during the performance of operations, and that no organic disease of the eyes existed. Every candidate must also be free from organic disease of other organs, and from constitutional weakness or other disability likely to unfit him for military service in any climate.

Candidates are examined by the Examining Board in the following subjects:—Anatomy and Physiology; Surgery; Medicine, including Therapeutics, the Diseases of Women and Children, Chemistry and Pharmacy, and a practical knowledge of Drugs. (The Examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of Surgical Apparatus, and the examination of Medical and Surgical patients at the bedside.) The eligibility of each Candidate for the Army Medical Service will be determined by the result of the examinations in these subjects only. Candidates who desire it will be examined in Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany with special reference to *Materia Medica*, and the number of marks gained in these subjects will be added to the total number of marks obtained in the obligatory part of the Examination by Candidates who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of these branches of science. After passing this Examination, every Candidate will be required to attend one entire course of Practical Instruction at the Army Medical School, on—1, Hygiene; 2, Clinical and Military Medicine; 3, Clinical and Military Surgery; 4, Pathology of Diseases and Injuries incident to Military Service. At its conclusion, the Candidate will be required to pass an examination on the subjects taught in the School. If he gives satisfactory evidence of being qualified for the practical duties of an Army Medical Officer, he will be eligible for a Commission as Assistant-Surgeon. During the period of his residence at the Army Medical School, each Candidate will receive an allowance of five shillings per diem with quarters, or seven shillings per diem without quarters, to cover all cost of maintenance; and he will be required to provide himself with uniform (*viz.*, the Regulation undress uniform of an Assistant-Surgeon, but without the sword). All Candidates will be required to conform to such rules of discipline as the Senate may from time to time enact.

The Army Medical School at Netley is governed by a Senate, composed of the Director-General of the Army Medical Department (President); the Physician to the Secretary of State for India in Council; the Principal Medical Officer at Netley, and the Professors of the School. The Candidates for the services remain for four months at Netley, attending Lectures on Military Surgery, Medicine, Pathology, and Hygiene. The Lectures on Military Surgery include gunshot and other wounds; arrangements for the transport of wounded; duties of Army Surgeons in the field, during sieges, on transports, etc.; and other special subjects. Those on Military Medicine refer to the tropical and other diseases of the British possessions and colonies, and to the losses by disease in peace and war at home and abroad. The Lectures on Hygiene comprise all duties relating to the examination of water, air, food, clothing, etc., of the soldier; his duties and exercise, and the circumstances affecting his health; the subjects of meteorology, statistics, and prevention of the principal diseases met with in the Army, on home or foreign service. The Lectures on Pathology have reference chiefly to the scientific examination of tropical diseases, and of other complaints which the Army Surgeon is especially called on to investigate. The Candidates also attend the wards of the Hospital to study the diseases of invalids under the Professors of Medicine and Surgery, the system of recruiting, and the modes of keeping the Army medical returns and records. They are also called on to make *post mortem* examinations, to operate on the dead body, and pass through courses of practical instruction in the laboratory on the modes of recognising the qualities and adulterations of food, and in the microscope room on the modes of microscopic examination of morbid tissues and of adulterations of food, etc.

MEDICAL DEPARTMENT OF THE NAVY.

REGULATIONS RELATIVE TO THE APPOINTMENT OF ASSISTANT-SURGEON.

1. A Candidate for the Appointment of Assistant-Surgeon in the Royal Navy must make a written application to that effect, addressed to the Secretary of the Admiralty; on the receipt of which application, he will be furnished with a Schedule containing the Regulations, and a printed Form, to be filled up by him in accordance with the directions given therein.

2. As vacancies occur, the number of Candidates required will be ordered to attend for competitive Examination at the Admiralty Office; but no person can be admitted as an Assistant-Surgeon into the Royal Navy unless he can produce satisfactory evidence that his name has been placed on the *Medical Register* as legally qualified to practise both Medicine and Surgery according to the regulations established by the Medical Act. And further, he will be required to make a declaration that he is free from any mental or bodily disease, defect, or infirmity,

which could interfere with the efficient discharge of his duties as a Medical Officer in the Navy.*

3. Each Candidate will be required to produce—I. A Certificate of good moral character, signed by a magistrate, a clergyman, or by a legally qualified physician or surgeon. II. A Certificate that he is not less than twenty, nor more than twenty-eight, years of age. III. Certificates of attendance at Lectures, etc., and proof that subsequently to the age of eighteen he has actually attended a recognised Hospital for eighteen months, in which the average number of patients is not less than one hundred. IV. Certificates that he has been engaged in actual Dissection for twelve months, and that he has performed the principal capital and minor operations on the dead body under a qualified teacher.

4. On producing the above Certificates, he will be examined on Anatomy; Surgery; Physiology or Institutes of Medicine; Practice of Medicine; Chemistry; Materia Medica; Midwifery; Botany.

5. Although a competent knowledge of the abovementioned subjects is all that is absolutely required, a favourable consideration will be given to those Candidates who are acquainted with the collateral sciences more immediately connected with the Profession, such as Natural History, Natural Philosophy, and the use of the Microscope in diagnosis.

6. Such Candidates as shall have been found in all respects competent for the appointment of Assistant-Surgeon, will be forthwith nominated to one of Her Majesty's Ships, or to a Naval Hospital at home; or, should their services not be immediately required, their names will be duly registered for early appointments as vacancies may occur. But it is distinctly to be observed, that Candidates admitted into the Naval Medical Service must serve in any Vessel to which they may be appointed; and that in the event of their being unable to do so from seasickness, their names cannot be continued on the Naval Medical List, nor can they, of course, be allowed half-pay.

7. After completing three years' Full Pay Service, Assistant-Surgeons will be allowed to be examined for the rank of Surgeon before a Board of Naval Medical Officers assembled at the Department of the Medical Director-General of the Navy, but no Assistant-Surgeon can be promoted to the rank of Surgeon until he shall have served five years, two of which must have been in a ship actually employed at sea.

8. The Lords of the Admiralty have been pleased further to direct that a limited number of those Candidates, who pass the best examination on entering the Service, shall be promoted annually to the rank of Surgeon at an earlier period than would occur under ordinary circumstances; and that these promotions shall be awarded as follows:—The Candidate who passes the best examination of his year, after 5 years' service; the Candidate who passes the second best, after 6 years' service; the Candidate who passes the third best, after 7 years' service. Provided, however, that their second examinations are passed in an equally creditable manner, and that their conduct during the whole time they have been in the Service has in all respects been satisfactory.

Regulations showing Rank, Pay, and Position.

1. Assistant-Surgeons at home, after completing their time for examination for the rank of Surgeon, may be granted two months' leave of absence on Full Pay, on condition of their resuming their studies at a Medical School or Hospital.—2. Promotion to the rank of Staff-Surgeon is open to Officers for distinguished or special service, although 20 years on Full Pay may not have been completed; such staff-Surgeons will have 16s. a day half-pay.—3. Staff-Surgeons rank with Commanders, according to date of Commission.—4. The whole time served on Full Pay as an Assistant-Surgeon to be allowed to Surgeons to qualify for the rank of Staff-Surgeon, provided the examination for Surgeon is passed before the Officer completes 10 years' service; otherwise only 10 years served as Assistant-Surgeon will be allowed to count.—5. Staff-Surgeons are appointed to the Flag-Ships of Commanders-in-Chief on Foreign Stations, with an allowance of 5s. a day in addition to their established pay.—6. The Hospital Allowances for Naval Medical Officers at home and abroad, in lieu of provisions for themselves and servants, and for fuel and light, are as follows: Inspectors-General of Hospitals at home £85, abroad £130; Deputy Inspectors-General £67, and £112; Staff-Surgeons and Surgeons £53, and £112; Assistant-Surgeons £39, and £108. In cases where Medical Officers draw provisions or fuel from public stores, they will be charged for the same at the cost price.—7. The travelling allowances, extra pay, lodging money, and compensation for losses, are fixed for Naval Medical Officers according to their relative rank in the Service.—8. Medical Officers have cabins according

to their relative rank in the Service, excepting always that the Senior Executive Officer of whatever rank has the one most suitable for his duties.

ADDITIONAL NOTES CONCERNING THE HOSPITALS AND MEDICAL SCHOOLS.

IN addition to the Tables of the Classes, etc., and hours of attendance, given at pages 286 and 287, we subjoin Abstracts of the Programmes issued by the several Medical Schools. We have extracted those points of information which are of most interest to the student, in addition to those given in the tables. It will be seen, that many of the Schools make arrangements by which the Course of Instruction required by the Examining Boards for the general practitioner can be compounded for, by paying a sum either at once or in periodical instalments. For the information of those who may wish to attend separate Classes in any School for one or more Sessions, we give the respective fees demanded in each School. To avoid repetition, and save space, the titles of the Classes are indicated by letters, thus:

a. Anatomy and Physiology.	z. Forensic Medicine.
b. Descriptive and Surgical Anatomy.	1. Practical Chemistry.
c. Anatomical Demonstrations.	m. Comparative Anatomy.
d. Chemistry.	n. Pathology and Morbid Anatomy.
e. Medicine.	o. Dental Surgery.
f. Surgery.	p. Ophthalmic Surgery.
g. Materia Medica.	q. Operative Surgery.
h. Midwifery and Diseases of Women.	r. Histology or Microscopic Anatomy.
i. Botany.	H.P. Hospital Practice.

ST. BARTHOLOMEW'S HOSPITAL.—Aggregate Fee, £99 15s.; or First Winter, £31 10s.; First Summer, £31 10s.; Second Winter, £36 15s.—For General Subjects for Students of Dental Surgery, £52 10s.; or, First Winter, £26 5s.; First Summer, £26 5s.—Separate Classes: a and b, single, £7 7s.; perpetual, £10 10s.; c, one course, £3 3s.; one session, £5 5s.; d, e, f, single, £5 5s.; perpetual, £7 7s.; g, h, single, £5 5s.; perpetual, £6 6s.; i, k, single, £3 3s.; perpetual, £4 4s.; l, single, £2 2s.; m, o, p, single, £2 2s.; perpetual, £3 3s. (the lectures on Dental and on Ophthalmic Surgery are free to Students of the Hospital); q, one course, £4 4s.; r, one course, £1 1s. H.P., Medical—6 months, £12 12s.; 2 years, £18 18s.; unlimited, £26 5s. Surgical—6 months, £15 15s.; 12 months, £21; unlimited, £26 5s. House-Physicianships and House-Surgeons, £26 5s. Dresserships—3 months, £12 12s.; 6 months, £18 18s.; 12 months, £26 5s.

The Anatomical Museum contains carefully selected and arranged specimens of Human, of Comparative, and of Pathological Anatomy; and also numerous Models, Casts, Diagrams, and Drawings in Oil and Water-colours. The Anatomical Museum, and the Museums of Materia Medica and of Botany, are open to students daily from 10 A.M. to 4 P.M.—The Library contains all the standard works on Medicine and the allied Sciences, with duplicates of books in most general use; also the chief medical and other periodicals, and works on General Literature. The Reading Room is open every day; during winter, from 10 to 5; summer, 9 to 5; vacation, 10 to 2.30. Subscription to Library, one year, £1 1s.; four years, £2 2s. Each subscriber may retain in his possession three volumes at one time.

Collegiate Establishment.—Students attending the Practice of the Hospital, or the Lectures in the Medical College, are admitted to residence in the College on the recommendation of a medical officer of the Hospital, which may be obtained on adducing satisfactory evidence of good moral character. The entrance-fee is £2 2s. All information regarding the College may be obtained on application, either personally or by letter, to the Warden, Mr. W. Morrant Baker.

Exhibitions, Scholarships, and Prizes.—Jeaffreson Exhibition, founded 1868: £20 yearly, tenable for two years; the tenure during the second year being contingent on the Exhibitor continuing his studies at the Hospital, and obtaining satisfactory testimony of good conduct. Confined to students of less than six months' standing. Examination on October 18, 1870: Subjects, those of Preliminary Education appointed by the General Medical Council.—Seven Scholarships are awarded. Two Senior Scholarships, of the value of £50 and £25, in Medicine, Surgery, Materia Medica, and Therapeutics. Two Senior Scholarships, of the same value, in Anatomy, Physiology, and Chemistry. Three Junior Scholarships, of the value of £50, £30, and £20, will be awarded after the General Examination at the end of the Summer and Winter Sessions.—Wix Prize, for the best Essay on "The Connexion between Revealed Religion and Physical Science."—Hichens Prize:

[Continued at page 288.]

* His physical fitness will be determined by a Board of Medical Officers, who will be required to certify that his vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses, and that he is free from organic disease, constitutional weakness, or other disability likely to unfit him for the Naval Service in any climate.

GUIDE TO LONDON HOSPITALS AND MEDICAL SCHOOLS: 1870-71.

For further particulars regarding each Hospital and Medical School, see pp.

LECTURES, ETC.	ST. BARTHOLOMEW'S HOSPITAL.	CHANCING CROSS HOSPITAL.	ST. GEORGE'S HOSPITAL.	GUY'S HOSPITAL.	KING'S COLLEGE AND HOSPITAL.
WINTER SESSION.					
PHYSIOLOGY	Mr. Baker..M. Tu. Th. F., 10.15	Dr. Silver..M. Tu.W. F., 3.30	Dr. W. Ogle..Tu. Th., 3; S., 11	Dr. Pavy..M. W. F., 4.15	Dr. Rutherford..M. W. Th. F., 4
ANATOMY, DESCRIPTIVE AND SURGICAL	Mr. Holden and Mr. Callender..Tu. W. Th. F., 2.30	Mr. Barwell..M. W. F., 9; Th. 3.30	Mr. Rouse..M. W. F., 3	Mr. Durham....Tu. W. Th. F., 9	Mr. Partridge..Daily, exc. M., 9
ANATOMICAL DEMONSTRATIONS	Mr. Langton, Mr. Marsh..Daily, 10.15 to 2	Mr. Bellamy..Daily, 10 to 1	Dr. Byam, Mr. Baher (<i>Anat.</i>) Mr. Sims (<i>Phys.</i>)	Mr. Howse and Mr. Davies-Colley	Mr. Curnow and Mr. Perrin
CHEMISTRY	Mr. Matthiessen..M. W. F., 9.15	Mr. Heaton..M. Th. F., 11	Dr. Noad..Tu. Th. S., 11.30	Dr. Debus and Dr. Stevenson Tu. Th. S., 11	Dr. Miller..M. W. Th. S., 10.15
MEDICINE	Dr. Black, Dr. Andrew..M. Tu. Th., 3.30	Dr. Salter..M. W. F., 2.30	Dr. Barclay..M. W. F., 9	Dr. O. Rees and Dr. Wilks..M. W. F., 3	Dr. Johnson ..Tu., 4 P.M.; Th. F., 5
SURGERY.. ..	Mr. Coote, Mr. Savory..M., 2.30; F., 3.30; S., 9 A.M.	Mr. Canton..Tu. Th. S., 9	Mr. Holmes..Tu. Th., S., 9	Mr. Birkett and Mr. C. Forster..Tu. Th., 3.30; F., 13.30	Mr. J. Wood..M. Tu. W., 5
HOSPITAL PRACTICE: Physicians	Dr. Black..M. Tu. Th., 1 Dr. Harris..Tu. Th. S., 1.30 Dr. Andrew..Daily, exc. W., 1.30 Dr. Southey..M. W. Th. S., 1.30	Dr. Salter, M. W. F. Dr. Headland, Tu. Th. S.	Dr. Fuller..Tu. S., 1 Dr. Barclay..M. F., 1	Dr. Owen Rees....Tu. Th. S., 1.30 Dr. Hahershon..Tu. Th. S., 1.30 Dr. Wilks..M. Th. 1.30	Dr. Johnson..M. Th., 2 Dr. Beale..Tu. S., 2 Dr. Garrod..W. F., 2 Dr. Guy (out-p.)
Obstetric Physicians ..	Dr. Greenhalgh..in-p. Th., 1.30; out-p. S., 9	Dr. J. W. Black, M. W. F.	Dr. J. Ogle..M. F., 1 Dr. Wadham..Tu. S., 1 Dr. J. Clarke..in-p. Tu. S., 1; out-p. Th., 12	Dr. Braxton Hicks..W. S., 1.30 Dr. Pavy..F., 12 Dr. Moxon..M., 12 Dr. Fagge..W., 12 Dr. Phillips (obs.)...M. F., 1.30; out-p. Th. S., 12	Dr. Priestley..Tu. Th. S., 1.30 Dr. Duffin..W. S., 1 Dr. Yeo..M. Th., 1 Dr. Kelly..Tu. F., 1 Dr. Playfair (obs.)..Tu. Th. S., 12.30
Assistant-Physicians ..	Dr. Church..Tu. F., 11 Dr. Gee..W. S., 11 Dr. Duckworth..M. Th., 11 Dr. Hensley.	Dr. Pollock, M. Th. Dr. Silver, Tu. F. Dr. Green, W. S.	Dr. Dickinson..Tu. S., 12 Dr. W. Ogle..M. F., 12		
Surgeons	Mr. Paget..Daily, exc. W., 1.30 Mr. Coote..M. W. F. S., 1.30 Mr. Holden..Tu. F. S., 1.30 Mr. Savory..M., 1; Tu. W. Th. F. S., 1.30	Mr. Hancock, Tu. Th. S. Mr. Canton, M. W. F. Mr. Hird (out-p.) Tu. Th. S. Mr. Barwell (out-p.) M. W. F.	Mr. P. Hewett..M. F., 1 Mr. Pollock..Tu. S., 1 Mr. H. Lee..Tu. S., 1 Mr. Holmes..M. F., 1 Mr. Brodhurst (<i>orthopædic</i>)..M. W. F., 2 Mr. Rouse..M. F., 12; Th., 12 (ear)	Mr. Cock..M. Th. S., 1.30 Mr. Birkett..M. Th., 1.30 Mr. Poland..W. S., 1.30	Sir W. Fergusson, Bart. .. Tu. Th. S., 1.30 Mr. Wood..M. W. F., 1.30
Assistant-Surgeons ..	Mr. Callender..W. S., 12.30 Mr. T. Smith..M. Th., 12.30 Mr. Willett..F., 12.30 Mr. Langton..Tu., 12.30	Mr. Bellamy.	Mr. Pick..Tu. S., 12	Mr. C. Forster..M. Th., 1.30 Mr. Bryant..M. Th., 12 Mr. Durham..W., 12	Mr. H. Smith..M. W. F., 1 Mr. H. R. Bell..Tu. Th. S., 1
Ophthalmic Surgeons ..	Mr. Power..Tu. F., 2; Mr. Vernon..M. Th., 2		Mr. R. B. Carter..M. F., 9	Mr. Bader.....W. S., 1.30, out-p.; Tu. F., 12	Mr. Soelberg Wells..Tu. Th. S., 1
Dental Surgeon ..	Mr. Coleman..S., 10	Mr. Parkinson..Daily, 10	Mr. Vasey..Tu. S., 9; Th. 1	Mr. J. Salter..Th., 12	Mr. Cartwright..Tu. F., 10
CLINICAL MEDICINE ..	The Physicians..Weekly	The Physicians..Daily; special class, Dr. Salter and Mr. Headland	Dr. J. Ogle and Dr. Wadham M., 2 (Winter) Dr. Barclay..M., 2 (Sum.)	Dr. Owen Rees, Dr. Habershon, Dr. Wilks (Win.)..S., 1.30; Dr. Pavy, Dr. Moxon, Dr. Fagge (Sum.)..W., 1.30	Dr. Johnson..alt. M., 3 Dr. Beale..alt. Tu., 3 Dr. Garrod..alt. F., 3
CLINICAL SURGERY ..	Mr. Skey (Consulting-Surgeon) and the Surgeons..Weekly	The Surgeons..Daily; special class, Mr. Hancock and Mr. Canton	Mr. Hewett and Mr. Pollock Tu., 2 (Winter) Mr. Holmes..Tu., 2 (Sum.)	Messrs. Cock, Birkett, Poland, and Forster (Win.)..F., 1.30; Messrs. Bryant, Durham, and Howse (Sum.)..F., 1.30	Sir W. Fergusson..alt. Th., 3 Mr. Partridge..alt. F., 3 Mr. Wells (<i>ophth.</i>)..alt. M., 3 Mr. Cartwright (<i>dental</i>)..alt. Tu., 10.30
CLINICAL MIDWIFERY ..	Dr. Greenhalgh..Weekly		Dr. J. Clarke..F., 2. (Win.)	Dr. Hicks and Dr. Phillips (Win.)..W., 1.30	Dr. Priestley..alt. Th., 3
OPERATIONS	Wed. and Sat., 1.30	Saturday, 1	Thursday, 1	Tuesday, 1.30	Wed., 2; Sat., 1.30
SUMMER SESSION.					
MATERIA MEDICA.. ..	Dr. F. J. Farre..Tu. Th. S., 10; W., 11.30	Dr. Headland..Tu. Th. S., 12	Dr. Dickinson..M. W. F. 3	Dr. Habershon..Tu. Th. F., 3	Dr. Garrod..Tu. W. Th. F., 8 A.M.
BOTANY	Rev. G. Henslow...M. W. F., 10	Dr. Dowson, Tu. Th. S., 11	Mr. Child..M. W. F., 12	Mr. C. Johnson..Tu. Th. S., 11.30	Mr. Bentley..M. Tu. Th. F., 12.15
MIDWIFERY	Dr. Greenhalgh..Tu. W. F. S., 8.30 A.M.	Dr. J. W. Black, M. W. F., 3	Dr. J. Clarke..M. W. F., 9	Dr. Braxton Hicks..Tu. W. Th. F., 8.45	Dr. Priestley..Tu. W. Th. F., 9
FORENSIC MEDICINE ..	Dr. R. Southey..M. Th. S., 9	Dr. A. J. Pollock, M. W. F., 4	Dr. Wadham..Tu. Th. S., 9	Dr. Taylor..Tu. Th. S., 10	Dr. Guy..M. Tu. W. F., 12.15
COMPARATIVE ANATOMY..	Dr. Church (Jan.)..M. Th., 11	Mr. Galton (Sum.)..Tu. Th., 4	Dr. Cavafy (Summer)..M. F., 4.30	Dr. Pye-Smith (Summer)..M. F., 12.45	Mr. Rymer Jones....M. W. F., 4
HISTOLOGY	Mr. Vernon and Dr. Thorne Thorne (Sum.)	Dr. Silver	Dr. Noad (Summer)..M. W. Th. F., 10	Dr. Pye-Smith..W. F., 1 (Win.); Tu. F., 10 (Sum.)	Mr. Bloxam..M. W. F., 10.15
PRACTICAL CHEMISTRY ..	Mr. Matthiessen (Sum.) M. Tu. F., 11 to 1	Mr. Heaton and Mr. Francis (Sum.)..M. F., 10 to 1		Dr. Debus (Sum.)..M. W. F., 10 to 1	
PATHOLOGY AND MORBID ANATOMY	Dr. Gee, 1; Surgical Registrars, 2.30	Dr. T. H. Green (Summer)..W. F., 12	Dr. J. Ogle (Winter)..Th., 3; (Summer) Tu. Th., 3	Dr. Moxon.....Daily, 2.30 (Win.); S., 9 (Sum.)	Dr. Beale (Sum.)..Tu. Th., 4
OPERATIVE SURGERY ..	Mr. Langton and Mr. Marsh, Christmas vac. and Sum.	Mr. Barwell (Summer)	Mr. Rouse (Summer)	Mr. Bryant (Sum.)..W., 3	
OPHTHALMIC MEDICINE AND SURGERY ..	Mr. Power..Tu. F., 1.15		Mr. R. B. Carter (Win.)..W., 10	Mr. Poland and Mr. Bader..M., 8.45 (Summer)	Mr. Soelberg Wells (Sum.)..M. Tu. W. Th., 9
DENTAL SURGERY ..	Mr. Coleman....Jan. Feb. March, S., 10	Mr. Parkinson (Summer)	Mr. Vasey (Summer)..Tu. 10		Mr. Cartwright (Summer)..Tu. F., 9
DISEASES OF SKIN ..	Dr. Duckworth..F., 1.30	Dr. Beigel, Tu., 2.30	Dr. Barclay (Sum.)..Th., 2.15	Dr. Fagge..Tu., 12 (Win.)	Dr. Duffin..Tu.
VACCINATION	Dr. Gee & Dr. Duckworth, W.	Mr. R. W. Dunn	Obstetric Assistant..Th., 10	Dr. Phillips	Mr. R. W. Dunn
MISCELLANEOUS ..	<i>Psychological Medicine:</i> Dr. Thorne Thorne (Sum.) <i>Diseases of the Ear:</i> Mr. T. Smith..F., 2.30 Mr. Willett..W., 12.30 <i>Ophthalmosc. Demonstr.</i> Mr. Vernon..W., 2	<i>Clinical Demonstrations:</i> Dr. Pollock..Th., 4 <i>Psychological Medicine:</i> Dr. W. J. Huut (Sum.)..M., 12 <i>Case-taking:</i> Dr. Silver <i>Auscultation:</i> Dr. Green, Tu.	<i>Orthopædic Surgery:</i> Mr. Brodhurst (Winter)..Tu., 10 <i>Psychological Medicine:</i> Dr. Blandford (Sum.)..W., 3	<i>Experimental Philosophy:</i> Dr. Stevenson and Mr. Davies-Colley (Win.)..W., 12 <i>Hygiene:</i> Dr. Fagge <i>Operations on Eye:</i> Mon., 1.30 <i>Aural Surgery:</i> Mr. Hinton (out-p.)..Tu. 12	<i>Diseases of Throat and Laryngoscope:</i> Dr. Johnson, W. Chapcl..Daily, 10 <i>Divinity:</i> F., 10.15 <i>Principal's Lecture:</i> Daily, 1.15 <i>Tutor's Class:</i> (Win.)..M. W. F., 5; (Sum.) daily, exc. S., 9

GUIDE TO LONDON HOSPITALS AND MEDICAL SCHOOLS: 1870-71.

For further particulars regarding each Hospital and Medical School, see pp.

et seq.

LONDON HOSPITAL.	ST. MARY'S HOSPITAL.	MIDDLESEX HOSPITAL.	ST. THOMAS'S HOSPITAL.	UNIVERSITY COLLEGE AND HOSPITAL.	WESTMINSTER HOSPITAL.
Dr. Fenwick and Dr. Woodman..Tu. W. Th., 4 Mr. Rivington..M. Tu. Th. F., 3 Mr. Adams, Mr. Tay, and Mr. McCarthy..M. Tu. Th. F., 10 to 3 Dr. Letheby and Dr. Tidy..M. W. F., 10.30 Dr. H. Davies, Dr. Ramskill, and Dr. Down (before Chr.)..M. W. Th., 9.15; (after) Th., 9.15; M. F., 4 Mr. Hutchinson..Tu. F. S., 9 Dr. Davies..Tu. F., 8.30 Dr. A. Clark..M. Th., 1.30 Dr. Ramskill..W. S., 1.30 Dr. Down..Tu., 1.30 Dr. Head..Tu. F., 1.30 Dr. H. Jackson..M. Th., 1.30 Dr. M. Mackenzie..W. S., 1.30 Dr. Sutton..M. Th., 1.30 Dr. Fenwick..Tu. F., 1.30 Dr. Woodman..Tu. F., 1.30 Dr. Palfrey (obs)..W. S., 1.30 Mr. Hutchison..M. Th., 1.30 Mr. Maunder..Tu. F., 1.30 Mr. Couper..W. S., 1.30 Mr. Rivington..M. Th., 1.30 Mr. James Adams..Tu. F., 1 Mr. Tay..M. Th., 1.30 Mr. McCarthy..M. Th., 1.30 Mr. Reeves..Tu. S., 1.30 Mr. J. Adams, S. 9; Mr. Tay..W., 9 Mr. Barrett..Tu., 10 Dr. Clark..M. 2 (Oct.-Nov.); Dr. Ramskill..W. 3.30 (Nov.-Dec.); Dr. Down..Tu., 1.30 (Jan.-Feb.); Dr. Davies..M. F., 9 (Feb.-Mar.); Dr. Sutton..Tu. 2 (May); Dr. Jackson..M., 2 (June); Dr. M. Mackenzie..W., 2 (July) The Surgeons Dr. Head (Win. & Sum.) 2nd F. each mo., 2.30 Dr. Palfrey..W. S., 1.30 Wednesday, 2 Dr. Down..Tu. Th. F., 4 Mr. Baker..M. W. F., 11 Dr. Head..M. W. Th. F., 3 Mr. Rodgers and Dr. P. James..daily, exc. S., 10 Dr. Woodman (Sum.)..M., 4 Dr. Feuwick and Dr. Woodman (Sum.)..M. Th. S., 9 Dr. Letheby..(Sum.) M. Th. S., 9 Dr. Sutton (Win. and Sum.)..Th., 12.30 Mr. Maunder (Summer) Mr. Hutchinson (June)..Tu. F., 8 A.M. Mr. Barrett (March)..5 Mr. McCarthy..W., 9 Asst. Obstr. Phys. & Res. Accou. Diseases of Throat: Dr. M. Mackenzie (Sum.) Acoustics: Dr. Tidy Aural Surgery: Mr. Rivington and Mr. Reeves (out-p.) S., 9 Dental Operations: Mr. Barrett..Tu., 10	Dr. Broadbent and Dr. Lawson..M. Tu. Th. F., 9 Mr. Gascoyen and Mr. Norton..M. Tu. Th. F., 2.45 Mr. Norton, Mr. E. Owen, & Mr. Lidderdale..daily Dr. W. Russell..M. Tu. Th. F., 10.15 Dr. Chambers and Dr. H. Jones..M. W. Th., 4 Mr. S. Smith and Mr. J. R. Lane..Tu. F., 4; W., 3 Dr. Sibson..M. Th., 1.15 Dr. H. Jones..W. S., 1.15 Dr. Sieveking..Tu. F., 1.15 Dr. Tyler Smith..Tu. S., 1.30 Dr. Broadbent..M. Th., 1 Dr. Cheadle..Tu. F., 1 Dr. Lawson..W. S., 1 Mr. Lane..Tu. F., 1.15 Mr. S. Smith..M. Th., 1.15 Mr. Walton..W. S., 1.15 Mr. J. R. Lane (out-p.) Tu. F., 1 Mr. Gascoyen..M. Th., 1 Mr. A. T. Norton..W. S., 1 Mr. Walton..M. Th., 1.30 Mr. Sercombe, Mr. H. Hayward..Tu. Th. S., 9.30 Dr. Sibson..M., after visit Dr. H. Jones..alt. S., after visit Dr. Sieveking..alt. F., after visit Mr. Lane..Tu., after visit Mr. S. Smith..alt. Th., after visit Mr. H. Walton..alt. S., after visit Wednesday, 1.30 Dr. Cheadle..Tu. W. F. S., 12 Dr. Trimen..M. W. F., 9 Dr. Tyler Smith..daily, exc. S., 9 Dr. Randall..M. Tu. Th., 10 Mr. St. G. Mivart (Summer) W. F., 10 Dr. Lawson (Win.)..W. S., 12 Dr. Russell (Summer)..M. Th., 11.30; S., 9 A.M. Dr. F. Payne (Sum.) W. S., 11 Lecturers on Anatomy Mr. Walton (Sum.)..Th., 2.45 Dr. H. Jones & Dr. Cheadle..Th., 1.30; Dr. Cheadle..(lecture), Th., 3 (Summer) Mr. Gerrans Diseases of Throat: Dr. Sieveking and Mr. Norton..W. S., 12.30 Aural Surgery: Mr. Allen....Tu. F., 2; (lecture) F., 3	Dr. Ferrier..M. W. F., 4 Dr. R. Liveing..M. W. Th. F., 10 Dr. R. Liveing..daily, 11 to 4 Mr. Taylor and Mr. Heisch..M. W. F. S., 11 Dr. Murchison..Tu. Th. S., 9 Mr. De Morgan..M. W. F., 9 Dr. Goodfellow..M. W. F., 1.30 Dr. H. Thompson..Tu. Th. S., 1 Dr. Murchison..M. W. F., 1 Dr. Greenhow..F., 8.30 Dr. H. Davis (in-p.)..Tu. F., 1.30 P.M.; (out-p.) W. S., 1.30 Dr. J. R. Sanderson..M., 8 Dr. R. Liveing..Tu., 8.30 Mr. De Morgan..M. Th., 1 Mr. Nunn..Tu. F., 1; (cancer, out-p.)..Th., 1.30 Mr. Hulke..M. Th., 1 Mr. Lawson..Th. S., 1 Mr. H. Arnott..M. F., 1 Mr. Hulke (out-p.)..Tu. F., 8.30; (in-p.)..Tu. F., 1.30 Mr. Tomes & Mr. Turner..daily, 9 The Physicians..F., 3 The Surgeons..M., 3 Dr. Hall Davis..Tu., 10 Wednesday, 1 Dr. Brunton..M. W. F., 10 Dr. Cobbold..M. W. F., 4 Dr. Hall Davis..M. W. F., 9 Dr. Greenhow & Dr. Divers..Tu. Th. S., 9 Dr. Cobbold (Summer)..Tu. Th., 4 Dr. Cayley (Summer)..Tu. Th., 3 Mr. Taylor and Mr. Heisch..M. W. F., 11 Dr. Cayley and Mr. H. Arnott (Winter)..Tu. Th., 4 Mr. Nunn (Winter)..S. Mr. Hulke (clin.)..alt. Tu., 3 Dr. R. Liveing Mr. W. Pearse Bandaging, etc.: Mr. H. Arnott	Dr. Bristowe and Dr. Ord..M. Th. F., 4 Mr. Sydney Jones..M. F. S., 1; Th., 3 Mr. Rainey, Mr. Croft, Mr. Wagstaffe..daily, 9 to 3 Dr. Bernays..W. Th. F., 9 Dr. Barker and Dr. Peacock..M. Th., 2; W., 4 Mr. Solly and Mr. Le Gros Clark..M. F., 3; W., 12.45 Dr. Peacock Dr. Bristowe Dr. Clapton Dr. Barnes Dr. Gervis (obs.)..S., 1 Mr. Solly Mr. Le Gros Clark Mr. Simon Mr. S. Jones Mr. Croft Mr. Elliott The Physicians, after or during visits The Surgeons, after or during visits Dr. Barnes..Tu., 3 Wed., 1 P.M.; Sat., 9.30 Dr. Clapton..Tu. Th. F., 2 Dr. J. W. Hicks..M. W. Th., 12 Dr. Barnes..M. Tu. Th. F., 3 Dr. Stone and Dr. Gervis..Tu. F., 12; S., 8 A.M. Dr. Ord (Sum.)..Tu. Th., 1 Mr. Rainey (Winter)..Tu., 12.30 Dr. Bernays..Tu. Th., 10 to 12; F., 11; S., 10 to 1 Dr. Bristowe (lecture); Dr. Lees (demonst.)..9.30 Mr. S. Jones (Sum.)..M. F., 1	Dr. Sharpey..daily, exc. S., 10 Laboratory..daily, exc. S., 9 Mr. Ellis..daily, 12 [to 4 Mr. Ellis, Mr. R. Parker, and Mr. G. D. Thane Dr. Williamson..daily, exc. S., 11; (exerc.) Tu. W. Th. F., 9 Dr. Reynolds...daily, exc. M., 9 Mr. Marshall..Tu. W. F., 4 Sir W. Jenner, Bart. Dr. Reynolds Dr. Wilson Fox Dr. Ringer [S., 9 Dr. Tilbury Fox (skin inf.) Dr. Graily Hewitt Dr. C. Bastian Mr. F. T. Roberts, M.B. Mr. Erichsen Mr. Marshall Sir H. Thompson Mr. Berkeley Hill Mr. C. Heath Mr. Wharton Jones..M. W. F., 1 Mr. Ibbetson..W., 10 Sir W. Jenner & Dr. Reynolds..M. Tu. Th. F., 1 to 3 Dr. W. Fox (Holme Professor)..twice weekly Mr. Marshall and Sir H. Thompson..M. W. S., 1 to 3 fortnightly or oftener Mr. Erichsen (Holme Prof.) twice weekly Dr. G. Hewitt..fortnightly 1 and 2 daily Dr. Ringer..daily, exc. M., 10 Mr. Oliver..daily, exc. S., 8 A.M. Dr. Graily Hewitt..M. Tu. Th. F., 9 Dr. Maudsley..Tu. W. Th. F., 10 Dr. Grant (Winter)..daily, exc. S., 3 Dr. Burdon Sanderson (Winter)..S., 10 to 1 Dr. Williamson (Sum.) elem., Tu. W. Th. F., 11; sen. M., 10 Dr. Bastian (Summer)..M. W. F., 4 Mr. Heath (Sum.)..daily, 3 Mr. W. Jones (Sum.)..Tu. Th.; clin. lect. alt. weeks Mr. Ibbetson (Winter)..M. Th., 4; clin..W., 10 Dr. Tilbury Fox..fortnightly [Pearse Dr. G. L. Cooper or Mr. W. Surgical Apparatus: Mr. B. Hill (Winter)..M. Th., 4; also Summer Mental Diseases: Dr. Sankey (Summer)..Tu. W. Th., 11; (clin.) Tu., 2 Hygiene and Public Health: Dr. Corfield (Sum.) M. F., 11	Dr. Maclure..M. F., 3; W., 4 Mr. Mason & Mr. Pearse..Tu. W. Th. F., 9 Mr. Pearse..daily, 10 to 1 Dr. Dupré..Tu. Th., 3; F., 13.30 Dr. Basham & Dr. Anstie..M. Th. F., 4 Mr. Holthouse and Mr. Mason..Tu. W. Th., 3 Dr. Basham..M. Th., 1.30 Dr. Fincham..W. S., 1.30 Dr. Radcliffe..Tu. F., 1.30 Dr. F. Bird..Tu. F., 3 Dr. Anstie..M. Th., 1 Dr. Gibb..Tu. F., 1 Dr. Sturges..W. S., 1 Dr. Potter (obs.) Mr. Holt..M. Th., 1.3 Mr. Holthouse..W. S., 1.30 Mr. Hillman..Tu. F., 1.30 Mr. Mason..M. Th., 1 Mr. Pearse..W. S., 1 Mr. Cowell..Tu. F., 1 .. Mr. Walker..W. S., 9.30 The Physicians..weekly The Surgeons..weekly Dr. Anstie..M. Th. F., 3 Mr. Beunett..M. W. F., 9.30 Dr. F. Bird..Tu. Th. F., 4 Dr. Gibb & Dr. Sturges..Tu. W. F., 3 Mr. Carter Blake..W. S., 11 Dr. Dupré (Summer)..Tu. Th., 10 Dr. Lee and Mr. Davy Mr. Mason (bandaging, etc., Summer)..Th. Th., 9 Mr. J. Walker..W., 9.30 Dr. W. Pearse Natural Philosophy: Mr. Brooke (Summer)..Tu., 3

[Continued from p. 285.]

Subject of Examination, Bishop Butler's Analogy.—Bentley Prize, for the best Report of not less than Twelve Medical Cases occurring in the Wards of the Hospital during the previous year.—Foster Prize, for Practical Anatomy—Senior.—Treasurer's Prize, for Practical Anatomy—Junior.—The Kirkes Gold Medal for Clinical Medicine.—The conditions under which the Exhibitions, Scholarships and Prizes are awarded, will be found in the Prospectus of the Hospital.

Appointments.—Four House-Physicians and four House-Surgeons (who must be qualified to practise) are appointed annually. Fee, £26 5s. Each of these officers is provided with rooms, and receives a salary of £25.—The Midwifery Assistant is appointed every six months. He must possess a diploma. He is provided with rooms.—Sixteen Dressers to the surgical in-patients and the Surgical Casualty Department are selected each year from the students (of the second year) who pass the best examination in the subjects of study of the first and second years, or who may be otherwise specially recommended. Other Dresserships may be obtained by payment of the usual fees. The Clinical Clerks to the medical in-patients, and the Clerks to the Physician-Accoucheurs, are chosen from the most diligent students.—Clerks to the Assistant-Physicians and the Assistant-Surgeons are selected to attend in the out-patient rooms.—Clerks are also selected for the Special Departments.

All first year's students are arranged in classes, and are required to attend the Surgical Wards. Elementary Practical Instruction is given by the Assistant-Physicians in the Medical Wards.

The *Clinical Practice* of the Hospital now comprises 676 beds: of these, 227 are allotted to the Medical Cases, 322 to the Surgical Cases, 26 to Diseases of the Eye, 20 to the Diseases of Women, and 81 to the Syphilitic. Children are admitted into both the Medical and Surgical Wards, those under five years of age being received into the Female Wards.

Examinations.—Students preparing for their Examinations are arranged in classes, and examined by the Lecturers and Demonstrators.

CHARING CROSS HOSPITAL.—First year: *a, b*, £4 4s.; *c, g*, £3 3s.; *d, l*, £5 5s.; *i, l*, £2 2s.; H. P., £10 10s.; Matriculation, £2 2s.—total, £36 15s. Second year: *a, b, c, k, n*, £2 2s.; *e, f, h, j*, £3 3s.; H. P., £10 10s.—total, £31 10s. Third year: *e, f*, £2 2s.; H. P., £10 10s.—total, £14 14s. Matriculated students receive a deduction of eight per cent. H. P., Matriculated students, for full period required by Examining Boards in London, £31 10s.; Non-matriculated students, either Medical or Surgical, 3 months, £6 6s.; 6 months, £10 10s.; 12 months, £15 15s.; full period, £21; both Medical and Surgical, 3 months, £10 10s.; 6 months, £15 15s.; 12 months, £21; full period, £31 10s. For a longer period, £5 5s. for each additional winter, and £3 3s. for each additional summer session.

Gentlemen who enter for their entire medical education at Charing Cross Hospital (Matriculated Students) enjoy certain privileges. They pay a proportionately lower amount of fees. They alone are eligible for the offices and appointments tenable by pupils. They are admitted to the use of the Library and Reading Room. They also attend, without additional fee, the special courses of practical instruction in Clinical Medicine, Clinical Surgery, and in Bandaging, as well as the Clinical and the Pathological Demonstrations; and the Lectures on Psychological Medicine. They are specially instructed in the use of all the instruments of modern scientific research—the Microscope, the Ophthalmoscope, the Laryngoscope, etc. They alone are entitled to compete for the Scholarships, Medals, and Prizes.

Students who enter to the Charing Cross Hospital College from other Medical Schools for the remainder of their education are allowed to matriculate. Students (non-matriculated) may enter for one or more separate courses, or to the Hospital Practice. Such students are admitted to the Library on terms proportioned to the period for which they enter.

Scholarships, Medals, and Prizes.—The Llewellyn Scholarship of £25, open to all Matriculated Students who have just completed their second academical year. Examination at the end of the second Summer Session, in Descriptive and Surgical Anatomy, Physiology, Materia Medica, Medicine, Surgery, Midwifery.—The Golding Scholarship of £15 a year, tenable for two years, open to all Matriculated Students who have just completed their first academical year. Examination at the end of the first Summer Session, in Descriptive Anatomy, Physiology, Materia Medica, and Chemistry.—The following Medals are awarded annually: The Gold Medal, for General Proficiency; the Governor's Clinical Silver Medal; Silver and Bronze Class Medals in all the Classes.—Free Scholarships are awarded to sons of professional men of reduced circumstances and position, or of gentlemen in a corresponding station of society. Two of the Free Scholarships are annu-

ally placed at the disposal of the authorities of the Royal Medical Benevolent College, for Foundation Scholars who shall have passed in the first class at the University of London Matriculation Examination.

Residence.—Arrangements have been made with several medical gentlemen and others residing in the neighbourhood of the Hospital, to receive students as inmates.

Appointments.—The office of Medical and Surgical Registrar to the Hospital is opened to students of Charing Cross Hospital who are doubly qualified. The salary is £50 a year; and it may be held for two years. The offices of House-Physician, House-Surgeon, and Resident Accoucheur, with six months' rooms and commons in the Hospital, are awarded to senior students (qualified men being preferred), after competitive examination.—Clinical Clerks and Dressers are appointed by competitive examination for three months.—Each Physician has two, and each Assistant-Physician three, Clinical Clerks. Each Surgeon and Assistant-Surgeon has three Dressers.—A Pathological Assistant is appointed for three months.

The *Library* contains the standard Medical and Surgical Works and the current Medical Periodicals, and is furnished with a Cabinet of Materia Medica and Osteological Preparations. It is open daily from 9.30 A.M. to 4.30 P.M.

ST. GEORGE'S HOSPITAL.—Perpetual Fee, £105,* or £115 10s. from those who have paid by instalments.—Aggregate Fees, £42 for first year, £42 for second year, and £10 10s. for each succeeding year.† Lectures and Hospital Practice for Diploma in Dental Surgery, £45 (none of these fees include Practical Chemistry).—Separate Classes—*a, b, c, f*, single, £6 6s.; perpetual, £7 7s.; *d*, single, £6 6s.; perpetual, £8 8s.; *g, h*, single, £4 4s.; perpetual, £5 5s.; *i*, single, £5 5s.; perpetual, £6 6s.; *j*, single, £3 3s.; perpetual, £4 4s.; *k*, single, £4 4s.; *n*, single, £5 5s. H. P.—Physicians', 6 months, £8 8s.; 3 years, £16 16s.; perpetual, £25 4s.; Surgeons', 6 months, £15 15s.; 3 years, £21; perpetual, £42.—House-Physician and House-Surgeon, each £50 per annum for board and residence.

Medical Tutor.—The studies of the pupils will be superintended by a medical tutor, who will hold periodical Examinations of all the students three times a week, especially those who are preparing for Examination. Each student will pay one guinea per annum. Five guineas, in addition, will be charged for instruction in the special subjects required for each Examination at the University of London.

Hospital Appointments.—A House-Physician is appointed annually, and a House-Surgeon half-yearly, from among the perpetual pupils. An Assistant House-Physician and an Assistant House-Surgeon are also appointed half-yearly from among the perpetual pupils; they aid in the out-patient department.—The Obstetric Assistant, who must be a legally qualified practitioner, is appointed annually. He resides and boards in the Hospital, and receives a yearly salary of £100.—An Orthopaedic Assistant is appointed from time to time from among the senior pupils.—A Curator of the Pathological Museum, and a Medical and a Surgical Registrar, are appointed annually from among the senior pupils, each with a salary of £50. One of the pupils is appointed to assist the Curator in performing *post mortem* examinations.—A paid Demonstrator of Anatomy is appointed annually from among the senior students.

Clinical Instruction.—The pupils of the Hospital are divided into classes under the superintendence of the Physicians and Surgeons in rotation, and are placed in charge of cases as clerks and dressers.

The *Library* and *Reading-room*, and the *Museum*, are open daily. Annual subscription to Library, 10s. 6d.

Exhibitions and Prizes.—The William Brown Exhibition, for general fitness and moral conduct, £40 per annum, tenable for three years. Candidates must have commenced their third but not completed their fourth Winter Session.—Sir Charles Clarke's Prize, interest of £200 annually, for good conduct.—The Thompson Silver Medal for the best Clinical Report (with observations) of Medical and Surgical Cases (not more than twenty in each department) observed in the hospital during the preceding year.—Sir Benjamin Brodie's Clinical Prize in Surgery, for the best Report (with notes) of not more than twenty Surgical Cases in the Hospital during the preceding twelve months.—Dr. Acland's Clinical Prize in Medicine, for the best Record of not more than twelve

* Perpetual Pupils are entitled to admission to the practice of the Physicians and Surgeons, to all the Lectures (except Practical Chemistry), to compete for all Prizes and exhibitions, to hold the appointments of House-Physician, House-Surgeon, and Assistant House-Surgeon, and to become Clinical Clerks for two periods of three months each, and Dressers for two similar periods. This payment must in all cases be made at the time of entry.

† By payment of these Fees, a Pupil is entitled to hold the offices of Clinical Clerk and Dresser, but not to become House-Physician or House-Surgeon, or to compete for the "William Brown Exhibition" and the "Clinical" Prizes.

Cases of disease treated in the preceding twelve months.—The Henry Charles Johnson Memorial Prize, for Practical Anatomy.—General Proficiency Prizes: £10 10s. for students of each year. Subjects: First year, Anatomy, Physiology, Chemistry, and Botany; Second year, Anatomy, Physiology, Chemistry, and Materia Medica; Third year, Medicine and Surgery, Pathology, and Midwifery.

GUY'S HOSPITAL.—First year, £40; second year, £40; each succeeding year, £10. Perpetual ticket, £100. Materials used in practical courses are charged extra. Separate Courses: *a, b, c, d, e, f, h, g*, each course, £5 5s.; *g, i, k, l, m, r*, each course, £4 4s.; Natural Philosophy, £4 4s.; H.P., either Medical or Surgical, 3 months, £10 10s.; 6 months, £15 15s.; perpetual, £26 5s.

Prizes.—Voluntary Examinations are held as follows. 1. At entrance, in Elementary Classics, Ancient and Modern History, and Mathematics. The first three of the successful candidates receive £25, £20, and £15. The entrance Examination will commence on October 11th. 2. At end of first year, in Anatomy, Physiology, Chemistry, Materia Medica, and Botany. Three prizes of £30, 25, and £10 10s. 3. At end of second year, in Anatomy and Physiology, Medicine, Surgery, Midwifery, Chemistry, and Therapeutics. Two prizes of £35 and £30. 4. At end of third year, in Medicine and Surgery, Midwifery (theoretical and practical), and Medical Jurisprudence. Two prizes of £40 and £35. Honorary Certificates are given to those gentlemen who pass creditable Examinations. Special Certificates are given to gentlemen who have attended 100 cases of Midwifery.—Two Gold Medals given annually by the Treasurer to Students who have completed the third and not exceeded the fourth year for proficiency in Clinical Medicine and Clinical Surgery.*

Clinical Instruction.—Two Wards, containing together forty beds, are especially devoted to Clinical teaching in Medicine. The care of these wards is taken by the Physicians in rotation during the winter, and by the Assistant-Physicians during the summer. The Surgeons lecture upon selected cases during the winter, the Assistant-Surgeons carrying on similar work during the summer. The Obstetric Physicians, and the Ophthalmic, Dental, and Aural Surgeons, also give clinical and practical instruction in their several departments.

All the cases admitted into the Hospital are reported by Ward-Clerks and recorded by the Registrars.

The Out-Patient Department supplies an extensive field for the observation of Obstetric, Cutaneous, Infantile, and Syphilitic Diseases, as well as general Diseases and Accidents.

Cots are distributed throughout the female wards for the accommodation of Children. This plan of distributing the children's beds has been adopted, as being considered preferable to that of collecting them into wards by themselves.

The Wards constantly contain a considerable number of instructive Orthopædic cases.

Wards containing thirty beds are devoted to Ophthalmic Surgery, and the patients in these have their special Dressers. Of late years the Eye Department of the Hospital has been greatly extended, a room has been specially fitted up for the performance of operations on the eye, and another large apartment has been darkened, and provided with lamps, for learning the use of the Ophthalmoscope.

A Surgeon has likewise been appointed to treat especially Diseases of the Ear.

Every facility and encouragement is given to the Students for clinical study and reporting. All Students have opportunities of becoming Ward-Clerks to the Physicians and Surgeons.

Under the superintendence of the Registrars, accurate records are taken and preserved of all cases admitted into the Hospital.

Arrangements have been made for the delivery every year during the Summer Session of a course of Lectures on Hygiene.

Pupils' Appointments.—All these appointments are given according to the respective merits of the Candidates, and without payment.

The House-Physicians are appointed by the Treasurer, four in each year. They hold office for a period of six months each—three months as Junior, three as Senior. The Senior House-Physician has separate rooms in the Clinical Building, and is boarded at the charge of the Hospital.—The House-Surgeons are appointed by the Treasurer—six every year. Each holds office for a period of four months, acting as junior for the first two, and as senior for the last two, months of his term. The Junior House-Surgeon is provided with commons. The Senior House-Surgeon resides in the Hospital and is boarded free of expense.—The Clinical Clerks are selected from those Students who

have been Medical Ward-Clerks.—The Dressers are selected from those gentlemen who have completed their third winter session, and who have been Surgical Ward-Clerks. They hold office for six months each. Three are attached to each Surgeon. During their weeks of special duty they reside in the Hospital, and board free of expense.—The Dressers in the Eye-Wards hold office for four months each.—The Obstetric Residents, two in number, reside and are boarded in the Hospital. Each holds office for two months—one month as junior and one month as senior.—The Assistant-Surgeons' Dressers and Dressers in the Surgery are also appointed for a period of three months.—Dressers are also appointed to the Dental and the Aural Surgeon respectively for two months.—The *Post Mortem* Clerks are selected from Students who have completed their second year. They hold office for two months each.—Extern Obstetric Attendants are appointed monthly to attend the cases of Midwifery, in addition to the Casual Attendants.—The Reporters or Ward-Clerks are chosen from those Students who have been diligent in their earlier studies.—Clerks to the Assistant-Physicians and Assistant-Surgeons are also appointed.—A Special Honorary Certificate is given to every gentleman who has diligently performed the duties of the various offices to which he may have been appointed.

School Department. There are two Lecture Theatres, Museums of Anatomy, Pathology, and Comparative Anatomy, Model-rooms, Dissecting-rooms, a Museum of Materia Medica, Chemical Laboratories, and a Library.

The Museum of Human Anatomy is divided into Anatomical and Pathological Departments. The Anatomical Department contains about 2,000 preparations of the various organs and tissues. There are a valuable series of skulls of different races; a section devoted to the teeth; various dissections of the brain, spinal cord, and nerves; and a series of injected preparations shewing the ovum in course of development. The wax models of the different regions and organs contained in this division present most complete and minute representations of the anatomy of the human body. There are thirty models of the brain shewing different sections through various parts of the organ, and thirty-nine illustrating its development from the earliest foetal conditions, and the arrangement of the cerebral convolutions in the principal varieties of the human race. The organs of sense are fully illustrated, especially the ear. The entire distribution of the nervous system is shewn, as well as the various other systems of the body.

The Anatomical Model Room also contains the numerous specimens which have accompanied the successful "Astley Cooper Prize Essays."

The Pathological Department is divided into twelve sections, and contains upwards of 5,000 specimens, with more than 2,000 drawings. This department has been greatly enriched by a series of models, upwards of 600 in number, illustrating the varieties of diseases of the skin. There are also numerous wax models, representing the effects of different poisons on the stomach, marks of violence on the body, the state of the lungs of new-born children, etc.

In the Microscope Room numerous instruments are kept, with several hundred specimens of the various structures of the body, presenting a complete histological series. Another room contains the volumes of records of the *post mortem* examinations. Besides the preparations and drawings before named, there are about 2,000 diagrams for the use of the Lecturers, and also over 330 pathological casts in plaster.

The Museum of Comparative Anatomy contains 2,900 specimens.

The Dissecting Room is well lighted, warmed, and ventilated, and in all respects adapted for its purpose.—In the Physiological Laboratory experiments are prepared for practically illustrating the lectures on Physiology.

The Museum of Materia Medica contains specimens of the drugs in general use under the different forms ordinarily met with in commerce, of their various preparations, and also of their principal adulterations. A Laboratory is adjacent, in which the experiments, etc., are prepared for the lectures on Chemistry and Medical Jurisprudence.

The Library contains upwards of 5,000 volumes, and is supplied with weekly, monthly, and quarterly journals of Medicine, Natural History, and Philosophy. It is open to the Students daily, from 9 A.M. to 5 P.M.

The Pupils' Physical Society meet on alternate Saturdays, at seven in the evening. A prize of £10 from the funds of the Society is given at the end of the session to the member who sends in the best essay and report of cases. A second prize of £10 is given to the member who is judged to have read the best essay before the Society.

KING'S COLLEGE AND HOSPITAL.—Aggregate Fee for Matriculated Students, £105.* The payments may be made by payment of £100 on Entrance; or £52 10s. on Entrance, £42 at the beginning of the

* Subjects: Commentary on a case in Medicine, and Clinical Examination; Commentary on a case in Surgery, and Clinical Examination; Examination in Practical Medicine and Surgery, including Chemical and Microscopical Examinations, the Operations of Surgery on the Dead Subject, and the Application of Apparatus.

* Students are recommended to add £2 2s. for a second course of Chemistry, and £3:3 for Medical Tutor's fee. Attendance on the Medical Tutor is compulsory on resident Students during their first year.

second Winter Session, and £10 10s. at the beginning of the third Winter Session. For each additional year, £10 10s.—Separate Classes, *a, b*, single, £7 7s.; unlimited, £10 10s.; *d*, single, £8 8s.; perpetual, £10 10s.; *e*, single or unlimited, £7 7s.; *f, h*, single, £6 6s.; perpetual, £7 7s.; *g, i, k*, single, £4 4s.; unlimited, £5 5s.; *l*, single, £5 5s.; perpetual, £8 8s.; *m*, single, £3 3s.; unlimited, £4 4s.; *n*, single, £2 2s.; *o*, single, £6 6s.; unlimited, £8 8s.; *p*, single, £3 3s. Tutor's Class, each Session, £3 3s. H.P.—Perpetual for Matriculated Students, £31 10s.; non-matriculated, £42. Medical Practice—3 months, £6 6s.; 6 months, £10 10s.; 18 months, £15 15s.; perpetual, £21. Surgical Practice—3 months, £10 10s.; 6 months, £15 15s.; 12 or 21 months, £21; perpetual, £26 5s.

The Students received into the Medical Department are—1. Matriculated Students, or those who (with certain exceptions) receive their entire Medical education at King's College. They alone can fill Hospital offices, and most of the Scholarships and special prizes are limited to them. 2. Occasional Students, or those who enter to one or more particular classes.

The Medical Tutor assists the Students living in the College, as well as the non-resident Students, in the subjects of the Lectures of their first Winter and Summer Session.

Clinical Instruction is given by the Physicians and Surgeons daily at the bedside in the Wards, and Clinical Lectures are delivered three times a week.—Clinical Instruction is also given daily in the Out-patient Department by the Assistant-Physicians and Surgeons; and Tuesday, Thursday, and Friday have been set apart in each week for special Clinical Instruction by the Assistant-Physicians.—Clinical Instruction in the Diseases of Women and Children is given in the Wards, and in Lectures upon the cases, by the Physician-Accoucheur, and in the Out-Patient Department by the Assistant-Physician Accoucheur. A large number of Labours are attended annually by the Students. A special Ward is appropriated to the reception of Diseases of Children.—Practical Instruction in Dental Surgery is given three times a week by the Surgeon-Dentist; and Clinical Lectures on Dental Surgery are delivered during the Winter Session.—Clinical Instruction in Diseases of the Eye, and Ophthalmoscopic Demonstrations, are given in the Wards and in the Out-patient Department by the Ophthalmic Surgeon. Beds are specially appropriated to the reception of Eye-cases. Clinical Lectures upon Ophthalmology are also given during the Winter Session.—Clinical Instruction in Throat-Diseases, and Laryngoscopic Demonstrations, are given every Wednesday by Dr. Johnson.—Clinical Instruction in Skin-Diseases is given every Tuesday by Dr. Duffin in the Out-patient Department. Demonstrations on Skin-Diseases are also given every alternate Tuesday by Dr. Duffin.—Demonstrations and Practical Instruction in Morbid Anatomy are given by the Physicians, Surgeons, and Registrars, in the *Post Mortem* Theatre of the Hospital.

Vaccination.—Arrangements have been made by which Students may obtain Practical Instruction and Certificates in Vaccination by the payment of a small fee.—Special Instruction is given in Medical Chemistry and the Microscope in the Wards of the Hospital, and in the Theatre, by the Physicians.

The Museums of Anatomy, Materia Medica, Natural History, etc., are open daily from 10 till 4.

Resident Medical Officers, Clinical Clerks, and Dressers, are all chosen by Examination from Matriculated Students who are pupils at the Hospital.

A permanent record of every case received into the Hospital is kept by the Medical and Surgical Registrars.

Scholarships and Prizes.—The sum of £200 is set apart annually, in consideration of £5000 presented to the College by the late Rev. S. W. Warneford, LL.D., for Scholarships to Matriculated Students of this department; viz.: Two Scholarships, £25 *per annum* for three years, for the encouragement of previous education; and one Scholarship of £25 *per annum*, for two years, for Resident Medical Students.*—Col-

lege Scholarships given yearly to Matriculated Students—One of £40 for two years, open to Students of the third and fourth year; one of £30 for one year, open to Students of the second year; three for £20 for one year, open to Students of the first year.—The Daniell Scholarship, £20 *per annum* for two years, open to every Student who has worked at the Laboratory for at least six months.—Sambrooke Registrarships, annual value £50, tenable for two years, open to all Matriculated Students who have filled any one of the higher appointments of the Hospital, or who have become Associates.—Leathes' Prizes: Interest of £300, applied in purchase of a Bible and Prayer-Book, as Annual Prizes to two Matriculated Students.—Warneford Prizes: £40 in Medals and Books, as Prizes to two Matriculated Students.—Class Prizes: Books of the value of £3, in each subject, are awarded annually for proficiency in Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Medicine, Obstetric Medicine, Botany, Forensic Medicine, Comparative Anatomy, and Practical Chemistry. Certificates of Honour are also given. All Students can contend for the Class Prizes.—Two Medical Clinical Prizes, one of £3 for the Winter Session, and the other of £2 for the Summer Session; and two Surgical Clinical Prizes of the same value.—Todd Medical Clinical Prize: A Bronze Medal and Books to the value of Four Guineas.—Jelf Medal, to the Candidate of the Senior Scholarship Examination who is second in order of merit.

Associates of King's College.—At the end of each Winter Session, the Professors recommend to the Council the names of Medical Students to be elected Associates.

Residence.—Rooms are provided within the College for the residence of a limited number of Matriculated Students. The cost of the academical year varies from £50 to £60. Some of the Professors, etc., receive pupils into their houses. The Council have also sanctioned a limited number of medical gentlemen, residing in London or its immediate neighbourhood, to receive pupils into their houses.—There is a Dining Hall in the College, for the accommodation of the resident Students, and for such other Students as may desire to avail themselves of it.

LONDON HOSPITAL.—Aggregate Fee, £88 4s., payable in two instalments of £44 2s. each, at the commencement of first and second years.—Perpetual Fee for Lectures alone, £48; for both Lectures and Hospital Practice, £98 14s., payable in two instalments of £49 7s. each, or two of £44 2s. each, and one of £10 10s. Composition Fee for Gentlemen who have spent their first year elsewhere, £66 3s., payable in two equal instalments. Students who have paid the general aggregate fee can become perpetual at any time by paying the additional £10 10s. Extra Fees: Subscription to Library (compulsory) £1 1s.; Practical Pharmacy, £4 4s. Separate Classes: *a, h*, one session, £4 4s.; unlimited, £6 6s.; *b, c*, one session, £5 5s.; unlimited, £8 8s.; *d*, one session or unlimited, £7 7s.; *e, f*, one session, £5 5s.; unlimited, £6 6s.; *g, i, k, m, r*, one session, £3 3s.; unlimited, £4 4s.; *l*, one course to Students of Schools, £2 2s.; to others, £3 3s.; *n*, one year, £3 3s.; perpetual, £6 6s.; *o*, one course, £2 2s.; Diseases of Throat, and Diseases of Eye, each, one course, £2 2s.; unlimited, £3 3s.—H.P.—Medical: 6 months, £6 6s.; period required by Apothecaries' Hall, £12 12s.; unlimited, £21. Surgical Practice and Dressing: 6 months, including 3 months' Dressership, £8 8s.; 12 months, including 6 months' Dressership, £12 12s.; 18 months, including 12 months' Dressership, £18 18s.; 3 years, including 12 months' Dressership, £26 5s.; 3 years, including 2 years' Dressership, £3 10s.; 12 months' Dressership after the expiration of the above 3 years, £8 8s.

The Anatomical and Pathological Museum, the Materia Medica Museum, and the Library, are open daily.

* Two Scholarships, of the value of £25 *per annum* each, to be held for three years, will be given in October 1870. Candidates must be Matriculated Students of the Medical Department, and also perpetual Pupils of the Hospital. Their first Winter Session must commence in October 1870. The Examination will be in the following subjects. 1. Divinity: Old Testament History; The Gospel of St. John in Greek; The Church Catechism, with explanations. 2. The Greek and Latin Classics: Homer, *Odyssey*, book xi; Livy, book i. 3. English Language and History: Shakespeare, *King Lear*; The Reign of Queen Elizabeth. 4. Mathematics: Arithmetic; Algebra, as far as and including Quadratic Equations; Euclid, book i; book ii, except props. 8, 9, 10; book iii. 5. The Modern Languages: French, Montesquieu, *De la Grandeur et de la Décadence des Romains*; German, Schiller, *Jungfrau von Orleans*. An equal number of marks is assigned to each of the five subjects. A want of a sufficient knowledge in Divinity absolutely disqualifies for further examination; but candidates may omit any other subjects which they think proper. For further particulars respecting the Examination, etc., for these Scholarships, see the King's College Calendar. The days of Examination for 1870 are September 28, 29, 30, and October 1.—One Scholarship will be awarded at the close of the month of July, 1871, of the value of £25

per annum, to be held for two years. This Scholarship is open to all Second Year Matriculated Students of the Medical Department, being also perpetual Pupils of the Hospital, who, during at least six months of their first academical year, and the whole of their second academical year, have resided within the limits of the College, and who produce to the Principal certificates: (1) of good conduct from the Censor, or from the Physician or Surgeon with whom the candidate has been residing; (2) of regular attendance on the Sunday and daily chapel service; (3) on the Divinity Lectures, from the Chaplain; and (4) of satisfactory attention to the regular medical studies, from the Dean of the Department. The Examination for 1870 will be in the Books of Kings, the Epistles to the Corinthians, Westcott's *Bible in the Church*. Candidates will be required, at the time of examination—1. To write from memory the particulars of four cases which shall have been treated in the Hospital during the previous academical year. Each Candidate may select his own cases; but no two cases selected by him may be taken from the practice of the same physician or surgeon. 2. To give, in writing, with the aid of notes taken by himself at the time, the substance of four of the Clinical Lectures which shall have been delivered in the Hospital by the medical officers thereof during the previous academical year. The Lectures to be selected by the Examiners. 3. To answer, either *visà voce* or in writing, as the Examiners may direct, four questions on cases which shall have occurred or been treated within the Hospital, in the practice of the physicians and surgeons thereof, in the current session.

Scholarships and Prizes.—Seven Scholarships will be offered for competition during the ensuing Winter Session. 1 and 2. Two Buxton Scholarships, value £30 and £20, will be given in October to the two students who pass the best Examination in the subjects appointed by the General Council of Medical Education and Registration as the subjects of Preliminary Education.* These Scholarships are open to all full Students of less than three months' standing, who have received their cards of admission to the Lectures and Practice. 3. A Scholarship, value £20, to the first year student who shall pass, in December 1870, the best Examination in Human Osteology. 4. A Scholarship, value £25, to the first year student who shall pass at the end of the Winter Session the best Examination in Anatomy, Physiology, and Chemistry. 5, 6, 7. Hospital Scholarships, value each £20, for proficiency and zeal in Clinical Medicine, in Clinical Surgery, and in Clinical Obstetrics. The Examinations for these Scholarships will take place at the end of the Winter Session.—The Duckworth Nelson Prize, value £10, at the end of the Winter Session, 1871, open to all students who have not completed their education; subjects, Practical Medicine and Surgery.—Money Prizes to the value of £60 *per annum* to the most meritorious of the Dressers in the Out-patient Rooms.—Special Certificates to those gentlemen who have faithfully performed their duties in the Hospital, and to those who have distinguished themselves at the Examinations.

Appointments.—A Resident Medical Officer, qualified to practise Medicine, who receives £75, is appointed for twelve months. He is eligible for re-election, and then receives £100. A Junior Resident Medical Officer is appointed every six months. Four Medical Assistants, one for each Physician, are appointed every three months. Ward Clerks and Clinical Clerks are also appointed to take notes of cases.—A Resident Accoucheur is appointed for six months. He is the Clinical Assistant to the Obstetric Physician.—All Students who have attended a course of instruction in Midwifery can have cases assigned to them. Gentlemen who have attended 100 cases are entitled to a Special Certificate.—Four House-Surgeons are elected, usually for six months. In cases of great merit they are eligible for re-election for three months.—Two Dressers reside and board in the Hospital every week. Every Student has the opportunity of acting as Dresser to the In-patients under all the Surgeons. Every General Pupil is entitled to act as Dresser for twelve months.—Any Student may become a Dresser to Out-patients; and, if he perform the duty for twelve months, is eligible to compete for one of the money prizes.—Two Clinical Assistants are appointed every three months for the Medical Out-patients, and two for the Surgical Out-patients and the Patients attending in the Special Departments. They are eligible for re-election. Each receives a salary of £40 *per annum*.—A Medical Registrar and a Surgical Registrar are appointed annually; the former receives 25, the latter 35, guineas.—An Assistant-Dentist, *Post Mortem* Clerks, and two Prosectors of Anatomy, are also appointed.

Full Pupils are eligible for all Scholarships, Prizes, and Appointments.

Students who have commenced elsewhere, but who, at or before the beginning of their second Winter Session, enter to both Hospital and College for the remainder of their curriculum, paying the Composition Fee, will be considered eligible for the Dresserships, for three months as House-Surgeon, and for the offices of Ward Clerk, *Post Mortem* Clerk, Maternity Pupil, Clinical Assistant, and Registrar.

All the appointments are open to Students without fee. The holders of all Resident Appointments are provided with rooms and board free of expense.

Clinical Instruction.—Two Medical Wards—one for male and the other for female patients—containing together thirty beds, have been set apart for Clinical Teaching, under the care, during the Winter Session, of three Physicians in rotation, and in Summer of the three Senior Physicians or Assistant-Physicians having the care of Out-patients. The Clinical Professor will meet his Class twice a week; once for Bedside Instruction, and at the other visit for a Clinical Lecture in addition to such instruction. Bedside Instruction will also be given in the General Wards by the Physicians not on special Clinical duty. Students requiring signatures for Medical Practice must attend the Clinical Professor for the time being; their attendance will be ascertained by calling the roll.—Dr. Davies will hold in the Summer a Class for Practical Auscultation and Percussion.

In the Out-patient Department, the Physicians and Assistant-Physi-

cians impart instruction at each visit, including Practice in Auscultation and other means of Physical Diagnosis.

A Room has been fitted up with Microscopes and Chemicals for the use of the Physicians, the Resident Medical Officers, and the Assistants and Clerks.

The Surgeons make Clinical Observations on the cases under their care; and a Clinical Lecture is given once a week.

Special Departments.—There are Departments for Instruction in Obstetric Medicine and Surgery, Vaccination, Diseases of the Eye and the Use of the Ophthalmoscope, Diseases of the Ear, Diseases of the Skin and of the Throat, Syphilis and Local Contagious Diseases, and Mental Diseases. Students desirous of obtaining a practical knowledge of Mental Diseases can attend, without additional fee, the Practice of Dr. Millar, Superintendent of the Bethnal House Asylum.

A Course of Instruction in Practical Pharmacy is given.

ST. MARY'S HOSPITAL.—Aggregate Fee, £89 5s. in instalments, or £84 in one sum.—Fee for all Lectures required for ordinary Examinations, £52 10s.; for Hospital Practice, £36 15s.; for Lectures and Hospital Practice, £89 5s.—Unlimited Attendance on Hospital Practice and all Lectures, £105 in instalments, or £99 15s. in one sum.—For Hospital and Lectures required for Examination in Dental Surgery of Royal College of Surgeons, £52 10s.—Separate Classes: *a, b*, one course, £6 6s.; unlimited, £8 8s.; *c*, £1 15s. first and second Sessions; *d*, one course, £5 5s.; unlimited, £7 7s.; *e, f, g, h*, one course, £4 4s.; perpetual, £6 6s.; *i, k*, one course, £3 3s.; unlimited, £4 4s.; *l*, one course, £3 3s.; *m*, one course, £2 2s.; unlimited, £3 3s.; *n, o, p*, one course, £2 2s.—H.P.—Medical: 3 months, £5 5s.; 6 months, £7 7s.; 12 months, £12 12s.; 18 months, £15 15s.; unlimited, £21. Surgical: 3 months, £6 6s.; 6 months, £9 9s.; 12 months, or time required by College of Surgeons, £21; unlimited, £31. Practical Pharmacy: 3 months, £3 3s.; 6 months, £6 6s.; 12 months, £10 10s.—Vaccination, £1 1s.—Library Fee, £1 1s.

Students may make special entries to any course of Lectures or to Hospital Practice.

Special Courses of Lectures are given on Ophthalmic, Aural, and Dental Surgery, Operative Surgery, Minor Surgery and Bandaging, and on Urology; also Clinical Demonstrations on Diseases of the Skin and Diseases of the Throat.—A Histological Room has been fitted up for instruction in the use of the Microscope.

Hospital Appointments are open to the Pupils without additional Fee. Three Resident Medical Officers are appointed for twelve months, and an Obstetric Officer for six months; all live free of expense in the Hospital.—A Resident Registrar is appointed, with a salary of £100 a-year: he holds office for two years, and may be re-elected, preference being given to past House-Surgeons and Perpetual Pupils.—All General Students must perform the duties of Clinical Clerks and Dressers for six months during the last two years.

Clinical Lectures twice-a-week by the Physicians and Surgeons. The Students are divided into three classes, each committed to the charge of a Physician and Surgeon for a definite period. The attendance of the Students in the wards is noted at each visit.

Prizes.—Examinations are held at the termination of each Session, the classes being grouped in accordance with this curriculum of the first, second, and third years. Average value of each prize, Five Guineas. Extra prizes according to merit. A prize is also given in the class of Comparative Anatomy.—Certificates of Honour are given for superior proficiency.—Scholarship in Anatomy, annual value £25 (the holder of which will be styled Assistant-Demonstrator).—Prize of £20 for Students of the First year at the end of the Winter Session: it may be divided into Prizes of £15 and £5.—Prize of the value of £4 4s. to the Student who shall make the best Anatomical Preparation.—Two prosectors are appointed annually, who each receive a Certificate and £5.

The *Reading Room and Library* is open daily. A fee of £1 1s. (perpetual) is paid on entrance by each Student.

The *Museum* is open daily to Students. It contains above 3,000 specimens of Morbid and Healthy Human Anatomy, arranged in sections and described in a Catalogue; also *Materia Medica* and Comparative Anatomy Collections, and Natural Philosophy Apparatus.

MIDDLESEX HOSPITAL.—Aggregate Fee, £90 in one sum,* or in instalments of £35 at the beginning of the First and Second Sessions; £20 at the beginning of the Third Session; and £10 for each additional Year, or separate fees for the Hospital Practice or Lectures attended.—Aggregate Fee for Hospital Practice alone, £42.—Fee for

* The subjects of Examination will be: 1. The English Language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions. 3. Algebra, including Simple Equations. 4. Geometry—first Two Books of Euclid. 5. Latin—Cæsar, *De Bello Gallico*, Book II. 6. One of the following subjects at the discretion of the Candidate: (a) Greek—Xenophon's *Anabasis*, Book I; (b) French—X. B. Saintine's *Picciola*; (c) German—Schiller's *Wilhelm Tell*; (d) Natural Philosophy—Mechanics, Hydrostatics, Pneumatics.

* The Aggregate Fee admits to the Library, to one Course of Practical Chemistry and two Courses of Dissections, to all the Lectures, and to the Instruction of the Tutor: it includes also all Charges for Clinical Clerkships and Dresserships.

Candidates for Certificates in Dental Surgery, £42; or £26 5s. at beginning of First Session, and £15 15s. at beginning of Second Session.—Separate Classes—*a, c, d, e, f*, single, £6 6s.; unlimited, £8 8s.; *b*, single, £8 8s.; unlimited, £12 12s.; *g, h, i, k*, single, £4 4s.; unlimited, £5 5s.; *l, m, r*, single, £3 3s.; *n*, single, £3 3s.; unlimited, £4 4s.; *q*, single, £5 5s.—H.P.—Medical, 3 months, £6 6s.; 6 months, £12 12s.; 12 months, £16 16s.; 18 months, £21; unlimited, £25. Surgical, 3 months, £6 6s.; 6 months, £10 10s.; 12 months, £15 15s.; 3 years, £21; unlimited, £25. Fee to Resident Medical Officer, Secretary, etc., £1 6s.; Vaccination, £1 1s.; Dental Practice (occasional Students), £5 5s.; Pharmacy, without Dispensing, 3 months, £4 4s.; with Dispensing, 6 months, £5 5s.; 12 months, £8 8s.

Appointments, etc.—Two House-Surgeons are appointed annually after competitive examination. Each takes charge for the first six months of the Out-patients, in the absence of the Assistant-Surgeon; for the last six months he has charge of the Surgical Wards, in the absence of the Surgeons. Candidates must be twenty-one years of age, and unmarried; and must have obtained certificates of proficiency as In-patient Dressers. The Junior House-Surgeon succeeds to the office of Senior House-Surgeon only if he have performed his duties satisfactorily. Each House-Surgeon pays a fee of £21; if he have not been a Surgical Pupil of the Hospital, he pays £31 10s.

Three Resident Physicians'-Assistants are appointed annually after competitive examination. They must have a legal qualification. They are attached to the service of each of the three Physicians for four months in succession. They have charge of the Patients between the visits of the Physicians, and carry out their instructions. Each Resident Physician's-Assistant pays a fee of £10 10s. on appointment; he must either be a Medical Pupil of the Hospital, or pay half the fee for twelve months' Medical Practice.

A Resident Obstetric Assistant is appointed for six months. He pays a fee of £10 10s.

Clinical Clerks and Dressers are appointed for six months. The appointments are so arranged that every Student may take both a Clerkship and a Dressership at some period of his attendance on Hospital Practice. There are In-patient Clerks and Dressers, Physician-Accoucheur's Clerk, and Ophthalmic Dressers. Each Student must be an Out-patient Clerk and Out-patient Dresser for six months respectively before being eligible to an In-patient Clerkship or Dressership.

The College Tutor assists all General Students of the Hospital, especially those who are preparing for examination, so as to avoid the necessity of private teaching apart from that of the school.

Clinical Lectures are delivered regularly by the Physicians and Surgeons, and by the Physician-Accoucheur and the Ophthalmic Surgeon.—Special instruction in Diseases of the Skin are given during the Summer Session.

Prizes.—Three Chief Prizes for competency in Clinical Knowledge are annually awarded after competitive examination; viz.: the Governors' Prize, of the value of £21, and two Clinical Prizes of £6 6s. and £4 4s. These are open to competition amongst Students who have completed their second, and not exceeded their third, Winter Session.—Written Periodical Class Examinations are held in the course of each Session, and must be attended by all General Students. Class Prizes are given in each subject, according to the amount of proficiency and the number of marks obtained at the Periodical Examinations.—A Prize is also given for the best Dissection during the Winter Session.

The *Museum* is open to Students daily from 9 to 5. It contains above 5,000 specimens.—Admission to the Library and Reading Room is included in the Fee paid by General Students. Occasional Students, who desire to use the Library, may do so on payment of £1 1s. The books are allowed to be taken out from the Library under proper regulations.

ST. THOMAS'S HOSPITAL.—Aggregate Fee (giving unlimited admission), £90 in one sum; or £40 each for the first and second years, and £10 for each succeeding year.—Special entries may be made to any course of Lectures or to the Hospital Practice.

Prizes.—The following prizes are awarded: To First Year's Students, the William Tite Scholarship, consisting of the interest of £1,000 consols, awarded every third year and tenable for three years; and three College Prizes for each year's Students, of £30, £20, and £10 respectively.—The Cheselden Medal, annually, for Surgery and Surgical Anatomy.—The Treasurer's Gold Medal, annually, for general proficiency and good conduct.—The Grainger Testimonial Prize, value £20, biennially, to Third or Fourth Year's Students, for a Physiological Essay.

Appointments.—Clinical Clerks and Dressers, and Obstetric Clerks, are selected according to merit; the Dressers and Obstetric Clerks are provided with Rooms and Commons free of expense. The House-Surgeons

and Resident Accoucheur are selected according to merit from gentlemen who have obtained their diplomas: the former hold office for six or twelve months; the latter for three or six. All are provided with Rooms and Commons.—A Medical and a Surgical Registrar are appointed from among gentlemen who have completed their studies in the school. Each Registrar, on completing his Annual Report to the satisfaction of the Physicians of Surgeons, receives £40. One Registrar, with a salary of £80, may be appointed.

The *Museum of Human Anatomy* consists of a Physiological and a Pathological Department, the latter containing above 3,000 specimens. The preparations are described in a printed catalogue of three volumes.—The Museum of Comparative Anatomy contains about 1,000 preparations; and that of Materia Medica at least 600.—There are also a Cabinet of Microscopical Anatomy, and a Museum of Chemistry and Mineralogy.—A Chemical Laboratory, under the direction of the Chemical Lecturer, is provided for Students.—The Students have access to a Library and to the use of a Microscope.

UNIVERSITY COLLEGE AND HOSPITAL.—Aggregate Fees for first year: First Winter Session, £37 10s.; First Summer Session, £16 16s. Separate Classes: *a*, Session, £7 7s.; half Session, £4 4s.; perpetual, £9 9s.; *b*, with *c*, entire Session, £7 7s.; half Session, £4 4s.; perpetual to Lectures, with three years' Practical Anatomy, £10 10s.; Practical Anatomy after the third year, every Winter Session, £1 1s.; Practical Anatomy without Lectures for three Summer months, £2 2s.; *d, e*, whole course, £6 6s.; half course, £3 3s.; perpetual, £9 9s.; *f*, Session, £5 5s.; half Session, £3 3s.; perpetual, £6 6s.; *g, h, n*, single, £4 4s.; perpetual, £6 6s.; *i, k*, single, £3 3s.; perpetual, £4 4s.; *l*, elementary course, £4 4s.; senior course, £2 2s.; summer matriculation course, £4 4s.; *m*, Comparative Anatomy, £4 4s.; Zoology, £4 4s.; perpetual to both, £9 9s.; *o*, single, £1 1s.; *p*, single, £2 2s.; *q*, single, £4 4s.; *r*, session, £6 6s.; perpetual, £9 9s.; Palæo-Zoology, single, £1 1s.; Mental Diseases, £2 2s.; Organic Chemistry, £2 2s.; Use of Surgical Apparatus, single, £1 11s. 6d.; perpetual, £2 2s.; Hygiene and Public Health, single, £2 2s.; perpetual, £3 3s.; Physiological Laboratory, first month, £2 2s.; each succeeding month, £1 1s.—H.P.—For Students of the Medical Faculty of the College who have already entered to three courses of six months' duration (two courses of three months' duration being considered equivalent to one of six months); and for pupils who produce Certificates of having attended a Course of Lectures of a recognised School of Medicine, and during one year the Practice of a recognised Hospital: Physicians' and Surgeons' Practice, perpetual, £27; one year, £21 15s.; six months, £16 10s. Physicians' and Surgeons' Practice separately, one year, £16 10s.; six months, £11 5s. Six Months' Practical Pharmacy, £5 5s.; three months', £3 3s.

Scholarships, etc.—Three Entrance Exhibitions, value £30, £20, and £10 *per annum*, tenable for two years, to gentlemen who are about to commence their first winter's attendance. The examination will take place on September 28th and 29th.*—The Atkinson-Morley Surgical Scholarship, amounts to £45, tenable for three years, for proficiency in Surgery.—The Filliter Exhibition of £30, annually in July, for Pathological Anatomy.—Dr. Fellowes's Clinical Medals, one Gold and one Silver, with Certificates of Honour, at the end of each term for reports and observations on the Medical Cases in the Hospital.—The Liston Gold Medal, with Certificates of Honour, at the end of the Session, for reports and observations on the Surgical Cases in the Hospital.—The Alexander Bruce Gold Medal, for Proficiency in Pathology and Surgery.—Gold and Silver Medals, or other Prizes, as well as Certificates of Honour, after competitive examinations in the classes. Prizes to the value of £10 in the class of Hygiene.

* The subjects of Examination are the following. Latin and Greek—Translation into English of passages from Cæsar and Xenophon; Translation of short English sentences into Latin. French or German—Translation into English of passages from Bossuet's *Discours sur l'Histoire Universelle*, or of passages from Schiller's *Geschichte des dreissigjährigen Krieges*. Arithmetic and Algebra—The ordinary Rules of Arithmetic; Vulgar and Decimal Fractions; Extraction of the Square Root; Addition, Subtraction, Multiplication, and Division of Algebraical Quantities; Proportion; Arithmetical and Geometrical Progression; Simple Equations. Geometry—The First Three Books of Euclid; or, the Principal Properties of Triangles and of Squares and other Parallelograms, treated Geometrically; the Principal Properties of the Circle, treated Geometrically. Natural Philosophy—Elementary Mechanics: Composition and Resolution of Statical Forces. The Simple Machines (Mechanical Powers), and the Ratio of the Power to the Weight in each. Centre of Gravity. The General Laws of Motion, and the chief experiments by which they may be illustrated. Laws of the Motion of Falling Bodies. Hydrostatics, Hydraulics, and Pneumatics: Pressure of Liquids and Gases; its equal diffusion, and variation with the depth. Specific Gravity, and the method of ascertaining the specific gravity of bodies. The Barometer, the Siphon, the Common Pump, the Forcing-Pump, and the Air-Pump. Acoustics: The Nature of Sound. Optics: Laws of Reflection and Refraction; Formation of Images by Simple Lenses. The next examination will take place on September 28th and 29th, 1870.

Libraries and Museums.—The General Library, the Medical Library, the Museums of Anatomy and Pathology, of Comparative Anatomy, of Materia Medica and Chemistry, of Geology, and of Natural Philosophy, are open daily.

Clinical Instruction is given by the Physicians and Surgeons of the Hospital in their daily visits, both in the Wards and in the Out-patient Department, and also by means of Lectures and Examinations upon the cases. Dr. Wilson Fox, the Holme Professor of Clinical Medicine, delivers Clinical Lectures, and trains the Pupils in the practical study and method of recording the phenomena of disease, giving a series of practical lessons and examinations on the physical examination, diagnosis, and treatment of disease. This instruction is conducted in the wards, and is made as systematic as the cases available for illustration will permit. Lectures are given twice a week by Mr. Erichsen, the Holme Professor of Clinical Surgery; once a fortnight or oftener by Mr. Marshall and Sir Henry Thompson. Clinical Lectures on Midwifery and the Diseases of Women are delivered once a fortnight; also on Ophthalmic Surgery and on Diseases of the Skin.

Arrangements are made for practical instruction in Vaccination.

Private Instruction.—Gentlemen may obtain assistance in their studies within the College, on application to the respective Professors.

Residence of Students.—Several gentlemen connected with the College receive students to reside with them; and in the Office of the College there is kept a register of persons who receive boarders. Information as to terms and other particulars may be obtained at the Office.

Offices.—Physicians' Assistants, House Surgeons, Midwifery Assistants, Physicians' Clerks, Surgeons' Dressers, and Ophthalmic Surgeons' Assistants, are selected from among the pupils, who are also students of the College and of unexceptionable moral character, without additional fees. The Physicians' Assistants, the Obstetric Assistant, and the House-Surgeons reside in the Hospital, paying for their board.

WESTMINSTER HOSPITAL.—Aggregate Fee, £70; or in instalments of £35 at commencement of First Year, and £30 at commencement of Second Year, and £10 at commencement of Third Year.—Perpetual Fee to all Lectures and Hospital Practice, £75 on entry, or in two equal instalments of £40 each at the commencement of first and second years.—Lectures and Hospital Practice for any single year, £35.—Separate Classes:—*a, b, d, e, f*, single, £5; perpetual, £7; *c*, single, £2; perpetual, £3; *g, i, k*, single, £3; perpetual, £4; *h*, single, £4; perpetual, £5; *l, m*, single, £2; Natural Philosophy, single, £1 (free to Students of Hospital).—Vaccination, £1 is.—Practical Pharmacy, 3 months, £3 3s.; 6 months, £6 6s.—H.P.—Period required by Colleges and Society of Apothecaries, £26; perpetual, £30. Medical or Surgical separately, each, 6 months, £8; 12 months, £12; 18 months, £15; perpetual, £20. For Dental Diploma of College of Surgeons, £30; or two instalments of £20 and £10.—Dental Practice, for gentlemen who are not pupils of the School, 3 months, £5; 8 months, £8. Students can attend without additional fee, the Practice of the Royal Westminster Ophthalmic Hospital and of the National Hospital for Paralysis.

The Anatomical Museum is constantly open to the student. There are also a Pathological Museum and a Materia Medica Museum.—The Reading Room is open to the students daily.

Arrangements have been made for the residence of Students.

Special Examinations on the subjects required by the Examining Boards will be held during the latter half of the Winter Session, and will be open to all Students of the Medical School without extra fee.

Appointments.—The offices of House-Physician and House-Surgeon are open to competition amongst gentlemen educated at the Hospital, who are qualified to practise. They are appointed without fee, and are provided with board and lodging free of expense.—An Assistant House-Surgeon is appointed without fee from among the senior students by examination. He is provided with commons at the Hospital table.—Clinical Clerks and Dressers are appointed without fee, in rotation, from among the most diligent students.—A Resident Obstetric Assistant will shortly be appointed.

Prizes.—A Prize of Books or Instruments and Certificates of Honour in each course.—Prize, value £5 5s., given by Mr. J. M. Clabon to First Year's Students, for General Proficiency.—Prize, value £2 2s., originally offered by the late Mr. Bruce, for Anatomy, to a First Year's Student.—Clinical Medicine and Clinical Surgery Prizes, each of the value of £5 5s.—Chadwick Prize for General Proficiency, £21, to the most meritorious student or students of the second or third year.

[Notices of the Provincial, Scotch, and Irish Schools of Medicine will appear next week.]

SMALL-POX appears to be very prevalent in British Burmah at present.

THE St. George's Hospital School Dinner will take place on Monday, October 3rd, under the presidency of Mr. Prescott Hewett.

THE Library of the Royal Medical and Chirurgical Society will be reopened on Monday next, the 12th instant.

MR. PRESCOTT HEWETT has intimated that he has not been called to visit the Emperor professionally, as we were last week informed was the case.

DR. DEBUS, F.R.S., has been appointed to succeed Dr. Alfred Swaine Taylor, F.R.S., as Professor of Chemistry at Guy's Hospital Medical School.

DR. ANDREW WOOD of Edinburgh is about to add his name to the honoured list of literary physicians by the publication of a translation of Horace's *Satires*—"in the Don Juan stanza," it is announced. This has not been used by any previous translator.

A GENERAL order just published directs that, when a staff medical officer is temporarily attached to a mounted corps for duty on the line of march, the commanding officer is to provide him with a troop-horse. A billet is to be drawn for him, as in the case of regimental officers.

THE fatality of diarrhoea is rapidly declining, while scarlet fever appears to be more than maintaining the ground it has held for a considerable time in the metropolis. It caused one hundred and twenty-nine deaths last week in London, and more than a fourth of the total mortality in Bristol.

MR. ARTHUR NORTON, Assistant-Surgeon at St. Mary's Hospital, London, writes a very interesting letter to Lieutenant-Colonel Lindsay, describing the proceedings of himself, Mr. Sewill, and Mr. Lyman, in the villages around Briey. The letter gives valuable information as to what is needed, but, of course, few details of clinical interest. Mr. Norton lays stress upon the value of plaster of Paris splints—now, indeed, indispensable in military surgery. He adds, also: "It was almost remarkable to see the improvement which took place in some wounds, hitherto treated by simple water, after the application of carbolic acid."

THE MIDDLESEX HOSPITAL ANNUAL DINNER.

THIS dinner will take place on October 3rd—W. H. Flower, Esq., in the Chair.

ST. BARTHOLOMEW'S HOSPITAL.

THE new ophthalmic wards at this Hospital are now verging on completion, and will be ready for the admission of patients early in October.

WEST LONDON HOSPITAL.

THE sum of fourteen hundred pounds has been promised by the wife of the Rev. R. G. Baker of Fulham Vicarage for the purpose of building and entirely fitting up a female ward, to be called the Baker Ward, in the new buildings now being erected.

KING'S COLLEGE HOSPITAL.

THE foundations of the new wing of this Hospital are commenced, and it is expected that the building will be in readiness early in spring. The wing will contain residents' rooms and small wards for delirium and other special cases. The removal of the residents' rooms will offer additional accommodation for patients in the main building. The new wing will cost about six thousand pounds, and afford altogether accommodation for about twenty additional beds. The open space in front of the Hospital, which has hitherto not adorned the locality, will be enclosed by a handsome railing, and otherwise improved.

MILITARY WASTE.

THE recent appointment of a military commandant at Netley Hospital is an instance of extravagance and nepotism which inflicts a public injury in

* For gentlemen who are not regular pupils of the School, the admission to the Dissections and Demonstrations is—3 months, £2; 6 months, £3; perpetual, £5.

more than one way. The system of military commandants of hospitals has been formally abandoned throughout the navy, on the report of a committee. It is known that this has not only been a measure of economy, but has also led to the most satisfactory administrative results. A military commandant of a hospital is, in fact, only an offensive and costly excrescence. The post having become vacant at Netley, where it has long been denounced as useless, costly, and offensive, a committee was appointed to report upon the question of its usefulness; but in the interval of time, while the report is yet getting ready, the appointment is made. Parliament is not sitting; but so discreditable an affair should not on that account escape the public censure which it deserves.

THE CASE OF MISS PRANKERD.

MR. H. CULLIFORD HOPKINS, the House-Surgeon of the Royal United Hospital, Bath, writes that Miss Prankerd is progressing very favourably, no bad symptoms having appeared. The bullets are still lodged in the upper part of the mouth. The wounds on each side of the jaw are now almost healed.

TOO LATE.

WHEN war was declared in 1866 between Prussia and Austria, the Minister of War was asked in the House of Commons whether any army medical officers were to be sent to the scene of hostilities, to observe the hospital arrangements of the contending armies, and to note any facts, sanitary or surgical, that might be advantageously communicated to the medical department of our own army. The reply was, that medical officers would be sent, with orders to report upon the subjects referred to. Time passed; the great battle of Königgrätz was fought on the 3rd of July; reports of all kinds were circulated in England regarding the treatment of the wounded left by the retreating and pursuing armies; questions of professional interest were mooted in medical publications; and the question was again asked—this time in the House of Lords—whether any medical officers had been sent to the seat of war. The reply given by the responsible Minister was, that an experienced medical officer had been sent. It was a mistake. No one had been sent; and so the Minister learned when he was in his cabinet on the following day. But, the statement having gone forth that a medical officer had been sent, it was quite evident that some one must now go. There was still to be settled who was to go, and what were to be his instructions. At last, on the 5th of September, *the decisive battle of the campaign having been fought on the 3rd of July*, Surgeon-Major Bostock of the Scots Fusilier Guards received an official letter, dated the 4th of September, ordering him to proceed to Prussia to report upon the field-hospitals of the Prussian army. Dr. Bostock arrived in Berlin on the 9th of September; and, as he informs us in the report of his visit, which may be found in the seventh volume of the *Army Medical Reports*, published in 1867, on presenting himself to Lord A. Loftus, the British Ambassador, surprise was expressed that he had not come several weeks before. No wonder. Fortunately, although Dr. Bostock could only report of what took place during the war from hearsay, instead of, what would have been of much greater value, from personal observation, the report furnished by him was still an interesting one, and may be referred to with advantage. Questions exactly similar to those which were asked in 1866 were again asked in the House of Commons during the present year, on war being declared between France and Germany. The time which has elapsed since then, and the great events which have since occurred, are too fresh in every one's mind to need reference here. On the 1st of the present month, Deputy Inspector-General Dr. Gordon and Surgeon Major Wyatt proceeded to France to report upon the field-hospital arrangements on the French side. The medical officers of the army who are to collect information on the German field-hospital arrangements—all the more important to be noted on account of the vast accumulations of wounded they have had to deal with on the German side, and on account of modifications arising from the fact of this being the first war between armies mutually bound by the engagements of the Geneva Convention for neutralising the sick and

wounded—have yet to be despatched to the seat of war. The mission, we are informed, has advanced thus far: Staff-Surgeon Dr. De Chaumont of Netley, and Staff-Assistant-Surgeon Count Wollowicz, have received instructions to hold themselves in readiness to go to Germany. Surgeon-Major Bostock received his orders to go to Prussia, to report upon the field-hospital arrangements of the Prussian army in 1866, exactly eight weeks after the fighting was at an end. It seems as if the army medical officers intended to collect information on the same subjects in the present war are destined to start for their work as soon as a somewhat similar time shall have elapsed after its conclusion. We have reason to believe that the fault of this procrastination does not rest with the medical branch of the War Office.

FOR AND AGAINST TOBACCO.

DR. BLATIN, in a work recently published—*Recherches Physiologiques et Cliniques sur la Nicotine et le Tabac*—examines the evil effects on the human system of the use and abuse of tobacco. On the other hand, Dr. J. C. Murray of Newcastle has written an enthusiastic vindication of snuff in his little book on snuff-taking, just published by Churchill and Sons, from which his paper at the Newcastle meeting was an extract: and the marvellous successes of the German soldiers on a diet of black bread, pease-pudding, and twelve cigars a day, has created a strong reaction in favour of the weed, so long abused by the unimaginative as the food of dreamers, and reviled as noxious by those who have no mind to use it.

YELLOW FEVER.

WITH so low a temperature, and at this period of the year, the importation here of the yellow fever, which has appeared at Barcelona, is extremely unlikely; it could not continue to exist.

LUNATICS IN IRELAND.

THE annual report of the inspectors of lunatic asylums in Ireland states that the number of lunatics in Ireland has decreased within the last ten years from 16,835 to 16,661—probably, however, not more than the proportion in which the general population has decreased.

THE EPIDEMIC OF RELAPSING FEVER AT LIVERPOOL.

THE following statement exhibits the progress of this epidemic during the week. *Outside district returns* for the week ending August 27th, 123. *Fever Hospital returns*, week ending September 3rd: admitted, 264; discharged, 138; deaths, 12; in hospital, 790. *Classification of disease* for the week ending August 27th: typhus, 13; simple continued fever, 40; relapsing fever, 623; deaths, 1 from typhus, 7 from relapsing fever; in hospital, 676.

THE CONDITIONS OF SERVICE UNDER THE RED CROSS.

THE amount of work devolving upon the very small number of members of the Committee of the Society in Aid of the Sick and Wounded at present in town, is so large that it is almost impossible to reply to all the inquiries which are daily addressed to this office. We are therefore to state that the qualifications of medical gentlemen desirous of offering their services to the Society should be a thorough practical acquaintance with Surgery, and a good knowledge of either German or French. According to all the information from the belligerents, a conversational knowledge of one of those languages is indispensable. All surgeons who volunteer their services must accept office for not less than one month, and must consent to act under the direction of the officers of the French or German armies with whom they may be associated. Their services must be given gratuitously; but the Society advance £1 per day for their expenses, with the understanding that any surplus should be devoted to the benefit of the poor sufferers with whom they are brought into contact.

Gentlemen who wish to volunteer as surgeons or dressers are required to fill up a certain form, copies of which may be obtained on application at the office, 2, St. Martin's Lane; after which a personal interview, between the hours of 2 and 3 P.M., is requested.

NOTES OF THE WAR.

A PRUSSIAN surgeon writes about the French soldiers wounded at Weissenburg, that scarcely one knew anything of the Convention of Geneva, and the signification of the red cross on a white band worn by every one belonging to the medical service. Among the French surgeons no one had this sign, as it was not distributed by their superiors, nor were they ordered to wear it.

LIEUTENANT VON LANGENBECK, a son of the eminent surgeon of Berlin, has died of wounds received in battle on the 18th of August. The only son and the son-in-law of General Staff-Surgeon von Grimm were both killed before Metz on the 18th. The sons of Dr. Simon of Berlin, Dr. Stilling of Cassel, and of several other medical men, have been wounded: the son of Dr. Lauer, Physician in Ordinary to the King of Prussia, severely.

THE WAR AND THE CATTLE-PLAGUE.

WE are informed that in the Palatinate cattle-plague is breaking out, and measures are being taken against it as far as possible. The disease first shewed itself in the district of Kaiserslautern.

THE WOUNDED IN FRANCE.

OUR French professional colleagues are showing all the ardent patriotism, the intelligent devotion, and the humane zeal which become them as Frenchmen and as members of a profession which has never failed in these qualities either in its daily work or in periods of emergency. But they complain with justice that their individual efforts are in no small degree crippled by the intendant. This department has determined on resolutely inflicting all the evils of hospitalism on the wounded, and, from "administrative motives", rejects the use of the isolated and well-fitted chambers offered by thousands of devoted persons for the reception of the wounded. These administrative motives will have to answer for a heavy list of deaths of brave men. Our own Société de Secours and the American Society for long vainly struggled to emancipate themselves from this influence. It is only by operating from the neutral base of Luxembourg that we have been able to afford to the French sick and wounded the enormous stores of hospital comforts and necessities which have been provided by subscription here. We have already enforced the logic of charity in war against cold reasoners who have ventured to doubt it; but, in the presence of the horrors of a carnage so terrible as that of Sedan, added to the losses in previous encounters, an irresistible impulse to attempt to give some relief to the indescribable aggregation of human suffering and misery will supersede argument or appeal.

SMALL-POX AMONGST THE FRENCH SOLDIERS.

SMALL-POX, which has been so common in France, and especially in Paris, is prevalent also in the French army. Five of the wounded French now in the hospitals of Berlin were taken ill with it and were brought to the small-pox wards of the Charité Hospital; two of them died. The invasion of France by the German armies will be a test, on the largest scale, of the efficiency of the vaccination and revaccination performed on every recruit of the Prussian army.

TREATMENT OF THE WOUNDED AT METZ.

AFTER the battles of Metz, the crowd of wounded was very large in Pont-à-Mousson, where most of those transported to Germany had to be refreshed and dressed. Twenty miles farther on, at Romilly, they reached the railway to Germany. Some of the wounded Prussians, who were sent from Metz on August 24th, complain of the insults offered them by the mob of that city, but acknowledge the good treatment they underwent in the hospitals there.

THE LAST ACT OF THE FRENCH SENATE.

PROBABLY no act of the French Senate became it better than that which immediately preceded its dissolution. This was to make arrangements for converting the whole of its palace into a vast ambulance. M. Daudet, Chef du Cabinet of the Grand Référendaire, is organising the beds, three hundred in number. Madame Rouher and the daughters of M. Ferdinand Barrot are organising the nursing. M. Nélaton, Senator, and MM. Boyer and Constantin Paul, Physicians of the Senate, will be the resident medical officers. The soldiers will occupy the two orangeries and the grand gallery facing the garden. The officers will occupy the little Luxembourg and the official salons of the President. Each Senator has subscribed for five beds.

PALACES AND HOSPITALS.

AN administrative decree, announced by the *Gazette Médicale*, orders that the Palaces of Versailles, Trianon, Saint Cloud, Rambouillet, and Meudon, shall be immediately transformed into ambulances, in order to receive the wounded.

NATIONAL SOCIETY FOR AID TO THE SICK AND WOUNDED.

THE following is a list of the surgeons and dressers now on the Continent in the service of the Society. *Surgeon Representative of the Committee in France*, P. Frank, M.D. *Surgeons*: Inman Welsh, Byron Blewitt, R. W. Parker, C. Mayo, M.D., J. C. Galton, W. Ward, H. Rundle, H. Sandwith, M.D., C.B., H. A. Reeves, W. D. Aubin, W. Mac Cormac, M.D., A. T. Norton, H. Sewill, H. J. Domville, C.B., Sidney Chater, R. H. Lloyd, A. Markheim, M.D., B. B. Connelly, W. Hardwicke, M.D., J. R. Walker, W. J. Treutler, M.B., C. Jeaffreson, R. W. Hutchins, Hugh Clark, M.B., Marcus Beck. *Dressers*: G. Willson, A. Dorin, W. Pratt, W. E. Atthill, B.A., C. A. Cooper, A. C. Horner, G. D. B. Thomas, H. B. L. Smith, M. Block, A. B. Lyman, W. G. Watson, H. Cruickshank, J. F. Rugg, A. S. Duncan, F. A. Thomas, J. Inglish. There are also ten others with Mr. Simon and Dr. Thudichum in Germany.

THE THREE M.P.'S IN THE FIELD.

To charge English gentlemen with buckling on the Geneva badge as an ensign of half-hearted humanity, and using it as a pretext for pushing themselves into the belligerent head-quarters, or as a convenient cover for holiday search for excitement, is to make an accusation which should not be lightly brought. The three young Members of Parliament whose movements and letters have been severely criticised are neither unequal to hardship nor hardened to indifference. Mr. Herbert and Sir C. Dilke have given proofs of courage and endurance before this; and a man who has fought as bravely as Mr. Herbert in the Danish War of Independence, and risked his life as fearlessly and successfully as he has in rescuing drowning men, is not likely to play any other than a generous and devoted part in the service of the knights of St. John, which he has joined during this campaign. He has already won other badges not less honourable than that which he now wears. Mr. Winterbotham has received a medical education, and is especially fitted, therefore, to give that help in emergency which the badge he has adopted pledges him to afford.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE first meeting of the fourteenth session, 1870-71, will be held at St. Bartholomew's Hospital, Rochester, on Tuesday, September 13th, 1870, at 3.30 P.M.

Dinner will be provided at 6 P.M.

The fourteenth session opens under altered circumstances; for, by the new bye-laws, the six districts are recognised as subdivisions of the Branch, and are brought into strict relations with the Council.

The idea of districts first occurred to the late Mr. James Dulvey, of Brompton; and the first meeting of the West Kent District was held on December 11th, 1857.

The subdivisions of a Branch into districts marks an era in the history of the Association; and it is probable that the example set by the South-Eastern will be followed by the other Branches.

The Honorary Secretary of the district will be elected at the *last meeting* of each session (in April or May); but, since the present Secretary goes out of office at once, an acting appointment must be made at Rochester on September 13th.

The present Secretary would feel thankful for a successor, because of ill health.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary*.

Rochester, August 30th, 1870.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT MEDICAL MEETINGS.

THE September meeting of the members of the above District will be held on Tuesday, the 13th, at 2.30, at the County Lunatic Asylum, Hayward's Heath; Dr. BYASS, of Cuckfield, in the Chair. Dr. Williams, the Superintendent, will conduct the members through the wards from 3.0 to 4.30.

Dinner will be provided at the Station Hotel punctually at 5.30. Charge, not including wine, 5s.

The Asylum is about a mile and a half from the station. Dr. Williams invites the members and their friends to luncheon at the Asylum, at 1.30. All members of the South-Eastern Branch are privileged to attend the above, and to introduce friends.

Gentlemen taking return tickets at Tunbridge Wells or Groombridge, will find them available either *via* Three Bridges or *via* Lewes.

FREDK. CHAS. MUDD, *Honorary Secretary.*

Albion Villa, Uckfield, September 1870.

MEDICAL VACANCIES.

THE following vacancies are announced:—

APPLECROSS, Ross-shire—Parochial Medical Officer: applications, 15th.
BANBURY UNION—Medical Officers for the Swalcliffe and Bloxham Districts.
BILLERICAY UNION, Essex—Medical Officer for the Great Burstead District: applications, 17th; election, 20th; duties, 29th.
BRIDGEND AND COWBRIDGE UNION, Glamorganshire—Medical Officer for the Northern District: applications, 16th; election, 17th; duties, 24th.
CAHERCIVEEN UNION, co. Kerry—Medical Officer for the Valencia Dispensary District: applications, 13th; election, 14th.
CASTLEBAR UNION, co. Mayo—Medical Officer for the North Division, No. 2: 10th.
CITY DISPENSARY, Watling Street—Physician: applications, 10th; Committee, 12th.
CLONMEL DISTRICT LUNATIC ASYLUM—Resident Medical Superintendent: applications, 12th.
ENNISKILLEN UNION, co. Fermanagh—Medical Officer for the Lisbellaw Dispensary District: 30th.
KENT COUNTY OPHTHALMIC HOSPITAL—House-Surgeon: applications, 15th; vacancy, Oct. 1st.
KIRKCALDY, Fifeshire—Medical Officer of Health.
LEICESTER INFIRMARY AND FEVER HOUSE—Physician: applications, 10th; election, 28th.
LETTERKENNY DISTRICT LUNATIC ASYLUM, co. Donegal—Apothecary: 14th.
LETTERKENNY UNION—Medical Officer to the Workhouse: 23rd.
LIMERICK UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Annacotty Dispensary District: 19th.
LIVERPOOL GENERAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST—Physician.
NEW ABBEY, Kirkcudbrightshire—Parochial Medical Officer: 10th.
NEWPORT UNION, Monmouthshire—Medical Officer for the Marshfield District: applications, 16th; election, 24th.
NORTH SHIELDS AND TYNEMOUTH DISPENSARY—House-Surgeon and Dispenser: applications, 15th.
ST. BARTHOLOMEW'S HOSPITAL, Rochester—Assistant Surgeon: Oct. 13th.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Medical Officer for Out-Patients: applications, 30th.
SALOP INFIRMARY, Shrewsbury—Dispenser: applications, 10th.
SHERBORNE UNION, Dorset—Medical Officer and Public Vaccinator for the North West District: applications, 14th; election, 22nd.
SURREY DISPENSARY, Great Dover Road—House-Surgeon: applications, 26th; Committee, 27th; election, Oct. 6th.
UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine: applications, Oct. 1st.
WALLINGFORD UNION, Berks—Medical Officer for the Wallingford District and the Workhouse.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. J. W. Langmore, London; Subscriber, Llanfyllin; Mrs. M. A. Baines, London; Dr. B. W. Richardson, London; Dr. Baines, London; Dr. Sewell, Caterham Valley, Surrey; Dr. Denne, Birmingham; Mr. R. G. Whitfield, London; Messrs. Fannin and Co., Dublin; Dr. Lawson Tait, Birmingham; Dr. G. Y. Heath, Newcastle-upon-Tyne; Mr. J. J. Burrows, London; Mr. E. Pears, Newcastle-upon-Tyne; Dr. R. Perry, Glasgow; Dr. W. Budd, Clifton, Bristol; Mr. W. B. Kilburn, West Auckland; Mr. B. R. Wheatley, London; Mr. F. C. Mudd, Uckfield; Mr. H. M. Morgan, Lichfield; Dr. Matthiessen, London; Dr. Bolton, Leicester; Captain Galton, C.B., London; Dr. Hermann Weber, London; Dr. C. O. Marriott, Sevenoaks; Dr. Wardell, Tunbridge Wells; Captain Burgess, London; Mr. Herbert, Paris; Dr. A. Miller, Edinburgh; Mr. E. Ray Lankester, London; Dr. C. J. B. Aldis, London; Sir Ranald Martin, London; Mr. J. H. Casson, Ashbourne; Mr. C. S. Jeaffreson, Arlon, Belgium; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. Acland, Oxford; The Rev. Dr. Haughton, Dublin; Dr. Ingleby Mackenzie, Sidmouth; Mr. T. Watkin Williams, Birmingham; Dr. Sheidan Muspratt, Harrogate; Mr. W. Provis, Biddenden, Staplehurst; Dr. James Russell, Birmingham; Mr. F. C. Annesley, Guernsey; Mr. J. N. Smart, Bedminster; Mr. J. Lister, Edinburgh; Dr. Geisse, Bad Ems, Germany; Mr. J. Manley, West Bromwich; Dr. R. Gee, Liverpool; Dr. Dyce Duckworth, London; Dr. Woodman, London; Dr. Tidy, London; Mr. H. C. Hopkins, Bath; Messrs. W. H. Smith and Co., Dublin; Dr. Rumsey, Cheltenham; Dr. Rolleston, Oxford; Dr. Percy Leslie, Birmingham; Mr. T. H. Bartleet, Birmingham; Dr. Styrap, Shrewsbury; Dr. George Johnson, London; Dr. Waters, Chester; Mr. J. Carter, Cambridge; The Director-General of the Medical Department of the Admiralty; M.D. Edin.; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. Embleton, Newcastle-upon-Tyne; Dr. Winn, London; Dr. Murchison, London; Mr. J. W. Barnes, London; Dr. Glyn, Liverpool; Lieut.-Colonel Loyd-Lindsay, London; Dr. R. Lord, Crewe; Dr. Laycock, Edinburgh; Mr. R. Craister, Bramley, Leeds; M. C. H. Loveday, Worthing; Mr. J. Sampson Gamgee, Birmingham; Mr. T. B. Branders, Saarbruck; H. L. S., Leeds; Dr. H. Quincke, Berlin; Mr. J. W. Hulke, London; Dr. Ritchie, Edinburgh; Mr. W. Draper, York; Mr. T. Alexander, London; Dr. Jonathan Hutchinson; Mr. R. W. Parker, Pont-à-Mousson, France; etc.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

DR. C. CURRIE RITCHIE.—The paper shall appear as soon as our space admits.

DR. D. CAMPBELL BLACK (Glasgow).—The forms of admission to the Association shall be forwarded at once.

ERRATA.—At the end of the letter on the Poor-law Medical Service at p. 261 of last week's JOURNAL, the signature "James Rodes" was by an accident appended instead of "Joseph Rogers". In the last paragraph of the letter, the word "elevation" in the first line should be "iteration".

THE weekly letter of our Paris Correspondent has not arrived. We are compelled to omit the second letter of our Special Correspondent in Berlin describing the organisation of the German Army Medical Department during the present war.

WE have to regret being compelled to omit many interesting communications; among them, letters from special correspondents at Pont-à-Mousson, Arlon, Berlin, and Bad Ems.

HOW SCARLATINA IS SPREAD.—Dr. Russell's (Birmingham) and Dr. George Johnson's interesting communications will appear next week; also Dr. Robert Gee's Notes on the Epidemic Fever at Liverpool.

ENGRAVINGS OF THE ARRIS AND GALE LECTURES.—We shall be happy to lend the woodcuts prepared for Mr. Hulke's lectures for the use of the *Quarterly Journal of Microscopical Science*, if the source whence they are derived be duly acknowledged, which, we are informed, was not the case last year.

ERRATUM.—In Dr. Rumsey's Address (BRITISH MEDICAL JOURNAL, August 27th, 1870), page 215, column 2, line 18 from bottom, for "or" (for the Army and Navy), read "as".

M. A. B.—The letter to Dr. Prior has been forwarded.

WE are informed that Mr. Clement was not an alderman of Shrewsbury, and had been only once elected Mayor of the Borough.

WE have to express our thanks for their letters and communications to Dr. Styrap, Shrewsbury; Dr. Malins, Cradley; Dr. Bradbury, Cambridge; Mr. Fleischmann, Cheltenham; Mr. Bartleet, Birmingham; Dr. W. Budd, Clifton, Bristol; Dr. Rolleston, Oxford; Captain Douglas Galton, C.B., London; Dr. Percy, Banff; Dr. Dyce Duckworth, London; Dr. Marriott, Sevenoaks; Dr. Wardell, Tunbridge Wells; Dr. Campbell Black, Glasgow; etc.

THE special medical benefits associated by a recent rumour with Brasted Park, which is mentioned as an intended residence for the ex-Emperor of the French, do not appear to have any foundation. Brasted Park is a delightful country residence in a healthy and bracing part of the county of Kent, but has no special virtues. It was formerly occupied by the Emperor, then Prince Louis Napoleon, for a short time.

MR. W. PROVIS's (Staplehurst) letters have been handed to the Publisher, to whom they should have been addressed, and will receive attention.

DR. MACKENZIE shall receive a private letter.

MR. MANLEY (West Bromwich).—Both shall appear as fully as circumstances will allow. We still feel deeply interested in the subject.

THE HEALTH OF WATERING-PLACES.—We are indebted to Mr. H. Loveday for his communication concerning the climate, etc., of Worthing.

MEDICAL ETIQUETTE.—The correspondence forwarded by Dr. Lownds, Egham Hill, shall receive a notice next week.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, August 8th; The New York Medical Gazette, August 20th; The Parochial Critic, Sept. 7th; The New York Medical Record, August 25th; The Boston Medical and Surgical Journal, August 25th; The Madras Mail, June 27th; The Shield, August 29th; etc.

ANSWERS TO STUDENTS.

REGISTRATION.—The registration for the ensuing session commences on Saturday, October 1st, and terminates on Saturday the 15th. It will be necessary for A. H., St. Bartholomew's, to have his card renewed.

PRELIMINARY EXAMINATIONS.—If "A Rejected Candidate" passed the preliminary examination at the Hall he could at once commence his professional studies at the hospital mentioned. The examination will be held on Friday and Saturday the 23rd and 24th instant, and is recognised by the College of Surgeons.

THE FELLOWSHIP OF THE COLLEGE OF SURGEONS.—D. P. A., Fowey, Cornwall.—Having passed the preliminary examination for the *Membership*, a candidate has only to take up the additional subjects for the *Fellowship*, which are the same as in June last. We believe the statement that the examination in December next will be the last, to be an idle rumour.

A COUNTRY STUDENT.—G. P. R., and Dr. M., will find the desired information in the present number of this JOURNAL.

INSTRUCTION IN COMPARATIVE ANATOMY.—A Member of the Association will find that the fees are about the same at both the hospitals. Mr. Mivart, F.R.S., will deliver lectures on Comparative Anatomy, one course of which is required for the Fellowship of the College.

REMARKS

ON

THE PREVAILING EPIDEMIC OF SCARLET FEVER
IN BRISTOL.By DAVID DAVIES, Esq.,
Medical Inspector of Health.

THE late Dr. George Gregory, when lecturing on small-pox and vaccination, used to state that the lives saved by the latter were by no means fully represented in the diminution of the bills of mortality, but that, immediately on the suppression of small-pox, scarlet fever and the other exanthems moved to the front, and nearly, if not fully, filled the breach made in the enemy's ranks by the discovery of vaccination. This statement would indicate a recondite system of compensation between diseases specifically different, which in the present state of our knowledge baffles any attempt at explanation. The circumstances under which scarlet fever is widely and fatally prevalent in Bristol, incline me to think that Dr. Gregory's statement expresses a truth which well deserves the serious attention of the students of preventive medicine, the camp of which science is certainly advancing, but with occasional retrogressive movements.

From experience gained as Medical Inspector of this city, and as a private practitioner, I have formed the opinion that the problem of the best means for the prevention of Asiatic cholera, typhus, and enteric fever, has been satisfactorily solved, both here and elsewhere. The result for the last few years had induced me to believe that the diminution of our mortality would prove constant and permanent; but the present weekly returns, in which deaths from scarlet fever figure so largely, claim a considerable deduction from our calculations. If hygienic medicine can at some future period do for this disease what vaccination has done for small-pox, we shall then have reached a considerably advanced post; but it behoves me here to confess that in the presence of such an epidemic as this, with the ignorance of the public, both high and low, on sanitary matters, and with the totally inadequate sanitary laws, I feel myself unable successfully to cope with the evil. The conditions of the spread of the disease are known; the means of prevention have been most graphically, and I believe correctly, pointed out by Dr. William Budd, and also very fully by the Metropolitan Association of Medical Officers of Health. To carry those means out among our present population, would require a new Sanitary Act with clauses so stringent that no legislature would pass them, and no public would submit to them; in the meantime, my best hopes lie in the direction of a better education of the public on sanitary subjects, and more especially in the nature and character of the zymoses.

I will here give a short account of the rise and progress of our present epidemic as well as I am able. Such an account must necessarily be very imperfect, as there is no registration of disease. During the last four or five years, we were comparatively free from scarlet fever. Sometimes several weeks passed successively without a single death being recorded from it. At other times, small and isolated outbreaks would appear, and then vanish without spreading. Occasionally we had one or more deaths recorded, seldom exceeding three in a week. When these outbreaks became known to me, the houses and clothing of the affected were treated with disinfecting chemicals, the drains communicating with the houses were saturated with disinfectants, and all went on well.

Towards the end of last year, or rather at the beginning of the present, the disease appeared over a much wider area, and among classes not accessible to public officers as such, and not subject to their action. Here was at once a difficulty which would, in these cases, render futile the functions of my office. Considering the area over which the disease was spread, it was of a mild and not very fatal type. The weekly deaths recorded varied about the figures 7, 8, and 9. With the advancing spring, cases of convalescents and others were sent hither by rail from public educational establishments in distant parts of the country; the epidemic assumed a more extensive, severe, and fatal form; our deaths rose to the weekly figures of 14, 16, 18, and 23, and last week reached the high figure of 29 in a total mortality of 106, forming, in fact, the exact number of our excess of mortality over the corresponding period of the last three years.

Judging from the class of persons and houses mostly affected by the present epidemic, this disease has but little if any connection with general sanitary conditions, but is propagated from person to person, showing nearly as little natural selection as variola or vaccinia. It has

proved its fatal influence as readily in the well situated and well ventilated mansions of our healthy and rich suburb of Clifton, as in the crowded courts and badly ventilated alleys of the more ancient parts of the city. Indeed, the old and badly ventilated courts enjoy a comparative immunity. I have personally visited hundreds of these courts during the present epidemic, and have found most of them free from the disease. On the other hand, in isolated houses, well drained, supplied with good water, and free from nuisance, I have met with some of the most malignant and uncontrollable attacks. We have therefore before us a problem simple in its terms, but very difficult of solution. We have, on the one hand, an animal poison, specific and distinct in character, its conditions of existence and propagation well and clearly known, the means of prevention having been also ascertained, viz., isolation of the affected, and the destruction of all propagating germs by strong chemicals. We have, on the other hand, a public who in the main ignore these conditions, and who are too frequently supported in their views by members of our own profession. The means of prevention being of such a stringent character as to require compulsory legislative measures which would never be submitted to in a country where the liberty of the subject is valued much more than his life or his morals, I am unable to solve the question, and freely confess my own office a comparative failure as regards this disease under the present condition of things, although I am allowed by the local authority all the means which the legislature has placed at their command. I will simply enumerate the difficulties with which I have met, as *mémoires pour servir* for some future writer on the subject.

1. The error of attributing the disease to pythogenesis is very prevalent in the public mind; hence frequent persecutions of the lower animals in the localities affected, instead of the use of the proper preventive means. Almost every letter addressed to me in my public capacity is founded on this error.

2. When disinfectants are used they are viewed more as charms with transcendental properties than as chemicals; hence the want of thoroughness in their application; and as the strength of every chain is known by its weakest link, they very frequently fail.

3. When the first case breaks out in a crowded house, the spread of the disease is favoured by the want of compulsory power to isolate the patient, and to adopt a complete system of disinfection. In many cases, a whole family live in one apartment; yet they will object to have a child suffering from the disease removed, and in many instances will object to the use of disinfectants, especially if they have any odour or gaseous exhalation.

4. Very mild cases of the disease occur, in which medical assistance is not called in, or is so only at a late period. These cases are found frequently amongst the poor; and the children affected pass through every stage of the disease, playing with other children in our crowded courts. I have now under my care the child of a respectable tradesman, suffering from scarlatinal dropsy, in whom the primary symptoms and efflorescence were not detected even by his parents; he continued to attend as a day-pupil at a very large and respectable boys' school until disabled by acute albuminuria. The state of the scarf-skin and the tongue alone revealed the past history.

5. The removal of patients suffering from scarlet fever by rail and cab; the exposure of them in the street during the desquamative stage; the taking of them, by ignorance or otherwise, to the crowded waiting-rooms of public institutions and the consulting-rooms of private practitioners; all promote the spread of the disease. On several occasions scarlet fever patients have been brought into my own house. The mother of the child, when remonstrated with, invariably pleads ignorance.

6. In consequence of the late period at which the family medical attendant is consulted and the disease is detected, very frequently all possible mischief is done before any preventive measures have been adopted.

7. The disease spreads through the sending of children to boarding and day-schools when convalescent from the fever, without taking any sufficient measures for the disinfection of their persons and clothing, and through the return of children into private families in the same condition from infected schools. If space allowed, I could enumerate several pointed instances of both cases.

8. In some instances, I have known the disease to spread by imperfect drains, which, containing the excreta and the copious secretion of infecting mucus from the throat, have conveyed it to a distance; but this source of infection cannot apply to any extent to Bristol now, as the ejects on the whole are in a sound condition, and the connecting sewers of any infected locality are regularly disinfected with carbolic acid. Notwithstanding the statements which have appeared in a highly respectable contemporary (*The Builder*), none of the Bristol sewers empty themselves by open mouths; all of them have a fly-trap door,

which opens at low water to let out the contents of the sewer, but is so arranged as to prevent the ingress of either water or air. The engineer has also made provision for the prevention of too much pressure of sewer-gases on the higher levels. I am not aware of any part of Clifton where the pressure of sewer-gas is sufficient to pass through two inches of water in a properly constructed trap.

The above are some, but not all, of the difficulties connected with the prevention of scarlet fever. I have never at any period apprehended that I was able to cope with it in an epidemic form. In a paper which I had the honour to read at the meeting of the Association at Leeds, when alluding to this disease, I spoke in the optative mood; but I was not prepared for such results as the present epidemic has produced. Highly as I think of the preventive measures previously alluded to, and practicable as they may be in a large well ventilated house, under the direction of an able physician, and with disciplined attendance on the sick, I am convinced that without isolation they will prove only very partially successful. In no disease will the motto *Obsta principiis* hold better than in this. Frequently the removal, or complete isolation, of a first case, with preventive measures, would save a large number of lives; and I would fain credit myself and co-workers with having on several occasions accomplished this, and staved off more than one epidemic; but at last the enemy appeared at too many points, and among a class of the population who would consider any interference or advice from the public sanitary authorities as intrusive.

The Board of Health of this city have established an ambulance of a superior construction for the conveyance of persons suffering from infectious disease, and have placed this at the command of every qualified medical practitioner; yet I am morally certain that cases of scarlet fever are frequently conveyed in vehicles used by the public, and it is but seldom that our ambulance is required, although it is so constructed as externally to resemble a gentleman's private carriage.

The Boards of Guardians of the Clifton and the Bristol Unions have recently directed their medical officers to give an order of removal to their fever hospitals to every patient suffering from this or any other infectious fever; and the Bristol Guardians have requested their medical officers to send to me, as Officer to the Board of Health, notice of the locality of each case. Every house reported, if belonging to a pauper or situated in a poor locality, is visited and disinfected; and disinfectants are supplied gratuitously to the poor. The result, I have no doubt, will prove excellent. Our real difficulties lie with the classes above paupers, or those inhabiting our badly ventilated and over-crowded courts and alleys. The health enjoyed by these has almost inclined me at times, when inspecting them, to think that the subject of ventilation has been made too much of. I do not mention this as a fixed opinion; but my experience as a public officer leads me to consider good water, free from the slightest contamination with sewage; good drains and ejects, and consequent complete exemption from sewer-gases; good and water-tight surface to the surrounding grounds, and the careful and prompt destruction of any germs of zymotic disease which may appear, by isolation and the use of disinfectants; to be the prime conditions of a good sanitary state.

It is much to be desired that some one competent for the task should undertake to instruct the press and the public generally on these matters. At present, the former take the figures returned by the Registrar-General, varying as they do from week to week, as truly indicative of an altered sanitary condition of a town, although the highest figures may have been produced by bronchitis from an east wind or the prevalence of scarlet fever among persons who will not adopt preventive measures; and thus the post of a health-officer is not a sinecure of comfort when the mortality is high. In letters to the local press and in leading articles by the editors, the mortality is attributed to every cause but the right one. Any stray donkey or pig which may have found a night's lodging in the place is charged with murder; every bit of cabbage-stalk which the scavengers may have neglected to remove becomes a fever-producing agent; and thus it requires a very high moral courage in a health-officer not to bend at times to the public prejudice for the sake of peace.

I have, in this cursory review of the subject, taken some things for granted which at another time I should be glad to treat more at length, and I have avoided some interesting points which, if touched upon, might have led me away from the hygienic view of the subject which I proposed to treat of. Some of these points are the following. The relative mortality from scarlet fever in the upper and lower classes; the natural selection of the disease as shown in certain families; the exemption of some whole families from the disease however exposed to infection; the caprice displayed by the disease in its attacks; its occasional recurrence in the same individuals; its analogies with others of the zymoses, etc. At some future period, I shall probably recur to the subject.

CLINICAL MEMORANDA.

LOCOMOTOR ATAXY.

A WELL-MARKED case of Duchenne's locomotor ataxy, which has recently been under my care, affords grounds for surmising that this complaint may be a peculiar form of rheumatism, and not a disease *sui generis*.

The patient was a middle-aged labouring man, who attributed his complaint to having worked in a wet and malarious district five years ago. For the last two years, the disease had been stationary. With the exception of the peculiar muscular affection, he was in fair bodily health, and able to follow his daily occupation. He walked as if he were treading on spring-boards. He said that, if he had to step over a kerb-stone, he should fall if he did not look at his legs; and that in the dark, he was obliged to support himself by his hands. Before I saw him, he had been taking strychnine for several weeks, without any benefit. He informed me that nearly all his fellow-workmen who were associated with him at the time he contracted the complaint, suffered from rheumatism or ague. From this circumstance I inferred that his malady might have a rheumatic origin, and prescribed iodide of potassium. After taking the medicine for some time, the man called to say that he felt very much better in every respect. I then lost sight of him. I hope this case may tend to throw some light on the nature and treatment of a painful and obscure disease.

J. M. WINN, M.D., Senior Physician to St. George's and
Harley Street, August 1870. St. James's Dispensary, etc.

OBSTETRIC MEMORANDA.

PUERPERAL CONVULSIONS, CAUSED BY UNWHOLESOME FOOD.

A. O., AGED 32, stout, strong, thick-necked, was, on the 2nd July last, safely delivered by an old midwife of her second child. Everything went on well till the day following, when her mother, unwittingly enough, cooked for her a meal of potatoes, which she greatly relished. A decided change for the worse almost immediately took place. She complained of a most acute gnawing pain in her stomach, which in about two hours resulted in a severe convulsive paroxysm. It appears that she recovered consciousness from the first seizure, and drank a quantity of dissolved common salt for the purpose of dislodging the obnoxious matter. However, the paroxysms continued, and after the third seizure she became quite comatose. By the time I arrived (having a journey of nine miles), she was being seized with the ninth fit. The paroxysm having subsided, she lay in a state of complete stupor, with stertorous breathing. The countenance presented a most repulsive aspect, swollen and livid; the tongue was much bitten, and deglutition was at a stand-still. Finding that the stomach had already been freely acted upon, I proceeded at once to relieve the congested state of the brain by means of a copious bleeding, which was not very easily accomplished; then a strong enema of turpentine and castor-oil was administered, and a blistering solution was also freely applied to the calves of the legs and soles of the feet. By the combined action of these means, the impetus of the paroxysms was broken in a very marked degree; the seizures returned at longer intervals, and were of a shorter duration; and upon visiting her the day following, she was found to be slowly gaining consciousness. The lochial discharge, which had been entirely checked, reappeared; and from this date (4th) she progressed favourably, harbouring in the meantime the thought of paying a little more attention to her articles of diet in the future.

Penygroes, Carnarvon.

JOHN WILLIAM.

HARD TO REGISTER.—Among the most recent additions to the ranks of the medical profession in New York are Lum Ling Wan, latter Doctor of Medicine, Ah Mok, Ah Sam, and Lu Sing. The two are apothecaries, and the last is interpreter. They are well provided with a varied assortment of drugs. It would probably puzzle our own Medical Council to register these gentlemen. But no such difficulties will exist in America; and, judging from the importance which enterprising medical advertisers here have at various times attached to the announcement of drugs from Arabia, it is fair to anticipate that this highly authentic detachment of medicines and physicians from heathendom will achieve at least a success of novelty. After a time, we might expect to see them here.

THIRTY-EIGHTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in NEWCASTLE, August 9th, 10th, 11th, and 12th, 1870.

SECTION A.—MEDICINE.

On the Shoulder-tip Pain, and other Sympathetic Pains in Diseases of the Liver. By D. EMBLETON, M.D.—The author's object was to give a fresh explanation of the shoulder-pain. It occurs where the external division of the spinal accessory nerve enters the edge of the trapezius muscle, and in cases in which there is *evident*, not latent, inflammatory mischief going on in the liver or ducts. The nerves become inflamed and painful, and that state is propagated to the trunk, branches, and origin, *e.g.*, of the par vagum, causing disturbance in the various organs supplied by it. The spinal accessory nerve is intimately connected with the par vagum, and receives the morbid influence, which manifests itself at the top of the shoulder in pain—as a diseased hip causes pain in the knee. The *Sympathy* consists in an extension of inflammatory state from the diseased to the pained part. The pain in the spinal accessory nerve paralyzes more or less the sterno-cleido-mastoid and trapezius.

Dr. REEVES (Carlisle), some time ago, had a case of pains in the tip of the shoulder and side of the neck; and the conclusion at which he arrived was that they were not entirely confined to liver-diseases. He had seen the most intense pain in the tip of the shoulder from heart-disease [The President: So have I], and from other diseases. The pain was fixed; and in the course of a few hours the man was dead. The pain was in the place mentioned by the President; so that in reality these pains were not to be relied upon as characteristic of liver-disease. He had seen liver-disease without any pain in the shoulder.—Dr. CHADWICK (Leeds) said the difficulty which Dr. Reeves suggested arose from the fact that in heart-disease there might be a hyperæmic condition of the liver, which might be the efficient cause of pain in the cases observed. The novelty of Dr. Embleton's view, he thought, consisted in the statement that active hyperæmia—inflammation—was the pathological condition of these pains in the shoulder as evidence of liver-disease. Two difficulties suggested themselves. The first was, that these pains were very intermitting; and this was not a likely circumstance if the condition were one of active hyperæmia. He would ask the President whether in his pathological inquiries he ever found any of the sequences of inflammation, such as abscess, thickening, or softening, round these nerves, which might be for months, and even for years, affected in this way?—Dr. EMBLETON said that there was (he believed) no evidence to show the existence of inflammation of the nerves during life. There was an absence of that *post mortem* proof which he felt was a great necessity in the case; but when there was the pain which he described along the track of the nerve, one could hardly come to any other conclusion than that the nerve was in a state of inflammatory irritation. He did not suppose it went so far as to produce abscess. It was rather a low form, not intensely inflammatory; and like all other inflammation of this kind, it gave rise to pain, which was not always constant, but occurred at times when it was little expected, and seemed to be absent when one would think it ought to be present. He thought it of a low and chronic form, and therefore not likely to leave many traces after death. He had in his mind the term irritation from the first, when he noticed this connection; and he found it, also, after referring to books. But what was meant by irritation? In sciatica the pains intermitted very much.—Dr. LEARED said the interest of the paper depended upon the new sign which the author had made out—namely the tenderness of the spinal accessory nerve. He would like to know why shoulder-pain was to be confined to liver-affections. Where the stomach was very flatulent, shoulder-pain was present in a very marked degree. Could Dr. Embleton distinguish one kind of pain—liver-pain—from stomach-pain?—Dr. EMBLETON said that the question put by Dr. Leared was rather foreign to the subject; but he hoped on another occasion to enter into it, and see whether there was the kind of tenderness; and with an equal amount of disturbance in the disease's origin, there would probably be an equal amount of pain. He would not be able to tell by shoulder-pain what was the origin of the disease without attending to the other symptoms and other examinations.

On Paralysis with reference to Treatment. By D. DE BERDT HOVELL, F.R.C.S.—The object of this paper was to refer treatment not only to

particular lesions of the nerves and nerve-centres, but also to the division of the nervous system affected, and to a simple classification of cases; viz.—1. Paralysis from causes affecting the generating power of nerve-structure interfering with the normal supply of nerve-power; 2. Paralysis from causes affecting the conducting power of nerve-fibre, of which irritation forms a second division; 3. Paralysis from waste. Paresis, or neurosis, was regarded as a condition of depression or exhaustion of nerve-power, not identical with paralysis so much as predisposing to it. The sympathetic nerve was considered—1, as the seat of shock, both physical and moral; 2, as a vaso-motory power, especially with reference to the first class, as regarded hyperæmia, anæmia, spanæmia, and toxæmia; 3, its influence on secretion by its supply to nerve-cells, by the nerves of Remak, according to Dr. Meryon. An apoplectic clot might operate under class 1, by interfering with generating power; and under class 2, as a source of irritation interfering with its conduction. Reflex paralysis was also a compound form, indicating, under class 3, depression or exhaustion of nerve-power, acted on by some cause of irritation, under class 2. The object of treatment should here be to raise power and to remove the cause of irritation. This double process was necessary: either process singly would not suffice. By referring the usual remedies to their effects upon the several causes, their treatment would be rendered more successful as well as more satisfactory. The effect of mercury might be considered as—1, purgative; 2, cholagogue; 3, or acting specifically on inflammation, depositing fibrine; or 4, acting on syphilis.

The PRESIDENT said it seemed to be a well ascertained fact that paralysis from a railway shock did not come on at once, but at varying periods.—Mr. HOVELL: Yes; it is that which has given rise to so much scepticism on the subject.—Dr. REEVES: The cases are very often intermittent. He had seen a person who one day suffered almost complete paralysis, and the next was quite well. It intermitted for two or three days.—Dr. CHADWICK said that the members were much indebted to Mr. Hovell for his very suggestive, able, thoughtful paper; it was too suggestive, too thoughtful, too able, to be discussed speedily upon hearing it; it required to be read. There were two points, however, about which he felt personally indebted to Mr. Hovell; viz., his very excellent definition, and the conclusion of his paper. He valued pathological and physiological observation as bearing on disease. But unfortunately the tendency in their profession now was to take up hobbies and run them to the extreme, and to neglect more or less everything else. He was always delighted when he heard a man of thought and reason, and an able pathologist, say they must not neglect the art of medicine.—Dr. REEVES said that paralysis often resulted from rupture of the nerve-tubes; and he could not, under these circumstances, conceive how therapeutic remedies had much effect further than to put patients in a good condition. He had seen cases of paralysis, evidently from rupture of the nerve-tubes, where the limb ultimately recovered. Ruptured nerves joined; even if a piece of nerve were cut completely out, in course of time there might be a reformation, not probably of real nerve, but of such a substance that enabled the nerve-force to pass on and the nerve perform its proper functions again.—Mr. W. H. EDDIE (Barton-on-Humber) had been the subject, in his own person, of a very severe attack of paralysis last winter, from exposure to cold. He had a long drive in a cold night; a squall of hail and rain came on; his hat was blown off. When he arrived home, he found his face stiff, and thought it swollen from exposure to the cold. There was no particular paralysis, and his wife did not notice anything particular. The next morning he got up rather early. He could not shave properly; yet he could not say what was the matter. There was nothing apparent to himself. When he looked at himself he could not see that there was paralysis of the face. He rode ten or eleven miles in the morning to see a patient. His man met him with another horse, and told him that his mouth was drawn on one side. He did not feel it in the slightest degree. On reaching home, he found he was paralysed. He felt perfectly well in every other respect. The paralysis became gradually worse for several days; and then it became gradually better, but it was three weeks or a month before he was well. This was a complete case of Bell's paralysis from exposure to cold.

On the Sulphocarbolates and the Antiseptic Method in Medicine. By A. ERNEST SANSOM, M.D. Lond.—The author alluded to the difference of opinion in regard to what is termed the germ-theory of disease. He thought that much of the diversity depended on the connotation of the word "germ". There is abundant evidence that the "contagia" of transmissible diseases are material and organic; they bear a strong analogy to ferments in their mode of operation; whatever the initial cause of each, the existence of organised material possessed of reproductive powers is intimately bound up with both processes. The author alluded to the recent researches of Chauveau on vaccine, glanders, and sheep-pox, as showing that the activity of the contagia

depended on the solid particles proved by Beale to be actively moving masses of bioplasm. He considered the efficacy of disinfectant and antiseptic measures to be due to no obvious chemical attraction, but to the poisoning of those septic organisms which are intermediary agents of decomposition from organic to inorganic matter. He thought that the proliferation of bioplasm might be checked within the living body, and discussed Dr. Polli's treatment by the sulphites. From the well-known properties of carbolic acid, he hoped more for the sulphocarbolates, of which he gave a succinct description. 1. *The alkaline sulphocarbolates*.—There was evidence of great success from the administration of the sodium salt in throat-ulcerations and in scarlatina. There was promise of success in variola. Patients in the various stages of phthisis had given evidence of much amelioration. In enteric fever, Dr. Ligertwood, of Newbury, considered the treatment to be efficacious. 2. *Sulphocarbolates of alkaline earth bases*.—Of these, the most interesting was the calcium salt, of extraordinary solubility, which the author had employed in cases of rickets with remarkable success. 3. *Sulphocarbolates of the metals*.—The zinc and copper salts had been used by surgeons, especially by Mr. John Wood, as antiseptic dressings for wounds; a very favourable opinion of them had been given. The author had employed the iron salt internally, with varying success; he was doubtful whether it had any advantage over other salts of iron. In conclusion, he hoped that the remedies would be tried upon their merits, as he considered that, all theory apart, they would prove an useful addition to the *materia medica*.

The PRESIDENT said their best thanks were due to Dr. Sansom for his interesting paper. It touched closely upon one of the most interesting questions of the day; and the remedies of which it spoke were evidently of very great efficacy in the cases in which he had employed them.—Dr. WILTSHIRE (London) asked Dr. Sansom how the salts were eliminated. He had, at the suggestion of a friend, four or five years ago, very largely used benzine—the ordinary benzine of commerce—in whooping-cough. The effect of it was admirable, as in many other so-called specifics for the whooping-cough. There were also cases in which it did not act. He mentioned it some time ago to a physician of Berlin, who said that he had found that, when benzine was given in great quantity, it was immediately thrown out by the lungs, and a considerable portion was eliminated by the kidneys in the form of carbolic acid. That led him to inquire into the action of carbolic acid when taken internally. He found that it was never excreted as carbolic acid by the kidneys, but was broken up and changed. To influence the system by carbolic acid, benzine, and not carbolic acid, must be given. Mr. Gamgee, the veterinary surgeon, had lately made use of chloride of aluminium—not the ordinary chemist's kind, which was a coarse compound, and very unstable, but a stable kind. This would prove a very powerful and innocuous antiseptic. Experiments had been made by Mr. Gamgee upon putrid meat, and the results were very striking. It would come into competition with Dr. Sansom's carbolates; and he hoped it would supplement, not supersede, them. It was well known that, in whooping-cough, children were taken to gas-works. An able practitioner at Keswick told him that the mothers of the children in Borrowdale brought them down to Keswick, and stayed there all day, to enable them to inhale the air from the gas-works; and it was very efficacious.—Dr. SANSOM said that to the question asked by Dr. Wiltshire—how the salts were eliminated—he could not give a positive answer. When sulphocarbolates were taken by an animal, and the tissues were afterwards examined, no trace of carbolic acid or of sulphocarbolates could be found. The urine might be examined with the same results, but the tissues and urine loaded with sulphate of soda. Therefore it seemed, at first sight, that sulphocarbolates were decomposed; and the result was carbolic acid, which permeated the tissues of the body, and sulphate of soda. Then came a material point—the physical character of carbolic acid, in reference to its being given off by the lungs. Carbolic acid was to a certain extent only a volatile body. It required for volatilisation a temperature of, he believed, 280 deg. He believed that it was eliminated by the lungs, but very slowly; and therein he thought was part of the virtue of its action—that it allowed the accumulation of a large portion in the system at a given time, without any (as far as was known) deleterious results. The question about benzine was perfectly new to him, and would be of the deepest interest; but, though the theory was a plausible one, he did not think that the benzine could be given in sufficient doses to produce the amount of carbolic acid required. [Dr. WILTSHIRE: I think it could.] Dr. Wiltshire had spoken of another antiseptic; but, highly valuable as it might be, it would hardly take the place of the sulphocarbolates.

Therapeutics of the Sea-Side; with Special Reference to the North-East Coast. By G. OLIVER, M.B., Redcar.—The author believed it highly probable that, while sea-air lessens the cutaneous and pulmonary exhalation, sea-bathing acts powerfully on the skin and lungs: and

hence that sea-bathing and sea-water baths should to some extent prove corrective of the prejudicial action of sea-air in certain cases. Increase of appetite is perhaps the best and most obvious indication of the beneficial effect of sea-air. Where sea-air is prejudicial, Dr. Oliver had sometimes found good to result from the liberal use of alcohol; but, as a rule, when stimulants can be dispensed with, more benefit is derived from sea-air without them. Dr. Oliver gave an account of the climate of Redcar and Saltburn on the coast of Cleveland, and of his own experience there. The climate is dry and bracing: the beach is broad, prim, and sandy, and extends about ten miles along the coast: waves constantly breaking over it charge the air with a fine salt spray. The coast of Cleveland appeared to the author especially useful in the following cases: convalescents; diseases of children, especially those dependent on retardation of nutritive changes; scrofula; functional disorders of the nervous system; atonic dyspepsia; debility produced by town-life; degenerative changes in the tissues, as in old age and in the prematurely old; and some cases of spasmodic asthma. The cases for which the climate was unsuitable were described as being those attended with irritability and dryness of the bronchial tubes; inflammatory skin-affections; tubercular consumption in all stages; and Bright's disease. In conclusion, Dr. Oliver observed that the climate of the North-East Coast is well calculated to call forth and develop vital energy, and thus to invigorate an enfeebled system; but the substratum of energy submitted to it must not be too low, nor have been lowered by exhausting organic disease, or the result may be that still further depression is produced.

Dr. J. C. MURRAY (Newcastle) stated that, from experiments, he could say that the state of the atmosphere mentioned had not occurred from excess of ozone. There was an excess of acids, making the excess of ozone less likely to be discovered.—Dr. WILTSHIRE said it should be borne in mind that the word phthisis comprehended a great many different diseases; and that while some—as tubercular phthisis—were injured by a residence on the north-east coast, scrofulous phthisis would be benefited.—Dr. HENRY BARNES (Carlisle) said, with regard to the influence of the sea-air in cases of phthisis, that he had experience of the north-west coast. They had there a large convalescent institution, containing forty beds; and he had never seen any good results from sending cases of phthisis there, in any stage. But he had seen considerable improvement in a class of cases such as rheumatism. The coast during the summer months was exceedingly suitable for rheumatic cases and cases of general debility, and also for those recovering from acute disease.—Dr. FOTHERGILL (Leeds) objected to the term phthisis as signifying any pathological disease. In cases of real tuberculosis, no one would think of sending the patients to the seaside.—Mr. ELLIS (Poole) said that the death-rate gave hardly any indication as to whether the locality was fitted for consumptive patients.—Dr. CHADWICK said that no person who had been on the north-east coast could help feeling exhilarated by it. But the houses were small and crowded, and the windows closed; so that residents did not benefit much from their own good air. As to visitors, the children were mostly out all day; and so were the old, who also usually left their cares behind them. With respect to the Fen district, he did not believe the mortality was lower than the average of the country; and he found nothing to justify the opinion that it was favourable to phthisis.

On Scarlet Fever, with Special Reference to Pathology and Treatment. By ROBERT RENFREW, M.D., Glasgow.—Scarlet fever is one of the zymotic diseases. These are produced by poisons entering the blood, which have the power of multiplying themselves. These poisons are not eliminated by the usual eliminating organs, but by special parts of the body. In scarlet fever the eliminating parts are the fauces and nose. Zymotic poisons may be reabsorbed. In scarlet fever a large proportion of the eliminated poison passes into the stomach, and may be reabsorbed, prolonging and intensifying the disease. In the treatment, agents should be given that will prevent the reabsorption of the poison, hinder its formation, moderate and assist physiological and chemical actions and changes. The medicine given consisted of a mixture of tincture of steel and chlorate of potass. This mixture contains chlorine, which destroys the poison; muriatic acid, which supplies an acid wanted in the blood; iron, to improve the impaired red discs, and to assist in forming new ones; and chlorate of potass to supply oxygen to oxidise the disintegrated matters floating in the blood.

Dr. MACGREGOR (Penrith) said that the theory of Dr. Renfrew was very plausible; but he could hardly agree with it. There was no doubt that scarlatina was due to a specific poison taken into the system, there fermenting and increasing and spreading; but the poison reabsorbed probably would have become incapable of producing an increase of the original injurious effects, namely, scarlet fever. However, he thought there was a considerable deal of force in what Dr. Renfrew said. The treatment itself was an old one: he himself had applied it for several

years. Chlorate of potass, in fact, was a very common and usual remedy in scarlet fever, and he supposed that Dr. Renfrew claimed no originality for the means of treatment, but rather that he explained the method by which that treatment proved efficacious in the cure of disease. He supposed that by giving iron he relieved the throat and the local pain; and after the absorption of the iron into the blood he improved the condition of the blood, and thereby moderated the effect of the poison; and, by giving chlorate of potass for scarlatina, he supposed that he supplied the oxygen that was decreased in the blood by the effect of the poison. There was no doubt that chlorate of potass contained a large amount of oxygen, and that it was decomposed in the system, imparting deficient oxygen to the blood; and he was by no means prepared to deny that the beneficial effects of chlorate of potass in scarlatina was owing to this. Steel and chlorate of potass were an excellent medicine to the general system, as well as a very efficient local gargle for the throat. Still he would be afraid that, as a gargle, it would be rather irritating in many cases, particularly if the throat became ulcerated. In children, instead of relieving the pain, it would tend to increase it.—Dr. FOTHERGILL (Leeds) said that his efforts had not been equally successful. He had frequently seen abscesses of the throat. There was no doubt that, in the use of chlorate of potass in affections of the mouth and throat, it was excreted largely by the salivating glands. As to Dr. Macgregor's statement, that chlorate of potass was broken up and given off in the urine, he very much questioned it. It was found that it was not eliminated as chloride of potassium.—Dr. MACGREGOR said that the late Sir James Simpson, in all cases, said that, where he found enfeebled action in cases of pregnancy, he constantly gave chlorate of potass for the purpose of supplying oxygen to the blood, because, in his opinion, the child *in utero* died from deficient oxygen in the blood in many cases.—The CHAIRMAN said that recent experiments did not appear to bear out the theory of the decomposition of chlorate of potass in the body. It carried its oxygen out of the system with it.—Dr. RENFREW replied to the observations of the various speakers.

Snuff-Taking; Its Utility in Preventing Bronchitis and Consumption. By JOHN C. MURRAY, M.D.—The author stated that the proposition that an habitual snuffer seldom or never died from consumption was consonant with the experience of himself and others. He further declared that six cases of recovery from phthisis consequent upon free snuff-taking had come under his own notice; and concluded that snuff-taking is in some degree preventive of consumption and its frequent concomitant bronchitis, in virtue, perhaps, of its derivative and quasi-counterirritant action. The way to cure a cold, according to Dr. Murray, was to have recourse to snuff-taking at once.

Dr. RENFREW said the subject was important, and the paper had been interesting; and they had plenty of opportunity for observation. There were some statements by Dr. Murray to which he was inclined to object. That snuff-taking really did cure phthisis, might be considered doubtful. At the same time, it was very difficult to make out what was really phthisis. There were frequently cases which appeared to be phthisis, but which were found to be bronchitis, or congestion, or slight pneumonia at the apex of the lungs.—Dr. MACGREGOR said that, whatever influence snuff might have as a prophylactic of phthisis, it was rather too much to expect that, if tubercle were once deposited in the lungs, any amount of snuff would displace it or in any way cure it. There was no doubt that snuff might prove a disinfectant to many smells and noxious gases taken by the nose and mouth, and in that way act as a preventive of fever and infectious diseases; but how it could act as a preventive of phthisis—of a disease which might be inherited and be in the blood of the person, born with him, in fact, and part of his nature—he could not understand. He believed that to the regular snuff-taker, instead of producing irritation of the mucous membrane, snuff had a soothing effect; so that he could not see how the discharges were increased by it. At first, it proved an irritant, and the discharge might be accelerated; but, even admitting that, instead of being taken into the lungs in any way, it was always taken into the stomach. There was no doubt that the decided snuff-taker swallowed a great deal; it had been found in the stomach in *post mortem* examinations.—Dr. H. MILLER (Glasgow) thought that Dr. Murray had taken too much upon him when he argued that snuff was a food. To take snuff in the last stage of a common catarrh might facilitate the cure; but it was too much to think that it should be used as a preventive. They might as well propose mustard-poultices to prevent bronchitis, or ipecacuanha as a prophylactic when in danger of catching cold. He had met many cases where gentlemen in the habit of taking snuff had complained of persistent hoarseness in the throat from snuff-taking.—Dr. BLACK (Glasgow) had long entertained the conviction that a great deal too many theories were started. Nothing was more obstructive to the progress of medicine than theories built upon false bases or upon very general statements. He failed to see the connexion between the em-

ployment of snuff and the cure of phthisis. He did not think that Dr. Murray had made out a good case. He was inclined to look upon the cases brought forward as coincidences.—Dr. MACLEAN would not have said anything but for the fact that Dr. Murray was about to print a book. It was to be regretted that such a book was to go forth to the public. To attempt to treat such a serious disease as phthisis by snuff-taking, and upon so few real grounds, would lead those unacquainted with the subject to take a false view of the matter. What medical man would found a theory upon a patient's feelings when a man was perhaps a little uneasy from sickness and trouble? He hoped Dr. Murray would refrain from publishing his book until he got some real cases.—Dr. MACGREGOR asked if it might not be possible that the ruddy complexion of those who took snuff was due to the fact that it was persons which partook of the sanguine temperament who were liable to become snuff-takers; and that, on the other hand, those predisposed to phthisis, and who were of a delicate or scrofulous habit of body, felt no temptation to acquire the habit.—The CHAIRMAN thought that Dr. Murray did not seem to have produced any satisfactory cases where phthisis had been prevented; and it was within his (the Chairman's) knowledge that people who took snuff did suffer from bronchitis, and also from phthisis. He had known cases where snuff-takers had not received an immunity from phthisis, but had gradually got the complaint. Nor was it borne out that snuff-takers were of a ruddy complexion: his experience was the reverse.—Dr. MURRAY had not expected to escape discussion. As to not having made out a case, he referred to the six cases in his paper. He thought snuff-taking would have some little curative effect in tubercle; but what he said principally was, that it would be preventive, though it would cure as well. A man who used snuff ought to wash out his nostrils every morning, and also before dinner; and then he would be able to enjoy snuff without injuring his stomach or his smell. He considered that snuff had a stimulating effect, and it tended to prevent phthisis in this way. Repeated small doses might suffice to keep up a weak stomach to par. If a man felt a chill, he took a pinch; it produced diaphoresis, and made him forget the chill. It excited the system, and gave a pleasing effect for a time. The discharge from the nostrils could do no harm to the chest. He believed that snuff often came in the place of food: a pinch would prevent the feel of the want of food. He had himself experienced its effect in dispelling a chill and in keeping him awake. Hoarseness in the throat might be possible, but he had not seen it.

On Mucus Disease.—By WALTER WHITEHEAD, F.R.C.S.E., Manchester.—This disease, though noticed by some of the ancient, and described by a few of the more modern physicians, has received but occasional recognition even in the best of our standard works on medicine, notwithstanding the gravity of its symptoms and the fatality of its results. Out of some hundred and twenty writers who refer to the disease, barely half a dozen describe it under the same name. Celsus, Fernel, Van Swieten, Berenger, Plater, Sennert, Gabucinus, Morgagni, Bonnet, Brunner, Marcard, Stoll, Theden, and, more recently, Kämpf, Powell, Iliff, Good, Gendrin, Simpson, Graves, Cruveilhier, Todd, Clark, Sireday, and Perroud, may be mentioned as the principal authorities on the subject. The most prominent of its synonyms have been pituitous and vitreous disease (Celsus), hypochondriasis pituitosa (Fracassini), infarctus (Kämpf), diarrhoea tubularis (Good), colica pituitosa (Sennert), diarrhoea fibrinosa (Grantham), pellicular enteritis (Sir J. Y. Simpson), follicular duodenal, and follicular colonic dyspepsia (Todd), mucous disease of the colon (Clark), and colique glaireuse of the French. Andral, Cruveilhier, Billard, Lélut, and others, have discovered *post mortem* evidence of the disease in the mouth, pharynx, œsophagus, stomach, and bowels; but, so far, the disease has been principally noticed in connexion with the intestines, the colon being by far the portion most frequently affected. The disease is characterised by the secretion of mucus, of abnormal composition, on mucous surfaces, in which condition the mucus is prone to consolidate into either masses, membranous shreds, or tubular casts. The secretion forms and exfoliates periodically, each exfoliation being critical, and followed by an amelioration of the symptoms, which are aggravated up to this point. This critical period is accompanied by pains of a spasmodic nature and of variable intensity. The invasion and early progress of this disease are most insidious. The subjective symptoms are those of a most distressing nervous nature, and the victims are usually of a phlegmatic temperament. The nervous system is often compromised to the extent of inducing symptoms of chorea, melancholia, and partial paralysis. Women are more subject to the disease than men. The pathological products of this disease have been variously referred—to the follicles alone, to the mucous membrane generally, and by some to an inflammatory exudation. The absence of any fibre in their composition nullifies the inflammatory process, and reduces us to the happy necessity of reading the disease in accordance with modern research, which may be

formulated as follows. 1. The proximate cause of the symptoms referable to this disease is the hypersecretion and accumulation of mucus on the free surface of mucous membranes. Such accumulations sheathe the part and prevent the healthy performance of the functions natural to it, and thus induce immediate and remote results, the effects of such suppressed functions. 2. This hypersecretion indicates a want of balance between nerve-force and germinal matter. 3. The nerve-force is perverted by irritation. 4. The exciting causes, shortly to be enumerated, are numerous. 5. It is a character of mucous secretion, under the influence of irritation, for its cell-elements to increase, and its viscosity to diminish. 6. In the disease in question, the prolific cell-formations become entangled in the albuminous fluid in which they are formed, and present the membranous structures before referred to. Microscopical and chemical investigations of the products of the disease lend their aid in confirmation of this reading. The exciting causes may be divided into those in direct contact with the mucous surfaces, and those in the immediate vicinity. Of the former, may be mentioned scybala, worms, drastic purgatives, cusso, pomegranate, and portions of indigestible food; of the latter, hæmorrhoids, many forms of uterine disease, and, in men, disease of the prostate. There are few diseases less amenable to treatment than the one under consideration. The most varied methods have been tried in some cases without being able to check the formations. The principal points in the treatment are as follows. 1. Discover and counteract any cause which can be traced as a source of irritation. 2. Reinvigorate the strength, and allay the nervous irritability. 3. Remove the accumulated mucus. 4. Prevent its re-formation by topical measures.

SECTION B.—SURGERY.

Subcutaneous Division of the Neck of the Thigh-bone. By W. ADAMS, F.R.C.S.—After some general observations on true and false, or bony and ligamentous, ankylosis, and the relative frequency and rapidity with which these conditions are produced after various forms of disease, the author referred to those cases of bony ankylosis of the hip-joint which called for surgical interference in consequence of the ankylosis having been allowed to take place with the limb in a deformed position. The inconveniences arising from bony ankylosis of the hip-joint depend upon the extent and direction to which the limb may be contracted and drawn into a deformed position. In females, when the thigh is flexed and adducted, so that the knee is drawn across the opposite thigh, the orifice of the vagina is often seriously interfered with, and urination is performed with difficulty, and even a catheter cannot be passed, as occurred in the case recorded by Dr. Sayre; the parts, moreover, are kept in a constant state of excoriation. The author then referred to the various operations which have been proposed and adopted for bony ankylosis of the hip-joint, with deformity, such as Rhea Barton's operation, and also that proposed by Louis Sayre of New York, which he had performed in two cases. In all these operations it was necessary to make a large external incision, so as to admit of the use either of an ordinary saw or of the chain-saw; and although in three cases recorded the result had been successful, so far as rectification of the deformity was concerned, the possibility of the restoration of motion by the formation of a false joint was not clearly established. The author, therefore, advised that the object should be limited to the rectification of the deformity, and obtaining bony ankylosis with the limb in a straight position. This he proposed to accomplish by a subcutaneous division of the neck of the thigh-bone within the capsular ligament, using only a tenotomy knife, and a very small saw, three-eighths of an inch in width, with one inch and a half cutting edge, at the end of a small shank three inches in length. A case in which Mr. Adams had successfully performed this operation was brought before the meeting, and no inflammation whatever had followed the operation; and the author, therefore, felt justified in comparing this operation of the subcutaneous division of bone, or subcutaneous osteotomy, with the subcutaneous division of tendons. The case in which he performed the operation was one for bony ankylosis of the right hip-joint, with the thigh flexed and contracted to a right angle with the pelvis, so that the limb was utterly useless. Bony ankylosis, with the limb in a straight position, was obtained as the result of the operation, and the man is now enabled to walk without the assistance of either a crutch or stick; and the bony consolidation at the seat of operation in the neck of the thigh-bone is such as to enable him to bear the whole weight of the body on the limb which has been operated upon.

The CHAIRMAN (Mr. H. Power) said that thanks were due to Mr. Adams for this very extraordinary case which he had brought forward. Many gentlemen present probably had cases under their care in which a similar operation might be performed with advantage; and the absence of danger that seemed to accompany the operation was a very

strong argument in its favour. He had a child of his own, five years old, who was suffering in a very similar condition. His boy was at Whitby about three years ago and caught diphtheria, and, as a result, he had a very large abscess at the abdomen, which burst and led to complete stiffness and ankylosis of the hip-joint. He thought his boy's case was a very good case on which Mr. Adams' suggestion might be practised. Mr. Hancock and he had put the boy under chloroform and tried to move the joint, but it was impracticable. When he returned to town he would ask Mr. Adams to see whether he could perform the same operation which he described.—Mr. F. JORDAN (Birmingham) asked how Mr. Adams exercised the pressure in order to preserve the track for the introduction of the saw.—Mr. ADAMS said that in all subcutaneous operations where two knives were used, he placed his hand very firmly to make an even pressure from the skin. What he meant by compression was not the admitting of a finger into the wound, but the mere external compression on the skin until the saw reached the bone, thus preventing the saw from getting out of the track.

A New Form of Elevator for Depressed Cranium in Childhood. By F. WATERHOUSE, M.R.C.S.—The subject of this paper might seem at first sight less important than, on further consideration, it would prove. The author thought it, however, his duty to place the instrument before the Association; for he was convinced that it would not only lessen the immediate risks of cranial operations, but would obviate other dangers which trephining and non-interference involved. Referring to the pathological paradox that peripheral irritation generally excites more nervous functional disturbance than results from direct injury to the brain-substance, he pointed out that the gravity of the damage done in the latter case was often not manifest until some time afterwards; but that severe organic disorder of the mind or brain almost invariably follows cranial injury, was a fact not sufficiently recognised. He quoted several authorities on psychological medicine in support of this view. Reviewing the forms of cranial depression which occur at different ages, he said that his instrument, "the tractor", was adapted for those cases where there was fracture with bending in of the bone. Taking a brief retrospect of the different instruments, ancient and modern, which had been employed in cranial operations, he concluded by showing the *modus operandi* of the tractor.

The CHAIRMAN said that, as to depressed fractures in childhood, he was disposed, except under serious circumstances, to leave them alone; but when the fracture was of an extraordinary character, then it was possible that such a machine as had been described might be useful.—Mr. HUMPHREYS (Shrewsbury) said that, when he was a dresser under Mr. Liston, a guard of the London and North Western Railway was brought in, suffering from compression, caused by the back part of his head coming with considerable force against the sharp edge of a bridge. The man recovered from the concussion; and there was a large depression at the back of his head into which three fingers could be put. Mr. Liston, seeing there were no active symptoms, merely watched the case, and the man recovered. This made a very great impression on his mind; and he had since had many cases, and he had always followed the advice of Mr. Liston, more particularly with regard to children. Whenever there were no dangerous or active symptoms, he had always allowed the case to take its own course; and he could not recollect one case in which he regretted having done so.—Mr. GREGSON agreed with Mr. Humphreys.—Mr. TAIT had seen the instrument in the annual museum. He had not attended midwifery much, but he understood that depression was nothing very peculiar; that, if left, it recovered itself. He would not use an instrument to raise a depression which would not interfere with the mental capacity. He trephined the skull of a child with abscess in the brain, but he got so much discredit from the operation that he should never do it again; and he did not think any surgeon would interfere with a child's head either with fracture or depression.—Mr. A. BELL (Newcastle) agreed that very few surgeons would trephine unless the symptoms were very urgent; but he could not go so far as to say that in the case of a child with an abscess of the brain he would hesitate to trephine it. He thought surgeons justified in trephining if they diagnosed injury of the base of the brain or disease of the brain. A man under his care was suffering from an injury received about two years and a half ago, resulting in paralysis. He had not the slightest doubt that if the man were trephined he might stand a very good chance of recovery, having been prepared by the long time of depression.—Mr. ADAMS referred to a case of trephining successfully performed by Mr. Cline; and mentioned a case in which Mr. Green trephined a child, but death resulted. He thought very few surgeons would venture to trephine children for depressed bones. In the Crimean War, a considerable number of patients were trephined, and the mortality was very large. He mentioned a case at the Great Northern Hospital, in which the antimony treatment had been used with great success.—Mr. JORDAN (Birmingham) said that in preference to the antimony treatment, he

would be induced to try a seton at the back of the neck.—Mr. TAIT mentioned a case in which Dr. James Duncan trephined the skull, but the man died in forty-eight hours.

Operation for the Relief of Contracted Toe. By R. WALKER, L.R.C.P. Ed.—The form of contraction of the toe which most frequently comes under the notice of the surgeon presents extension at the proximal, and flexion at the middle and distal joints, and calls for interference chiefly on account of the prominent middle joint and the inflamed bursa upon it. The second toe is the one usually affected. When the contraction is extreme, the interosseous muscles are most probably to blame, having become atrophied in consequence of the cramped position of the member. The only modes of treatment hitherto proposed are tenotomy and amputation. In a case in which Mr. Walker operated, he adopted a third plan successfully. He excised the middle joint together with the bursa, and brought up and secured with a splint the distal fragment of a line with the extended proximal phalanx, trusting that, when ankylosis was complete, the long flexor, having become contracted to its normal tension, and being inserted to much greater mechanical advantage than the extensor, would bring down the toe to its natural position. The result was perfectly satisfactory, and he thought that the operation will prove a better one than either of the others.

On the Treatment of Enlarged Lymphatic Glands. By FURNEAUX JORDAN, F.R.C.S.—The numerous modes of treating enlarged glands were remarkable chiefly for their want of success. The method now proposed, if carefully carried out, Mr. Jordan had never known to fail. The ordinary enlargement of lymphatic glands is due to inflammatory action. By far the most efficient remedy in inflammation of any organ is counterirritation, if only it be established in the proper locality, and to a proper extent. A blister will cure bursitis when nothing else will, and inflammation of a bursa does not differ from other inflammations. In enlarged glands, as in abscess, carbuncle, boils, and erysipelas, the best locality for counterirritation is not over the inflammation, but around it or adjacent to it—in short, in an independent vascular region. In enlarged cervical glands, a large patch of iodine irritation at the back of the neck, which may be prolonged below the glands, will certainly prove successful in a short time. A shot-bag, as heavy as can be tolerated, should be applied over the glands at intervals during the day, the patient being for this purpose in the horizontal posture. Dr. Hickinbotham, of Nechells, Birmingham, had under his care a man with enlarged cervical glands, which, for three years, resisted the careful trial of every known treatment. Dr. Hickinbotham then established a patch of counterirritation at the back of the neck. In three weeks all enlargement had disappeared. One of the advantages of counterirritation is, that it gives certain and immediate relief to pain. The persistent tormenting pain of a carbuncle, for instance, may be instantly relieved by a ring of counterirritation with its transitory smarting.

The CHAIRMAN (Dr. Kelburne King, Hull) presumed that the practical point which Mr. Jordan wished to bring forward was that if they wished to cure inflammation they must select a separate vascular territory.—Mr. JORDAN: Yes, that is the fact. He wished they could get a counterirritant which would not give so much pain as blistering.—Mr. JONATHAN HUTCHINSON considered pain essential to a counterirritant; and that which gave the most pain was perhaps the best. Mr. Jordan had a little overlooked the possibility of an inflammatory action being set up, and contracted entirely through the influence of the nervous system, and not through the vascular. It was very probable that Mr. Jordan was right; but his own practice had given him much better results from counterirritation right over the inflamed part than Mr. Jordan appeared to have got. He had used counterirritation very freely. Whether it were better to have the counterirritation at a little distance, he did not know; but he knew that where applied directly over the inflamed part it did an immense amount of good.—Mr. SPENCER WATSON thought counterirritation of very great value in many cases. He was inclined to think, with Mr. Hutchinson, that it was, perhaps, in many cases, desirable to apply counterirritation rather near the part inflamed. Many members of the profession, however, objected, as he did himself, to the term counterirritation. The term conveyed very little information as to whether it was an irritation of the vessels or of the nerves. Until they had found a better term it seemed hardly possible to express themselves in any other way.—Dr. HEATH (Newcastle) said that there was one mode by which they were sometimes guided as to the best place to which the counterirritant should be placed, which was in favour of the theory that counterirritants acted not only on the vascular, but also on the nervous system. He thought that where the sympathetic pains existed at a distance from the disease, they found that the placing of the counterirritation at that spot was much more efficacious than if the counterirritant were in the neighbourhood or immediately over the disease itself.—The CHAIRMAN wished to know whether in the case of

housemaid's knee, to which Mr. Jordan had alluded, he would prefer to apply a blister at a distance rather than over the part.—Mr. JORDAN said that he did not enter at all into the explanation of the action of counterirritation. He could not explain the action of opium, or of chloroform; but he would not take a child's finger off without giving chloroform simply because he could not explain the action of it. He agreed with Mr. Hutchinson as to the action on the nervous system. He believed there was some reflex influence, and that some influence was exerted through the nervous system. He scarcely agreed with Mr. Hutchinson as to the advantage of applying counterirritants near the inflamed part; and certainly his experience bore out the views which he had mentioned in his paper. If counterirritation did harm when applied directly on the place, it seemed to him that some independent territory, not too far off, was best. He was constrained to use the term counterirritation until a better term was accepted. The term distant irritation had been suggested; but whether it was more used he could not say. As to "housemaid's knee", he would put one blister over and one around.

The Use of the Seton in the Treatment of Vascular Ulcer of the Cornea. By W. SPENCER WATSON, F.R.C.S., London. Mr. Watson observed that vascular ulcers of the cornea are usually consecutive to phlyctenular ophthalmia. They had been successfully treated by him in twenty-two out of twenty-six cases. The usual theory of counterirritation is not sufficient to explain the beneficial action of the seton, which was explained by another theory. Three cases, with drawings in illustration, were related.

The CHAIRMAN could speak with some confidence as to the efficacy of the treatment. Some time ago the House-Surgeon at the Hull Hospital recommended him to try it in a case of cornea; and it was so successful that it had become the habit to treat such cases in the Hull Infirmary in that way.—Dr. LEGAT (South Shields) had two of these cases under treatment. He thought Mr. Watson had omitted all reference to application of lotion except belladonna, which was soothing. He had found a weak solution of sulphate of zinc to answer admirably. There were cases of recurrence of the complaint, particularly during a very hot sun, and also cold winds. A child, whom he had under his care about a year ago, was very bad a short time ago in both eyes, and another attack was threatened. To his surprise, however, within a week the eyes were almost well, and in ten days the ulcer on each eye was healed. The other case, that of a young woman sixteen or seventeen years of age, promised to be much more obstinate; and he had ordered a blister to the temple. He did not think a blister so painful as Mr. Watson supposed. He believed that in the main they must treat the constitution.—Mr. SPENCER WATSON said he did not preclude general treatment, as he believed it was as important as the seton.

Twenty Cases of Stone in the Bladder. By W. F. TEEVAN, F.R.C.S.—Mr. Teevan briefly related the particulars of all the cases, now twenty in number, in which he had operated for stone. Nine of the patients were adults, and eleven children. Of the adults, six were operated on by lithotripsy, and three by lithotomy, the latter operation being necessitated by the great size of the calculus in each case. All the boys were operated on by lithotomy. Eighteen of the patients recovered and were permanently cured, and two died. When possible, lithotripsy ought always to be preferred to lithotomy in adults. For the successful performance of lithotripsy, the stone ought to be of only moderate size, and the bladder not too much diseased. The removal of a calculus by lithotripsy was one thing, and the cure of the patient another thing; for there were patients now alive in whom surgeons had removed the calculi by the lithotrite, and yet failed to cure them, a state of chronic cystitis and paralysis remaining. In old men, the lithotrite ought only to remain in the bladder for a couple of minutes, the patients being operated on once a week, and only confined to bed for one day: the confinement of old men to bed was perilous. Large phosphatic stones might be crushed with safety in young men. Extensive heart-disease forbade lithotripsy, as patients had lost their lives whilst straining in passing fragments. Much information was yet required to know the extent to which the mortality after operations for stone had been reduced by the introduction of the lithotrite. The median operation was only justifiable for small stones, and these had much better be crushed. In lateral lithotomy, the stone ought to be cut out, and not torn out. There was no such thing as dilatation of the prostate; it could be cut or torn, but not dilated. The external incision ought to commence low down, as less blood was lost thereby. The internal incision ought to be free, as the chief dangers incident to lithotomy were phlebitis and pyæmia resulting from bruising the parts in tearing out the stone. A rectangular staff ought to be used, and held with two hands, the lower resting on the pubes. The forceps was unnecessary in children, and often in adults; the stone in the former could be better

extracted with the left forefinger, and in the latter a polypus-forceps ought to be used in preference to the one now employed. The introduction of a tube after lithotomy was useless where there was a good assistant in charge of the case. Mr. Teevan concluded by relating the results of a personal examination of the various pathological museums in London, and of a series of experiments which he had performed on the dead subject.

Dr. ARNISON (Newcastle) said that from the portion of the paper he had heard he had gained one or two hints as to the performance of the operation. If he had only heard the paper two years ago, when he performed his first operation in lithotomy, it would have saved him very great anxiety. In the Newcastle Infirmary he had had four successful cases, and the fifth case was in the Infirmary recovering. He had decided that the straight staff should be used instead of the curved one. As regarded the use of the tube, they seldom operated at the Infirmary without it; but it was seldom kept in more than twenty-four hours.—Mr. TEEVAN said that some had no doubt in their experience found the staff to wriggle about more or less; and some of the accidents had happened, not from the fault of the operator, but from the fault of the man who held the staff. He himself got the man to hold the staff with both hands, one above close upon the other; and the result was that the staff was held firmly. He was very much surprised, on going to the surgical instrument makers in town, to find that many surgeons in London even now used two knives—one for a child, and another for an adult. For a child they used a knife with a narrow blade, and for an adult a knife with a broader blade. This was very illogical, because the surgeon had to use his finger in all cases; and the opening made should be of similar size.—The CHAIRMAN remembered that Mr. Syme entered his knife just immediately in front of the anus, and cut outwards; and to get more room he cut open the skin forward and upward.—Mr. TEEVAN said that some operators felt about seeking the stone; but if the walls of the bladder were separated suddenly with the opening of the forceps, and the forceps closed again as suddenly, then they would always catch the stone.

On some Rare Forms of Opacity of the Cornea. By W. FAIRLIE CLARKE, M.A., M.B.—The author first related a remarkable case of congenital leucoma, and pointed out the interesting pathological changes that must have taken place *in utero* before such a blemish could be produced. He then gave details of three cases of symmetrical opacity of both corneæ, which had lately been under his care; and to these he added two cases of the same disease, which had been published by Mr. Bowman. Unlike most other opacities of the cornea, this complaint is confined to adult life. It is characterised by a limited opacity, lying transversely across the cornea, and corresponding more or less to the palpebral aperture. The opacities commence as a slight haze, and gradually increase until they almost destroy the sight. They are not attended by pain or by any acute symptoms. Their progress is very slow, and they affect simultaneously exactly corresponding parts of both corneæ. In reviewing the whole series of cases, Mr. Fairlie Clarke drew several conclusions as to the nature and treatment of this disease. The paper was illustrated by sketches, which showed the form and position of the opacities.

SECTION C.—PHYSIOLOGY.

The PRESIDENT (Dr. Andrew Clark, London) opened the proceedings by an able address, in which he pointed out the importance of Physiology to Medicine.

Dr. HUGHES BENNETT (Edinburgh) proposed a vote of thanks to the President for his address. It contained an immense amount of solid truth, which he trusted would be given to the world. It was a very grave question as to how far the Physiological Section should be carried out in connection with the Association, because notwithstanding the force of those truths which Dr. Clark had so well expressed—that physiology must ever be the basis of a sound, solid, medical education—it was an unquestionable fact that the Physiological Section was attended by the smallest numbers of associates, and the physiological papers brought forward, which entailed an enormous amount of trouble and research, were read to some half dozen members, while others flocked to what they called practical. It had therefore occurred to him, and they would see how far it was borne out by the present session, that it would not be inappropriate that the Physiological Section should be given up. There were many reasons for this. One was, that physiological papers of importance were generally brought before the Royal Societies and other scientific institutions. The small attendance in the section was certainly very discouraging for those who had taken pains and perhaps spent a year in long researches to arrive at important truths.—Mr. JOHN COUPER seconded the motion, which was carried by acclamation.

The Diagnosis of Astigmatism by the Ophthalmoscope. By J. COUPER, F.R.C.S.—An ophthalmoscopic diagnosis of astigmatism was shown to be an essential preliminary to its correction. Without such an examination, testing by cylinder glasses becomes a haphazard and circuitous procedure. In dealing practically with astigmatism, there are but two problems: first, to find the focus of a cylinder which measures the difference of the two chief meridians; and, secondly, to find the appropriate inclination of the cylinder axis. Rightly used, the ophthalmoscope solves both these problems by disclosing the position of the chief meridians, as well as the nature of their refraction. With information on these two essential points, a random trial of cylinder glasses is avoided. The proper kind of cylinders at once chosen, and the proper inclination at once given to its axis. The exact focus required is then ascertained speedily by trial. The examination has thus a basis of fact for its starting point. In discussing the present modes of detecting astigmatism ophthalmoscopically, viz.: first, the plan based on the circumstance that two vessels parallel with the meridians of maximum and minimum curvature respectively, are not distinctly seen at the same time, nor without change in the adjustment of the eye when viewed as an erect image; and, second, that depending on the contrast of shape in the erect and inverted images of the disc, Mr. Couper suggested as an improvement on the first test that the periphery of the disc is preferable as a test-object to the vessels, because of its greater uniformity, and because vessels conveniently placed are not always found. In astigmatism, only limited diametral portions of the margins of the disc are distinctly seen with unchanged adjustment when the fundus is viewed as an erect image at minimum distance. If the observer know accurately the amount of accommodation which he requires to exert in order to make these diametral portions distinct, then he also knows the refraction of that plane of the media through which they are seen. The inclination of the distinct parts clearly indicates that of the chief meridians. Thus, in all cases where the fundus can be viewed erect, the solution of both problems is in great part achieved. Great stress was here laid on the necessity for perfect control of accommodation on the observer's part—that control being within easy reach of every one. In applying the second test, the difference in size of the images compared is often an obstacle. Mr. Couper then described his methods of examination. In mixed astigmatism, an erect image is visible in the hypermetropic meridian, and an inverted image in the myopic meridian of the eye. Each meridian is tested in succession by bringing into view a vessel disposed at a right angle to its plane. The apparent motions of this image at once determine whether it be erect or inverted, and—the observer's eye being accommodated for diverging rays—at once point out which is the hypermetropic and which the myopic meridian. Of course, in seeking for an inverted image, the observer must recede sufficiently far to place it *at or beyond* his near point, and must accommodate accordingly. By a little modification, this method serves as well for the detection of the two simple forms as for the mixed variety of astigmatism. Examination at maximum distances (five feet for myopic, and three to three and a half for hypermetropic meridians) was strongly recommended as a means of detecting the exact inclination of the chief meridians. At this distance, the effect of the astigmatic media on the apparent course of vessels is exactly like that of a cylinder glass held at arm's length, with axis oblique, on a perpendicular line. The image of the line deviates from the perpendicular with the axis. So, too, does the image of a vessel deviate to and coincide with one or other chief meridian plane. This apparent deviation of vessels from their real course indicates with perfect precision the position of the meridians. A thirty-inch mirror is best suited for illuminating at these distances. Lastly, Mr. Couper pointed out a new method of utilising the inverted image produced by a convex lens, so as to make it a most delicate test of all forms of regular astigmatism. With the solitary exception of the fact pointed out by Mr. Jonathan Hutchinson, that when the lens is slightly withdrawn from the observed eye this image undergoes an expansion if the eye be myopic, and a diminution in all dimensions if the eye be hypermetropic, no attempt had hitherto been made to diagnose refraction by means of it. Mr. Couper pointed out that, when astigmatism is present, this expansion or contraction takes place in one diameter only of the disc. The direction of this diameter gives the direction of the chief meridians; and so delicate has he found this test that an astigmatism of one-thirty-sixth can be readily detected by it—an amount not far removed from normal astigmatism. He declared one-thirty-sixth to be the least degree of astigmatism discernible by the ophthalmoscope, but also admitted that now and again yet smaller degrees call for correction, and instanced naval officers, astronomers, and all who use optical instruments of precision, as greatly benefited when one-fortieth or even one-sixtieth is corrected. In such cases the ophthalmoscope is useless, but as a set off to this the patient's acuteness of observation facilitates the examination.

The PRESIDENT thanked Mr. Couper for his elaborate paper. He thought it would be well worth perusal; and when it was in its printed form many of his auditors would return to it.

The Preservative Agency of Lowered Vitality. By J. MILNER FOTHERGILL, M.D., Leeds.—Premising that health consisted of a balance of parts as regards power as well as function, the writer gave a series of illustrations demonstrating the preservative agency of general impaired health in irremediable injury or protracted repair. In grave injury of an organ, he considered a general lowering, by lessening the necessity for functional activity in the organ, as directly tending to preserve it from utter disorganisation. He instanced lessened power of exertion in heart-disease, the avoidance of nitrogenised food by the sufferers from chronic renal disease, etc. After giving some cases illustrating the position taken up, he concluded by stating that in many cases a general impairment of health, by tending to maintain an equilibrium, was directly preservative in its action.

Dr. HUGHES BENNETT presumed there was very little difficulty in agreeing with the author as to the occasional necessity of sometimes lowering the system, and, he hoped also, occasionally of the necessity of supporting it. The difficulty was to determine what were the cases which required the one kind of treatment or the other. The paper was singularly deficient in facts. What was required was not merely ingenious speculations, but positive facts. Dr. Fothergill stated that, when the consumptive ate ravenously, the prognosis darkened. That was contrary to his (Dr. Bennett's) experience; for, whenever he found that the consumptive ate well, he had a tolerable hope of his improvement. Had Dr. Fothergill carefully observed and recorded the fact that, whenever a person ate well in consumption, the prognosis was worse? Before any such statement was accepted, at least one hundred well recorded cases should be shown to prove that fact. Dr. Fothergill also stated that wasting took place with increased appetite in pneumonia. Where were the facts that supported this statement? Had Dr. Fothergill fifty or a hundred well recorded cases which demonstrated that such was the fact? He quite agreed with him that excessive eating under certain conditions was very likely to produce nephritis. He instanced a case which came under his own observation in the Edinburgh Infirmary. A labourer having eaten a very hearty meal after working in the fields, fell asleep in the open air; and, on waking, he had a shivering. This was succeeded by pneumonia. When Dr. Bennett saw him, he was comatose; and he had evidently not digested the large meal which preceded the attack. He (Dr. Bennett) at once detected that there was uræmic poisoning, and he immediately bled him to sixteen ounces, when coma disappeared, and he recovered. But he would not put that case forward as a foundation for an absolute general statement. He thought observation and more care required before recommending the lowering or levelling-down system in such cases. Then, again, as to hæmoptysis: in the one case referred to, where it seemed to do harm, details were wanting. He should like to criticise that case. In the meantime, they should be cautious before they supposed that because there was hæmoptysis in phthisis they should starve their patients. He thought the advancement of medicine required that, before entering into generalisations, more care should be shown in the investigation. Medicine would occupy a much higher position, and the medical practitioner would be more highly regarded, if, instead of entering into speculations of that sort, they were to introduce the principle that no statement should be put forward unless the person who stated it had a conscientious conviction, and had taken pains by investigation and care to obtain the proof.—The PRESIDENT thought that there could be no impaired vitality which was not destructive. The only meaning of increased vitality was resistance from within and without to the disturbing agencies; and he could not conceive it possible under any circumstances whatsoever that impaired or lessened vitality should be preservative. He thought that if the author of the paper had used the term "rest of the organs" he would probably have carried out his meaning without violating their sense of physiological propriety.—Dr. HAYDEN (Dublin) agreed with the President's remarks. He thought that the paper was one of a character which should be encouraged at meetings of that kind. It had a physiological aspect, and connected physiology directly with practical medicine. He agreed with the author in some of the remarks made. As to increased appetite in phthisis, however, he had seen numerous cases of entire excavation of the lungs where, on visiting the patient every morning, the report was that the patient had an increased appetite. In regard to hæmoptysis, he thought there was a great deal in what the author had said. It was notorious that stimulation of the heart—the action of which, in a great measure, depended upon the quality of the blood—was the means of increasing the pressure upon the injured vessel.—Dr. A. WILTSHIRE (London) pointed out, with reference to the remark of Professor Bennett, that before believing the statement made they should have a hundred well-recorded cases before

them—that the objection to papers which would illustrate one hundred cases was that there was too much detail—they took up too much time. He had heard Sir William Jenner state that very great appetite in connection with loss of flesh was a grave and certain sign of phthisis.—Dr. HUGHES BENNETT said that what the patient said about his appetite was one thing. The question was, his real appetite. To say that a man had a great appetite and ate largely at the moment when he was wasting away, was to give forth a physiological problem of the greatest magnitude. He required the proof.—Dr. FOTHERGILL asked what were facts. The statements in his paper were founded on his conscientious convictions. As for the facts, the principle might be starving while the facts were being gathered. As to the question of consumptive people eating and wasting away, he had seen a good many cases.

The Naked Man and his Photograph: in re the Turkish Bath. By J. A. BOLTON, M.D., Leicester.—Dr. Bolton exhibited photographs of a case of ankylosis from rheumatism, in which benefit had been derived from the use of the Turkish bath. He described the case, and also one of rheumatic gout, and one of sciatica and neuralgia. The Turkish bath was, he considered, likely to be useful in the following diseased states: scabies or psora; ichthyosis; alopecia; chilblains, boil, and carbuncle; acute orchitis; the exanthemata; cholera; syphilides and gonorrhœal synovitis and rheumatism; disorders of the stomach and liver; also in pregnancy; amenorrhœa and dysmenorrhœa; heart-disease; diabetes mellitus; and Bright's disease. He considered the Turkish bath, properly constructed, to be a valuable addition to the *British Pharmacopœia*. As a preventive of many diseases, it was eminently useful; but, when wedded to medicine, it became a powerful curative agent in the hand of the physician who understood from personal experience its proper use, and who was guarded against its unfair abuse.

Dr. HUGHES BENNETT said that, although the Turkish bath had been introduced into the large towns, and was at the present very largely employed, he was not aware that in medicine generally they had yet arrived at any very clear ideas or conceptions as to the class of cases in which it was likely to be beneficial. He reiterated his remarks as to the worthlessness of solitary cases, and pointed out that it did not follow that that which had been valuable in one given case would be valuable in all similar cases. He should like to know from Dr. Bolton what were the injurious as well as the beneficial effects arising from the use of the Turkish bath. He advised Dr. Bolton to begin to collect cases at once. He again urged the necessity of having a number of cases before coming to any belief.—Dr. BOLTON said that in all his experience he had not known a single case to be injured by the bath.

SECTION D.—MIDWIFERY.

The PRESIDENT (Dr. R. Barnes) said it was not the custom to deliver any elaborate address on opening the Section: he should therefore only offer a few observations before proceeding to the abundant business before the members. He thought it was a subject for regret that obstetrics and the diseases of women were in this country studied so much apart from general medicine and surgery. The almost complete neglect of this study by physicians and surgeons raised a serious barrier against the progress of general medical and surgical science, and made them necessarily incompetent to appreciate rightly the work of those who brought the light of physiology and pathology to bear upon the investigation and treatment of disease in women. It was a remarkable fact, that many of the most interesting problems in medicine and surgery received their most important illustrations from the observation of women under the various influences of menstruation and pregnancy. For example, ovarian influence, disorder of the generative organs, and the changes in the circulation wrought by menstruation and pregnancy, evoked or modified many nervous manifestations, as chorea, epilepsy, paralysis, neuralgia, which could not be rightly understood or successfully treated without study of these conditions. He had even known cases of monomania and other grave forms of mental disease depending upon uterine displacement. Again, there was something in the action of pregnancy which seemed to induce changes in the blood that led to the development of diseases which excited the deepest interest amongst general pathologists. For example, leucocythæmia, acute atrophy of the liver, and albuminuria, occurred in the non-pregnant state, and even in men; but the richest field of facts in elucidation of these diseases—at any rate of the two first—was furnished by obstetrics. Pregnancy seemed to create a predisposition to many of the most serious pathological conditions, and therefore furnished the means of studying them with the most profit. This great opportunity of acquiring broader views of disease was denied to those who neglected the study of obstetrics.

The Connection between Inflammatory Conditions of the Uterus and its Displacement. By J. HENRY BENNET, M.D.—The paper was concluded with the following recapitulation. 1. Under the influence of

mechanical doctrines, pushed to an extreme, uterine displacements are, by many, too much studied *per se*, independently of the inflammatory lesions that complicate and often occasion them. 2. The examinations made to ascertain the existence of inflammatory complications are often not made with sufficient care and minuteness, as evidenced by the fact that the author constantly saw cases in practice in which inflammatory lesions have been entirely neglected, and the secondary displacements alone treated. 3. Inflammatory lesions are often the principal cause of the uterine displacements through the enlargement and increased weight of the uterus, or of a portion of its tissues which they occasion. 4. When such inflammatory conditions exist, as a rule, they should be treated and cured, then time given to Nature to absorb morbid enlargements, before mechanical means of treatment are resorted to.

The PRESIDENT said that the great point of controversy was whether inflammation or displacement was the leading feature of uterine disease. It might be either; but he did not see why they should go together. He perfectly agreed with the proposition that inflammation was a starting point for displacement in many cases; but he was equally certain that it was not the sole cause of all displacements. There was a large class of displacements with which he was becoming more and more familiar, which might be called congenital. He could not entirely subscribe to the absolute tendency of Dr. Bennet's views.—Dr. RENFREW (Glasgow) had read the second edition of Dr. Bennet's work when it came out with great profit and enlightenment. The opposite doctrines were so prevalent that, it was well for Dr. Bennet to bring forward his views. He thought that the conditions mentioned were pathological; and that if the inflammation were removed, the uterus would regain its place. The point with him was to get rid of the retroversion without a support.—Dr. MARTIN said that practitioners in Australia had to deal with conditions which predisposed very much to uterine displacement. Displacements of the uterus were exceedingly common in Australia; and experience there pointed largely to the fact, that in most cases they would be better without supports. There was scarcely anything that marked the necessity of accurate diagnosis more than the question as to supports. To be successful, an uterine support must restore the uterus to its position, and thereby relieve the conditions which had arisen in consequence of the displacement. The Australian practitioners in most cases found that it was better without a support; and they generally came to these cases very carefully and with the resolve to treat the pathological conditions before they thought of applying a support at all.—Dr. THOMAS CHAMBERS (London) thought that both sides were right and both wrong. Both were right in this way—that there were many cases of displacement due to inflammation; wrong, because many cases were due to accidental causes. A vast number of the cases due to accident might commence weeks or months before they came into the hands of the practitioner, and then he applied remedies to the seat of displacement and said they were due to inflammation. It was well known that there were a vast number of accidental displacements, and they might be treated with leeches or the rest; but until the uterus was supported, leeches were utterly useless. One might as well treat a displaced uterus without first applying the support, as treat a dislocated joint without first replacing it. He had once a case which had been treated with leeches, lotions, washes, etc. He put in the pessary, and in a fortnight the woman could walk well. All cases must not be merely called "displacement" or "inflammation", but should be treated by well-known conditions suited to each; and there would be a good deal less unpleasant feeling and a good deal less controversy.—Dr. GIBSON (Newcastle) was quite assured that Dr. Bennet, with all his experience and with all the light he had given to the subject, would never assert that simple inflammatory action was the only agent at work in the production of uterine displacement. There were three other agents. It was very evident that there was in the constitution of a given individual a peculiar condition of that organ which predisposed it to the occurrence of displacement, when the displacement occurred on the slightest opportunity. This cause he considered strictly congenital. Then there were cases that were constantly occurring as a sequence of pregnancy and parturition in debilitated subjects. There was the condition of involution, which readily enlarged the tissues; there were mechanical causes which resulted in displacement owing to the peculiar health of the individual at the time. Dr. Bennet was right so far as he went; but there were other agents besides inflammation at work equally influential in the production of displacement.—Dr. BENNET, in reply, said Dr. Gibson had relieved him from the necessity of answering several of the arguments used in the discussion. If they were to discuss the entire pathology of the subject they would require a week; therefore he had limited himself to one practical fact, wishing that their meeting should tend to settle one or two debateable points. He entirely agreed with Dr. Barnes in all that he stated on the congenital displacement of the uterus; indeed, he was one

of the earliest contributors on this subject. He had listened with great pleasure to Dr. Barnes' observations as to retroversion. He had been consulted four days ago by a woman who had been married three years. She had seen one or two eminent men in town, and had been told, after some digital examination, that she had nothing amiss with her. She was told that an examination would upset her morally and physically. She remained in this condition a year or two; and, in a fit of desperation, she came to Dr. Bennet. She submitted to an examination, and he found extensive inflammatory conditions. There was another class. A woman was told that she had a dislocated uterus. She had only been married six months, and she had had a miscarriage; and when she was examined, conditions were found which, were they in the throat or rectum, would be instantly treated. He only appealed to the laws of surgery in cases like these. When women had these enlargements of the uterus, and at the same time had inflammatory conditions, the common-sense way to treat them was according to the laws of surgery.

On Uterine Pathology at the Change of Life and after the Menopause. By E. J. TILT, M.D.—Dr. Tilt was able to confirm the general belief that the change of life is a perilous period for those women who enter it in a state of disease, particularly if they be suffering from any uterine affection. Not only are uterine affections then made worse, but they prolong the change and retard cessation. Dr. Tilt also confirmed the belief in the powerful help that the menopause brought in aid to medicine to enable us to cure cases of intractable chronic uterine inflammation, and to prevent uterine displacements from being any longer a fruitful source of painful symptoms, although the displacements still continued to be almost as great as before the menopause. After reminding his hearers that heteromorphous growths became unusually frequent after cessation, Dr. Tilt showed the influence of the menopause on those forms of uterine disease which had previously been so frequent—irritation, congestion, inflammation, and ulceration, of the womb. He passed in review the diseases that had come under his observation in the order of their greatest frequency, and gave chronicity as their chief characteristic.

The PRESIDENT said that the subject of Dr. Tilt's paper was a very extensive and interesting one—one that had been rarely touched upon in any work that he knew. In his clinical lectures at St. Thomas's Hospital, when he asked his students if there were any particular subject on which they desired information, they frequently requested observations on the subject referred to.—Dr. BEATTY (Dublin) regarded Dr. Tilt's paper as most excellent. It was of great importance that a man of Dr. Tilt's experience should put together such facts as he had—facts which he (Dr. Beatty) had met with over and over again; for they would be useful to persons studying the disease. One thing struck him in the paper—the danger of checking leucorrhœa in aged women. Some thought it necessary to check it; and three or four days after this was done, the patient was suffering from acute pain in the uterus, and long treatment was required to bring her out of the condition into which she had been placed. Several years ago he received a caution in such a case, so that he was very slow to adopt means to check leucorrhœa.—Dr. HENRY BENNET complimented Dr. Tilt on the excellence and value of his paper, and remarked that from it he had received a certain amount of confidence as to the correctness of the views which he was upholding a short time previously.—Dr. TILT thanked the members for having so kindly listened to his paper. It was a mere sketch of what he had seen in his consulting-room during the last fifteen years, since his attention had been drawn more particularly to the subject. He was glad to have his views corroborated by Dr. Beatty.—Mr. MELLOR (Manchester) moved a vote of thanks to Dr. Bennet and Dr. Tilt for their valuable papers.—The proposition was heartily agreed to.

SECTION E.—PUBLIC MEDICINE.

The PRESIDENT (Dr. Rumsey) delivered an address, which was published at page 214 of the JOURNAL for August 27th.

Dr. STOKES (Dublin) congratulated the Section on having the opportunity of listening to such an admirable paper as that which it had just heard, so distinguished by profound research and philosophical sentiment. He wished to draw attention to one or two isolated points connected with the subject. One of the great faults in all our speculations upon the remains of disease was, that we had been in the habit of attributing these great phenomena to too limited a number of causes. It was certain that all great phenomena proceeded from multiform causes. With respect to the investigation of disease in connexion with meteorological phenomena, he admitted that investigation was absolutely necessary; but it also must be borne in mind that, in order to adduce reliable information, a large series of accurate observations was required. It was the proposal of his late revered master, Dr. Graves,

that the different governments of civilised Europe should unite and establish, in various points of their dominions, meteorological observatories in connexion with medicine; that these should be officered both by medical officers and by purely scientific men; that they should be furnished with the highest class of instruments that science knew at the time; that the observations made by them should be above all suspicion; and that in this way, after certain periods of the year, some mode of collecting the facts might be adopted; and then it might be seen whether it was of any utility going on that track. That was a grand idea, and one which he thought a good government ought to entertain; and facilities for this sort of observation were wonderfully increased. He was lately at one of the government meteorological stations established in the south-western point of Ireland, where there is a large establishment, well officered. There, meteorological observations of the weight of the atmosphere, the temperature, the wind, the light, and electricity, were all observed by registering instruments.

On the Registration of Disease and Meteorology in Manchester and Salford during the Last Ten Years. By ARTHUR RANSOME, M.D.—The returns contained a record of seven hundred thousand new cases of disease, coming under treatment in public institutions. Meteorological tables were also published during the same period. The returns were perfectly accurate, and perfectly homogeneous. They had constituted each week a report upon the health of the district and had proved very useful in showing the rise and fall of disease, its virulence and fatality, its mode of incidence, the habits of epidemics, and the prevalence of syphilis. The necessity for a National Registration of Disease was pointed out. Charts were exhibited showing the influence of weather upon disease.

Health and Meteorology of Newcastle and Gateshead during the Years 1868 and 1869. By G. H. PHILIPSON, M.A., M.D.—After a short history of the registration of disease, a series of statistical statements, obtained by the collation of the returns, were given, of which the following is a summary. The total of the new cases of disease and injuries occasioned by accident, observed in the public practice of Newcastle, in the year 1868 amounted to 16,059, and in 1869 to 17,084; and in Gateshead, in 1868 to 4,665, and in 1869 to 6,075. The total of the seizures from diseases dependent upon a morbid condition of the blood, in Newcastle, in 1868 amounted to 3,445, and in 1869 to 2,540; and in Gateshead, in 1868 to 945, and in 1869 to 1,013. The total of the deaths from all causes in the public practice of Newcastle in 1868 was 728, and in 1869, 736; and in Gateshead, in 1868, 101, and in 1869, 99. After acknowledging the kindness of the contributors and of the Northumberland and Durham Medical Society, under whose fostering care the plan had been developed and carried on, it was stated that the Society had undertaken to defray the expenses of the printing, issuing and collecting the returns, to the end of the present year, but not longer; and that, if other means were not forthcoming, whereby the expenses could be defrayed, it would be obligatory for the registration of disease in Newcastle and Gateshead to be abandoned—a course that would be taken with the utmost reluctance.

The PRESIDENT said that the paper opened the whole subject of the public registration of disease, and he felt satisfied that its contents indicated the approaching dissolution of the attempts to register disease in Newcastle. He thought it material that Government should come to the rescue. One of the most remarkable attempts in the kingdom was about to fail, unless some machinery or some means were adopted by the State to carry out the public registration of disease throughout the kingdom.—Dr. A. P. STEWART (London) said that these two great undertakings, that had been carried on by purely voluntary contributions for a considerable period, showed how much could be done where there was a will. They were all aware that for a long time past there had been a wish that something should be undertaken in the public registration of disease; and all who had inquired into the subject were satisfied that the registration of death failed to bear upon the causes for the variations in the public health. How many evils were there—how many more things were there—to be taken into consideration, other than the mere statistics of death, in order to enable us to come to a correct conclusion as to the state of public health at any given place? Since the publication of the series of observations which were made the basis of the first little blue volume of the Privy Council, they knew how exceedingly important it was to notice the distribution of particular diseases, and how utterly impossible it was to do this without some such method of recording disease as they were pressing the Government to adopt. The example set by the gentlemen of Salford and Manchester, and by the Northumberland and Durham Society, was one which he would hope to see copied in all parts of the kingdom. The Committee for the Registration of Disease were exceedingly grieved to learn that day, prior to the meeting of the Section, that the attempt to register disease was likely to be given up. This could not be won-

dered at. A Society that had been established for the purpose of publishing their medical investigations could not be expected to take upon itself all the expenses attendant upon carrying out an object of that sort. He hoped that the Sanitary Commissioners would call the attention of the legislature to the matter. The all-important question was the expense; and he thought the Government ought to meet the difficulty. The remark had been made, that there was no utility in taking meteorological observations without having observations concerning disease recorded at the same time. Combined, they became of immense value; and, if conducted by thoroughly competent observers, and with such means of observation as had been described by Dr. Stokes, they would become of the greatest possible value. Let them hope that in the district of Newcastle they were not very far from following the example of Ireland. In Ireland, they had a public agency in the public dispensary system which was capable of being turned to all uses, and which was fervently hoped for in England, but for which they sighed in vain.

A Chapter of Difficulties in Applying Sanitary Laws.—By LEONARD ARMSTRONG, M.R.C.S., South Shields.—The intention of this paper was to point out the impossibility of controlling the injury and nuisance arising from smoke and offensive and noxious chemical vapours, so long as the administration of the Sanitary Acts was entrusted to the producers of those nuisances. The author, having alluded to the pernicious effects which these atmospheric impurities have exercised on vegetation in their immediate neighbourhood, where trees became stunted and ceased to grow, next referred to the dirt and deterioration they engendered. He remarked that in South Shields, notwithstanding the advantages of good sewerage, good water, and general prosperity, the rate of mortality, especially amongst children, was high. The death-returns during the last two years averaged 26.56; while at Sunderland and Tynemouth—seaboard towns, apparently placed under the same external conditions—they stood at 24.05 and 24.59 respectively. He believed this excess in South Shields was due to a vitiated atmosphere impeding the functions of respiration in purifying the blood, “which is the life of man.” These evils were endured because manufacturers did not comply with the requirements of the law; and the Board of Health was too supine to do its duty and compel them. In confirmation of this, he detailed various futile efforts that had been made during the last twelve years to obtain pure and fresh air, and to enforce the provisions of the Sanitary Acts—first, by a minority in the Town Council; secondly, by private sufferers; and thirdly, by a local association, appealing first to the Board of Health, and eventually to the Secretary of State. These attempts produced no permanent improvement, and begat only personal enmity and personal annoyance. It was clear that an insurmountable difficulty in these struggles would always be found in the fact that the magistrates who have to convict, the engineers who have to give evidence, and the town clerk who has to prosecute, are all more or less engaged with the tall black chimneys themselves, and, like partial parents, disposed to deal leniently with their own offspring. Although the corporate funds are taxed with the cost of sanitary inspection, that inspection is not carried out as directed by the Sanitary Act. Formal notices and summons have, indeed, been served on various occasions; but no penalties are ever inflicted. Experience has proved that the laws against these nuisances will remain dead letters so long as they are entrusted to local authorities. In London, where a skilled Inspector is appointed by Government, pains and penalties, impartially enforced, have been found remedial; but local and interested authorities will never enforce them.

Dr. A. P. STEWART said he was visiting, along with a friend, some years ago, a very large manufactory near Leeds; and, after they had gone over the whole establishment, Mr. Salt, the proprietor, after drawing attention to several out-buildings about the works, directed his (Dr. Stewart's) attention to a chimney, and desired him to look at the top of it, from which he said there was never the smallest cloud of smoke emitted. He asked him what machinery he used; and Mr. Salt replied that he had spent hundreds of pounds upon apparatus for the consumption of smoke, but found it unavailing: it was all done by the stoking. From year to year, if any one went to Saltaire, they would never see smoke coming out. What had been done by Mr. Salt might be done in nine cases out of ten by manufacturers throughout the country. About two years ago, in Leeds, there was a very extensive campaign against smoke-makers, in order to compel them to conform to the Act. Notices were served upon numbers of the worst culprits, amongst whom were some of the leading manufacturers in Leeds; and he believed it was stated by Dr. Robertson last year, that this raid had produced considerable diminution in the nuisance; and he (the speaker) noticed himself that the improvement had been considerable. There did not appear any hope that these Acts would be put in force by those who are personally and practically interested in avoiding the operation

of the Acts; and all had come to the conclusion long ago that it was absolutely essential that there should be some power to put the law in operation to the most rigorous extent. There should be a public department, able to bring the law into motion against the offenders, and compel them to conform to its provisions; and, till that was done, he did not see the smallest hope of having the sanitary regulations properly attended to.—The PRESIDENT suggested that the concluding paragraph, slightly amended, might form the basis of a resolution which might be passed in that Section on the subject of smoke-consumption, and which might be handed to the general body of the Association. He also suggested that they should not name the precise machinery to cure the evil. The question would be thoroughly considered by the Sanitary Commissioners, of whom Dr. Stokes was one.—Mr. ARMSTRONG moved the following proposition: "That, in future sanitary legislation, smoke- nuisance and other gaseous pollutions of the atmosphere must be dealt with by compulsory measures, to be carried into effect by authorities independent of the district, and instructed by competent inspectors unfettered by local interests and feeling." Mr. Armstrong said he had himself been requested to be medical inspecting officer; but he felt himself compelled to decline the offer, because he felt convinced that, if he fulfilled his duties to the letter, he would have made himself hosts of enemies.—Dr. ROBINSON (Gateshead) had fought the same battle as the last speaker. He felt satisfied that the Acts would never work until magistrates on the judicial bench were deprived of the power of adjudicating in smoke- nuisance cases, as in many instances they were personally interested in a conviction. In the borough of Gateshead, the greatest nuisance-makers were those who had to adjudicate on their own cases. He seconded the motion.—Dr. REID (Newbiggen) said that at Newbiggen the authorities had appointed an inspector of police as inspector of smoke- nuisance; and it was found that he, being independent of all local authorities, had answered most admirably. For his own part, he was decidedly in favour of government authority.—The resolution was unanimously agreed to.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 17TH, 1870.

BEDSIDE EXAMINATIONS.

IF there is one feature which distinguishes the regulations of the Examining Boards in the present day from those issued but a few years ago, it is the general recognition of the importance of compelling the candidate for qualifications to practise the medical profession to show that he has some direct acquaintance with the nature and treatment of disease. Formerly, it was in but very exceptional cases that anything further was required of candidates for diplomas than ability to answer a series of oral or written questions; now, happily, something more is demanded.

The abstracts of regulations which we last week presented, show how extensively the system of insisting on a practical test of the student's ability to recognise and treat disease is carried out; and some valuable information on the subject is also contained in a return from the various licensing bodies, obtained by Sir John Gray, and presented to the House of Commons last Session. Five questions were submitted to each of the bodies. The first three related to the numbers of diplomas, etc., granted by each body during five years, the fees payable, and the duration of the curriculum of study. The fourth and fifth subjects of inquiry were:—

"4. The number of years or months during which the candidate is required to have been engaged in the practical work of a Medical or Surgical Hospital as dresser, clinical clerk, or pupil, having the actual charge of patients under the medical or surgical officer of the institution; stating the dates at which such practical work was declared to be a requisite qualification for a candidate for a licence to practise.

"5. Is the candidate for any, and if for any, for which, of the qualifications to demonstrate at the bedside of a patient that he has acquired a practical acquaintance with disease, giving the date at which such rule was adopted, and the date since which it has been operative."

Replies to the questions have been furnished by all the bodies except the University of Durham. These show that evidence of having held the

office of house-surgeon, dresser, or clinical clerk, or of having in some way had the charge of patients under superintendence, is required of candidates by the majority of the boards; some, as the Colleges of Physicians and Surgeons of England and the Apothecaries' Society, demanding certificates of clerkship or dressership; and others, as the Edinburgh Colleges, requiring the candidate to have attended the out-practice of a Dispensary, or to have acted as assistant to a registered practitioner. Some of the boards urge, more or less, the difficulty of compelling students to avail themselves of such opportunities of practical instruction. The College of Surgeons of Edinburgh pleads the limited number of appointments in the Royal Infirmary and the large number of students; the Queen's University in Ireland and the King and Queen's College of Physicians both object to the attempt on the ground of impracticability; and the Glasgow Faculty and the Apothecaries' Hall of Ireland simply acknowledge that they have no regulations bearing on the point.

More satisfactory still than the replies to the fourth question are those to the fifth, relative to the practical testing of the knowledge of candidates. Regarding this, the returns from which we quote show that, out of the nineteen licensing bodies, sixteen have either for some time required, or are about to require, that each candidate shall have his knowledge tested by the direct examination of patients. Among the bodies which have most recently adopted this course are the Royal College of Surgeons of England, which will subject candidates for the membership to a practical examination after March 31st, 1871; the University of Dublin (which has instituted practical examinations on the living subject from the beginning of the present year); and the Royal College of Surgeons in Ireland, which will require practical examination after January 1871. It is with special satisfaction that we notice the intended enforcement of clinical examination by the two Colleges of Surgeons of England and Ireland. Our London College especially, whose diploma of membership is held by so many members of the medical profession of the country, and which has shown itself so cautious in its advances towards improvement, is to be congratulated on the sound and wise determination to which it has come. One body alone—the King and Queen's College of Physicians—objects positively to clinical examination, on the ground that it "can only be carried out, and even then to a very limited extent, in the most unimportant cases; viz., chronic and non-painful cases"; and the Queen's University of Ireland, recognising the value of clinical examination, believes that it is not applicable in acute medical and surgical cases, and that it cannot be made a substitute for searching oral and paper examination. But surely that which sixteen boards—not all at once, but at various times in succession—have found to be practicable, cannot be impracticable to the remaining boards. The impossibility of applying utilising acute cases is not an argument of such value that it should lead to the entire omission of clinical examination. That a candidate should be able to recognise chronic cases—cases which, *pace* the Irish College of Physicians, *are* of importance in ordinary practice—is not a trifling matter: and, it seems to us, the object of clinical examination should be not only to find out that a student can give a correct diagnosis of disease, but also to ascertain whether he knows how to go to work to make his diagnosis.

As a consequence of the growing demand on the part of the licensing bodies for evidence of practical knowledge, the medical schools are year by year increasing the opportunities afforded to the students for practical instruction. Clerkships and dresserships, which were in times past confined to the few, are now more liberally distributed; and in several schools special provision is made that every pupil shall at some time hold these offices. In other ways, too, the means of acquiring a knowledge of disease are being extended; as, for instance, by the system in force at St. Mary's Hospital and at Leeds, where the students are assigned in detachments to the physicians and surgeons in rotation.

The medical student may, then, rest assured that something more than mere book-learning will be required of him; that he will be required, before he can obtain a qualification to practise, to show that he really has a knowledge of disease; and, at the same time, that he will

find the means of obtaining that knowledge ready at hand. To those who come prepared for their work by previous training in habits of accurate observation and correct reasoning, and fortified by a determination to use diligently the means offered to them, invaluable opportunities are afforded by our medical schools.

THE CREDENTIALS OF PSYCHOLOGY.

THE last comer to our Association and youngest sister among the sections claims a few words of welcome at our hands, and may be congratulated on having at once become an object of interest.

Whatever opinions may be entertained as to the new doctrines enunciated by Dr. Laycock in his introductory address to the Section of Psychology, which was delivered at Newcastle, and lately appeared in our columns, the members generally will concur with his expression of satisfaction that the Council has instituted the Section. The best-informed amongst us must have felt the need of that more definite knowledge of psychology which *viva voce* discussions will elicit, while not a few must often have had occasion to regret that they had not been enabled to study it theoretically and practically in connection with the kindred great departments of study—medicine, surgery, and midwifery. This departmental recognition of psychology by our great Association, and in the scheme of the proposed Academy of Medicine of London, cannot fail, we think, to compel a like recognition of it by the Examining Boards of the Universities and Medical Colleges, so that the next generation of practitioners may hope to be spared at least some of the difficulties and regrets of the existing.

But what is meant by psychology? What are its scope and limits—its principles and its procedure, as a science? What, too, its practical applications? Those who have to teach and examine, as well as those who study and discuss, must of necessity ask these questions. Dr. Laycock evidently aimed at the answers to them in his address, by showing, in the first place, what it was not.

It is not a mere department of medical science and art, any more than physiology or chemistry, but of natural science, capable, like these, of wide application to each and every department of medicine; nor is it a department of philosophy—the poetry of science—because a “true psychology must deal with the varying states of consciousness in their immediate relations to the organisation, and not apart therefrom, as is common with the speculative psychologist”. Further, although a knowledge of the laws of life and organisation (biology), and more especially of those laws as exemplified in the development, structure, and functions, of the brain and nervous system, be essential to psychology, it is not a mere department of either biology or physiology; for, dealing expressly with the human mind, it includes metaphysics on the one hand; and, examining the vital changes which go on coincidently with human thought and feeling, it includes molecular physics on the other. Then, after all, come the practical applications of the science not only to insanity in all its forms, but to mental hygiene, and to therapeutics and the practice of medicine in general—in, short, all that has hitherto been included under *medical* psychology, so much is clearly shown by Dr. Laycock’s psychological work, the text-book of his class. [*Mind and Brain; or, the Correlations of Consciousness and Organisation*. Second edition.]

If now we turn to what is commonly included under “psychology”, we find statements of the most contradictory kind. A recent French writer [*La Psychologie Anglaise Contemporaine* (Ecole Expérimentale), par Th. Ribot: 1870] has divided English psychology into two “schools”—the thinking and the experimental; the former including such thinkers as Hamilton, Ferrier, and Whewell; the latter, James Mill, J. S. Mill, Herbert Spencer, Bain, Lewes, and Morell, who mix up more or less of natural science with their thinking. It is significant of the imperfect appreciation of what psychology includes, that psychologists like Laycock and Maudsley are not included in M. Ribot’s “experimental” school. When Magendie was on a visit to London, a physician, well known as a physiological writer, was introduced to

him as a physiologist. “A physiologist!” exclaimed Magendie, somewhat puzzled; “what experimental researches has he made?” M. Ribot’s experimental psychologists are for the most part unacquainted either scientifically or practically with the multitudinous experiments of Nature manifested in insanity and in the various brain-disorders which involve the intellect, or with the researches in the laboratory or at the bedside into the influence of chemical composition on physiological action, like those of Dr. B. W. Richardson, noted by Dr. Laycock. As compared with the pure “thinkers”, the writers enumerated, being more or less of the “sensational” school of philosophy, are experimental; but then the fact of there being “schools” in psychology, proves that with these at least it has not attained to the position of a true science, for schools deal with opinions, the sciences with facts.

The vastness and the inherent difficulties of the study of human nature (which psychology is) are the chief causes of its speculative character—so vast that one mind can hardly take in the whole range; so difficult, that while in every science it is more easy to think than to observe accurately, in psychology it is difficult even to think; and scientific observation, because of a false method, is well nigh impossible. This is shown by so common and comparatively simple a subject of inquiry as pain, its effects and its alleviation. Scientifically, all pain is mental, and depends on some state of the brain or nervous system. If it be mental in the metaphysical sense, as in grief and melancholia, both its seat and origin are in one portion of that system; if corporeal, as in neuralgia, its seat is in one portion, its origin in another. The “thinking” psychologists, however, not only exclude all consideration of the bodily correlatives of pain, but affirm that the pain of a neuralgia is not mental at all. Again, they say that pain causes this and that action, whereas it is the state of the brain at the moment which causes both the pain and the action. This is now well established from observation of the groans and other signs of pain manifested unconsciously by persons operated on surgically when anæsthetic. In short, a good criterion of a psychology professing to be scientific may be found in the way in which it deals scientifically and practically with pleasure and pain.

Not less is the connection of ideation with molecular changes illustrated by such research. Thinking philosophers have jangled interminably touching “the Infinite”, without any regard to the fundamental fact that their brains are the seat of all their thoughts thereon. How pregnant in instruction a glimpse at true psychological facts may be easily learned, when it is remembered that one particular form of insanity is characterised by insane ideation as to the Infinite, and that it may be artificially developed by certain chemical compounds. Let a De Quincey be able to discourse ever so lucidly on the infinite grandeur of his hallucinations, an atom of water taken from the morphia which excites them, so as to constitute it apomorphia, will change them into a prosaic nausea, to be followed speedily by irrepressible vomiting.

A true science offers another criterion of its validity. The thinking psychologists have had interminable discussions as to the “veracity” of consciousness. But in the face of facts like those referred to, what can any state of consciousness teach beyond that cerebral state on which it at the moment depends? And how can that be proved to be a true teaching, except by the scientific process termed verification? Those psychologists who place implicit reliance on the evidence of their senses and look confidently into the depth of their own consciousness for a knowledge of facts, would never learn, as they move so airily about, that they bear a pressure equal to fourteen pounds upon every square inch of their bodies, or that they are being constantly attracted towards the centre of the earth. The anecdote which Dr. Laycock told of Leibnitz is a charming illustration of fallacies which flow from this error. “I am a great friend of experimental philosophy,” that illustrious thinker patronisingly remarked; “but Newton deviates much from it when he pretends that all matter is heavy, or that each particle of matter attracts every other particle.” Dr. Laycock does not deny, nevertheless, the ultimate veracity of consciousness; on the contrary, he holds that the fundamental intuitions of the human mind are truths. For this reason he maintained in his address that the primary and

fundamental idea of force is as an adapting energy. Just as a man gets his primary idea of force and of its existence from the action of his own limbs, so the adaptation of the force to ends in an act of will gives both the primary idea of mind and the proof of its existence.

The best criterion, however, of a true scientific psychology is that it is founded on unity of the sciences, and is thereby rendered of necessity both experimental and practical. Dr. Laycock dwelt specially upon this point, and showed how the breadth of view thus obtained gives clearness of comprehension to a subject so vast and comprehensive, and how, on the other hand, the severance of phenomena which are cognate gives rise to the "mysteries" of life and organisation and mind, so complacently dwelt upon by eminent physicists as well as "thinkers."

We have not discussed the particular doctrines which, in illustration of this breadth of view, Dr. Laycock enunciated in his address, for that would render necessary a reference to his more detailed exposition of them in the work already referred to, and published last year. The property of "adaptivity" as correlative with chemical affinity, and the increase in molecular weight without increase of absolute weight, or even with diminution, *pari passu* with adaptivity, as manifested in life, throw new life upon the nature of the vital forces and bring new kinds of experimental research to bear upon mental phenomena. Especially, that new science termed *Kinetics* or *Kinematics*, which investigates the motions of atoms and molecules with special reference to the atomic theories of chemical affinity, will be brought with biology to elucidate the direction, rapidity, and composition of the atomic vital motions in relation to function. Altogether, we may admit Dr. Laycock's assertion "that, so far from the relations of body and mind being too mysterious for investigation, it is a simple fact that the phenomena can be brought within the range of molecular physics and experimental research." And we may farther add that, in proportion as man knows the workings of his brain—that wondrous organ of his spiritual nature—in the same proportion he will assert his dominion over the vital forces, as he has done already over the physical, and make them subservient to his will.

HER Majesty the Queen has become patroness of the National Aid Society for the Sick and Wounded.

DR. JAMES SALMON, Inspector-General of Hospitals and Fleets, has been appointed to the vacant post of Physician-Extraordinary to Her Majesty the Queen.

WE have pleasure in announcing that our associate Mr. Spencer Wells has been recently elected an Honorary Fellow of the Société Royale des Sciences Médicales et Naturelles of Brussels, with the very encouraging assurance that this distinction has been conferred upon him "in consideration of the eminent services that he has rendered to science and humanity."

PRACTICAL CHEMISTRY.

THE facilities for the study of practical chemistry are increasing in London. Besides the extensive and complete laboratory which has recently been built at St. Bartholomew's Hospital, there will be a large one in the new St. Thomas's, and that at Charing Cross Hospital is to be enlarged.

ACCIDENTAL SELF-POISONING.

ANOTHER case of accidental self-poisoning has been lately recorded. A Mr. G. D. Lace, carman, of Ulverston, Lancashire, was passing the Sewage Works, where was standing near one of the tanks a two-gallon stone bottle containing carbolic acid, which the men are in the habit of using as a disinfectant. Mr. Lace, thinking it contained beer, drank from it, without observing that it was labelled "poison". He became seriously ill in a very short time. Drs. Anderson and Cranke were both called in immediately, and every remedial measure was resorted to; but the unfortunate man died in a few hours, after suffering great agony.

THE SANITARY GOVERNMENT OF PARIS.

By a decree of the French Provisional Government, dated September 10th, a "Central Committee of Hygiene and Salubrity", consisting of eight members, has been formed at the Hôtel-de-Ville. The members are, MM. Sainte-Claire Deville, Bouchardat, Chauveau-Lagarde, De Montmahon, Dr. Sée, and Dr. Onimus; with M. Jules Ferry as president, and M. Brisson, *adjoint* to the Mayor of Paris, as vice-president. The Hygienic Committee of each *arrondissement* of Paris, the Council of Hygiene and Salubrity of the Department of the Seine, and the Committee on Unhealthy Lodgings, are to be in direct communication with the Central Committee, which will make its reports to the Government.

THE NAVAL MEDICAL SERVICE.

WE are able to furnish the following abstract of the meritorious services which have recently secured promotion in the Naval Medical Service for Staff-Surgeons Henry Slade, William Bennett Dalby, and Ahmuty Irwin.

Staff-Surgeon Henry Slade entered the service on the 4th June, 1847, and was employed as Assistant-Surgeon on the Coast of Africa, Home, and East India Stations. He was promoted for services in the Burmese War; and served as Surgeon on the East Indian, Home, North America and West Indian, Baltic, South-East Coast of America, and Australian Stations. He distinguished himself on two occasions by his attention to the wounded after the actions of Pakehinahina and Gate Pah in New Zealand, in 1864 and 1865.

Staff-Surgeon William Bennett Dalby, M.D., entered the Navy on the 12th May, 1846, and served as Assistant-Surgeon on the Home and Mediterranean Stations and at Plymouth Hospital. As Surgeon, he was employed during the Russian War at Therapia Hospital, and subsequently on the Home, Cape of Good Hope, and West Coast of Africa Stations; at Haslar Hospital, and as Medical Officer in charge of the Naval Cadets' Sick Quarters at Dartmouth, where he is still serving. He has been specially commended for his services on several occasions.

Staff-Surgeon Ahmuty Irwin entered the Navy on the 4th January, 1851, and served as Assistant-Surgeon at Plymouth Hospital, on the South-East Coast of America and the Mediterranean Stations, and with the Naval Brigade in the Crimea, where he was severely wounded. As Surgeon, he has been employed on the Mediterranean, Home, West Coast of Africa, East Indies and China, and North America and West India Stations. His name was mentioned in the *London Gazette* as being continually under fire when attending the wounded at the capture of Ningpo from the rebels in 1862. Mr. Irwin is now serving at Plymouth Hospital.

THE WAR AND THE BRITISH ARMY MEDICAL SERVICE.

WE last week mentioned that two army medical officers, Staff-Surgeon Dr. De Chaumont and Assistant-Surgeon Count Wollowicz, had for some time past received notice to hold themselves in readiness to proceed to the German forces in the field, with a view to observing and reporting upon the hospital and sanitary arrangements. The officers named were selected, it appears, not only on account of their known scientific acquirements, but also because they were thorough linguists, speaking both French and German fluently. We now understand, what appears to be scarcely credible, that at the last moment, after having received orders to proceed on their mission, they have been stopped, not by any difficulties abroad, but by difficulties created at our own Foreign Office. As soon as hostilities were declared between France and Germany, the Director-General of the Army Medical Department applied for permission to send some of his officers to the seat of war, for the good of the public service; and Mr. Cardwell, the Secretary of State for War, stated in the House of Commons that he would take steps to have the application carried into effect. This was two months ago. It seems unaccountable that the medical branch of the army should be the only one prevented from gaining improvement out of the extensive field of practical experience unhappily afforded by the vast number of casualties which have resulted from the conflicts of the contending armies. We hear that there are numerous officers of the British army—line, artillery, and others—watching the military operations of the German army, and, whether officially recognised by our own Government or not, openly received and hospitably entertained by the German authorities. We know also that the National

Society for aid to wounded soldiers has met with no difficulty in sending numerous civil surgeons to the seat of war, where they have been very actively and profitably employed. We cannot wonder, therefore, that the army medical officers should chafe under the restrictions which have been put upon them by the authorities. We are assured that numerous applications have been made by army medical officers to go to the seat of war at their own expense; but the necessary permission has in all cases been withheld. We trust that the subject will not be forgotten when Parliament meets; and that there will be a strict inquiry why a department of the public service which is notoriously very defective in much of its organisation has not been allowed to take advantage of the great opportunities of improvement in various directions which the present war has offered.

BRITISH PHARMACEUTICAL CONFERENCE.

THE seventh annual meeting was opened at the Royal Institution, Liverpool, on Tuesday. The address of the President, Mr. W. H. Stoddart, was the chief feature of Tuesday's proceedings. He discussed the present state of education among pharmacutists—a subject which occupied the attention of the members also yesterday. There is an exhibition of objects relating to pharmacy open at the Savings Bank buildings.

SPREAD OF SCARLATINA BY MILK.

A MEMBER of Parliament writes to the *Times* of Thursday, asserting that several outbreaks of scarlet fever in a bathing town in Scotland had been traced to the milk supplied. The woman who milked the cows was in attendance on her children who were suffering from scarlet fever, and the boy who was carrying the milk was just recovering from it. The inference to be drawn from these facts is, that the particles of the skin peeling off has become mixed with the milk. It is much more likely that the milk-boy carried the infection in his person from house to house. The question is one, however, of great interest and importance; and the whole circumstances of the cases mentioned should be thoroughly investigated by the medical men of the place.

THE FOOT-AND-MOUTH DISEASE.

IN a report of an inquiry made by Dr. Thorne Thorne, for the Medical Officer of the Privy Council, on the effect of the milk of animals suffering from the foot-and-mouth disease, it is stated that cases were observed where the milk of diseased animals seemed decidedly to have produced disease in man, but that in many cases no noticeable effects were produced. Dr. Thorne Thorne reports that in no instance has he heard that any disease in the human subject has been produced by the use of the flesh of animals which have been suffering from the foot-and-mouth disease.

THE SANITARY CONDITION OF WARWICK.

THE undue prevalence of continued fever at Warwick, as shown in the quarterly return of the Registrar-General, has resulted in an inquiry by Dr. Buchanan into the sanitary condition of the town. It appears that the Inspector found the drainage to be insufficient and inefficient, the sewers ill-ventilated and sewer-air forcing itself into the interior of dwellings, and the removal of house-refuse from premises conducted in a most unsatisfactory manner. In addition, the water-supply is described as being filthy in the extreme; it is derived from the Avon, which receives close to the water-works the sewage-liquor cast into the Leam by the A B C process for dealing with the sewage of Leamington, and also, fifteen miles higher up, the river the sewage of Coventry to the extent of 1,500,000 gallons a day. Probably much of the sickness in Warwick might have been prevented by the appointment of a local medical officer of health; but the most serious question here brought forward is that relating to the almost universal pollution of streams, and we can only regret that the recent Report of the Commissioners appointed to inquire into the value of the A B C process has resulted in the expression of a strong opinion adverse to this system. Irrigation seems at present to be the only safe and effectual plan of dealing with

the sewage difficulty. According to the *Warwick Advertiser*, the Local Board of Health of that town are directing their earnest attention to the removal of the many causes of preventable disease.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. THE fortieth annual meeting of the British Association commenced at Liverpool last Wednesday. Professor Huxley took the Chair as President, and delivered an introductory address. Instead of, as has generally been done by his predecessors, giving a general review of the progress made in all departments of science, he confined himself to a history of the rise and progress of a single biological question—that of the “spontaneous generation” of living from dead matter. Having briefly referred to the ancient opinions on the subject, he gave a sketch of the labours of Redi, Needham and Buffon, Spallanzani, Schultze and Schwann, Helmholtz, Pasteur, etc. Without asserting absolutely that “spontaneous generation” or *abiogenesis* (as he called it) was altogether impossible, he considered that Redi's doctrine of *biogenesis*, or the evolution of life from life, was victorious at the present day. The address concluded with some remarks on the mode of propagation of parasitic and zymotic diseases.

THE CASE OF MISS PRANKERD.

MR. HOPKINS, the House-Surgeon of the Royal United Hospital, Bath, informs us that one or two interesting facts have occurred in this case since our last report. From the first, the patient has not been able to open her mouth as widely as she did previously; and on each side of the jaw where the bullets entered there has been some swelling, which would account for this inability. When the swelling disappeared, it was found that the teeth of the upper and lower jaws did not approximate, and that the left side of the lower jaw was apparently displaced a little outwards. This displacement has, however, diminished within the last few days, and would not be noticed unless special attention were directed to it. On Monday morning, she coughed up a small piece of bone about the size of a grain of wheat. On Tuesday night, she complained slightly of a sore throat; and on Wednesday morning, she felt a little irritation at the upper part of her throat, which caused her to cough; at the same time she experienced a slight difficulty in breathing, and whilst coughing one of the bullets dropped into the back part of her mouth. There was no hæmorrhage. The bullet is flattened and grooved, clearly indicating its having been fired from a rifled barrel. The upper ridge of the bullet has in its passage carried away a small portion of bone, which is imbedded there. Its weight is fifty-three grains.

TEMPORARY SUSPENSION OF THE GAZETTE MÉDICALE DE PARIS.

THE *Gazette Médicale* of Saturday last contains a notice of which the following is a translation. During the siege of Paris, communication with the exterior being interrupted, and all hands in the interior being occupied in defending the city, we shall of necessity be obliged to suspend the publication of the *Gazette*. We shall resume it as soon as possible, and will make arrangements to prevent our subscribers from suffering any loss by the interruption.

CHOLERA EPIDEMIC IN ZANZIBAR.

TOWARDS the end of last November, the cholera which had been prevailing in the central parts of Africa was carried down to the eastern coast, and was thence conveyed to the island of Zanzibar, and prevailed for about five or six weeks in a very fatal form, as in that time, in the town and suburbs alone, it is estimated to have caused ten thousand deaths, being about a tenth part of the population. It then ceased in the town, but continued its ravages in other parts of the island and amongst the shipping. Last March it broke out again, and from that time to the end of April it continued to prevail with more or less severity. In the beginning of May, it had nearly ceased in the island, there occurring only one or two isolated cases amongst the slaves, though it was stated to be prevailing in some of the neighbouring French settlements.

VEGETABLE POISONS.

DR. MATTHIESSEN continues his researches on vegetable poisons in the laboratory of St. Bartholomew's Hospital. According to the *Athenæum*, he has obtained some startling results as to the fatal effects of certain vegetable extracts, and the impossibility of subsequent detection. A full account of his investigations will be published in the forthcoming volume of the *Hospital Reports*.

BOERHAAVE MEDAL.

THE Dutch Society of Sciences of Haarlem has instituted, in addition to its ordinary prizes, a large gold medal of the value of 500 florins, in honour of Boerhaave. The Boerhaave medal is to be granted in 1872 to mineralogy and geology, in 1876 to botany, in 1882 to zoology, in 1884 to physiology, in 1888 to anthropology. The series will then recur.

PERILS OF EPICURES.

THOSE fascinating little foreign cheeses which make their appearance in foreign and fashionable provision stores, wrapped in tinfoil, are not, it seems, as safe as they are, to some people, attractive. The tinfoil contains lead; and the lactic acid of the cheese, favoured by the condition of moisture, leads to contamination of the outer layers especially with that poisonous metal. Soap, chocolate, and dry confectionery, so largely wrapped in the foil, were found, on recent examination by Auguste Vogel, to be quite free from contamination.

AMMONIA AND SNAKE-BITES.

SUBSCRIPTIONS are being at present raised in Victoria, Australia, with the object of presenting a testimonial to Dr. Halford for his discoveries in the treatment of snake-bites by ammonia. Dr. Day writes to say that, for the last two years and upwards, the ammonia-treatment has been the remedy for snake-bites in Victoria, and the means of saving a number of cases in an apparently hopeless state of collapse.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

DR. DUDFIELD has retired from the office of Secretary, which he has ably filled for some years; and, at a meeting of the Council on the 6th instant, the following resolution was moved by Dr. Dixon, seconded by Dr. Pinder, and carried unanimously: "That Dr. Dudfield's resignation be accepted with great regret; and that the best thanks of the Council be tendered to him for the able and willing services which he has at all times rendered to the Association, and also for the invariable courtesy and kindness which characterised the discharge of his duties as Honorary Secretary for the past four years." Mr. Wickham Barnes has been appointed Honorary Secretary to the Association.

BRITISH MEDICAL BENEVOLENT FUND.

BY the death of Sir James Clark, Bart., the British Medical Benevolent Fund has lost, not only its President, but one of its warmest friends and earliest supporters. Upon the announcement of his death, the Committee expressed to the surviving members of the family, through the present baronet, its deep regret and sympathy in their bereavement. Another loss has been sustained by the Society in the death of Mrs. Robinson of Bolton-le-Moors, one of the oldest of its lady collectors. Mrs. Robinson continued to the last to take the warmest interest in the affairs of the Fund, and only a few days before her death she requested that a five-pound note should be sent to the Honorary Secretary as her last donation. The applications for assistance to the Fund continue to be very numerous, and many of the cases are, as usual, of a most distressing character. At the last two meetings the large sum of £250 has been distributed in grants to about thirty different recipients, many of them being widows with families of young children. J. A. Locking, Esq., of Hull, and F. Thorne, Esq., of Leamington, have been elected Honorary Local Secretaries; and we are requested to state that the Committee will gladly avail itself of the services of any gentleman who is willing to act as such in places not already represented, or of ladies as collectors, if they will put themselves

in communication with Dr. Felce, or Dr. Thorne Thorne, the Honorary Secretaries in London. Among the donations received since our last notice are: Dr. Rogers, Exeter, £10; C. A. Newnham, Esq., Honorary Local Secretary Wolverhampton, £5 5s.; Mrs. Robinson (the late), Lady Collector Bolton (additional), £5; Dr. Shann, York, £5; Dr. G. S. Jenks, Bath, Vice-President British Medical Association (additional), £10 10s.; Dr. Burrows, F.R.S. (additional), £10; G. D. Pollock, Esq. (additional), £5; Bath and Bristol Branch of the British Medical Association, by Dr. Steele (additional), £3 3s.

SCOTLAND.

THE ROYAL INFIRMARY, EDINBURGH.

IT is stated that His Royal Highness the Prince of Wales will lay the foundation-stone of the New Infirmary, on October 12th. Preparations for a great public ceremonial are in progress.

CONVICTION UNDER THE SANITARY ACT.

PERSISTENCE in enforcing the sanitary laws will do something towards checking the spread of contagious disease. A Glasgow clerk has been fined for having put into a public cab a boy who was suffering from typhus fever. He intended to have the boy taken to the Fever Hospital, but did not say a word to the driver about the boy's condition.

THE UNIVERSITY OF EDINBURGH.

DR. WYVILLE THOMSON, Professor of Natural History in Queen's College, Belfast, and Dr. H. Alleyne Nicholson, Extra-academical Lecturer on Natural History, Edinburgh, are, we believe, candidates for the Chair of Natural History in the University of Edinburgh, rendered vacant by the resignation of Professor Allman from ill health.

MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.

AT the meeting of this Society held on Friday, September 2nd, in the Hall of the Faculty of Physicians and Surgeons, the following gentlemen were elected office-bearers. *President*: James Adams, M.D. *Vice-Presidents*: J. Steven, M.D.; James Stewart, M.D. *Council*: D. Richmond, M.D.; M. H. Gibson, Esq.; T. Torrance, Esq.; H. Thomson, M.D.; James Gray, M.D.; R. Grieve, Esq.; J. Pollock, Esq.; R. Renfrew, M.D. *Secretaries*: R. Perry, M.D.; Alex. Robertson, M.D. *Treasurer*: H. R. Howatt, M.D.

NORTHERN COUNTIES MEDICAL SOCIETY.

THE annual meeting of this Society was held in Edgar's Hotel, Forres, on September 3rd, Dr. Grigor of Nairn, President, in the Chair. The Society, which was formed seven years ago by a number of medical men in the counties of Banff, Elgin, and Nairn, has met with the warm support, not only of practitioners in these counties, but not a few from distant parts have shown their interest in the objects and welfare of the Association by joining its ranks. It was, therefore, thought desirable to alter its name from that of the Banff, Moray, and Nairn Medical Association to that of the Northern Counties Medical Society, a course which is evidently calculated to lead to excellent results in the north of Scotland. The President delivered an excellent address. The subject of the late Medical Bill was discussed, and the action taken by the British Medical Association approved of. It was remitted to the Council to watch over any Bill which might be introduced next session, and to take what action might be thought necessary. Dr. Murray, of Forres, was elected President for the ensuing year. The members afterwards dined in Edgar's Hotel.

BEQUESTS, ETC.—The Darlington Hospital Dispensary has received £100 under the will of Mrs. John Pease.—Miss Elizabeth Champion, of Wandsworth Common, bequeathed £100 each to the Bethlem, London, and St. George's Hospitals.—"A Lady" has given £100 to the London Hospital.

NOTES CONCERNING THE PROVINCIAL AND SCOTCH HOSPITALS AND MEDICAL SCHOOLS.

BIRMINGHAM.—**QUEEN'S COLLEGE.**—Aggregate Fee for all Lectures required, £52 10s., payable in two instalments.—Separate Classes: *a, b, e, f*, single, £5 5s.; perpetual, £8 8s.; *c, d, h*, single, £4 4s.; perpetual, £6 6s.; *g, i, k, l*, single, £3 3s.; perpetual, £5 5s.; *m, o, p*, single, £3 3s.; two courses, £5 5s.—Fees for rooms and board of resident students, £50 *per annum*, payable in three instalments.—H.P.—*General Hospital*: Medical and Surgical Practice, 6 months, £10 10s.; a year, £15 15s.; perpetual, £31 10s.—*Queen's Hospital*: Fees the same as at the General Hospital.

Appointments. At the *General Hospital*: Resident Medical Assistant, and Resident Surgical Assistant, each for 12 months; two Resident Dresserships, tenable 6 months: all after examination, and with board and lodging in the Hospital. At the *Queen's Hospital*: Resident Physician's Assistant and Resident Surgeon's Assistant, every six months after competitive examination: board and lodging in Hospital. No fee for Clerkships or Dresserships.

Clinical Instruction. Clinical Lectures are given at both Hospitals. At the *Queen's Hospital*, there are special wards for Diseases of Children and Venereal Diseases.

Prizes.—Two Warneford Scholarships, annually after examination.—The Sands Cox Prize, of the value of £20, annually, awarded to Students who have completed their curriculum, after an examination in Medicine, Surgery, and Midwifery.—Warden's Prize, of £5 5s., to the most proficient Student of the first year.—The Percy Prize, Books of the value of £5 5s., for the best examination in German.—Silver Medals and Certificates of Honour, annually, in each class after examination.

Clinical Prizes.—*General Hospital*: Surgery, first year, two prizes of £3 3s. and £2 2s.; Medicine, second and third years, one prize of £5 5s. each year.—*Queen's Hospital*: second year, two prizes of £3 3s. and £2 2s. in Medicine, and the same in Surgery; third and fourth years, two prizes of £5 5s. and £3 3s. in Medicine, and the same in Surgery.

BRISTOL MEDICAL SCHOOL.—Perpetual Fees to Lectures (except Comparative Anatomy), £52 10s. Separate Classes: *a, b*, single, £5 5s., perpetual, £9 9s.; *d*, single, £5 5s., perpetual, £7 7s.; *e, f, g, h*, single, £4 4s., perpetual, £6 6s.; *i, k, l*, single, £3 3s., perpetual, £5 5s.; *m*, single, £4 4s.—H.P.—*Royal Infirmary*. Surgeon's pupil, 1 year, £12 12s.; 2 years, £21; 3 years, £26 5s. Dresser (extra fee), 1 year, £12 12s.; 2 years, £21; 3 years, £26 5s. Physician's pupil, 6 months, £8; 1 year, £15; 18 months, £20; perpetual £25. Entrance Fee, £5. Subscription to Library, £1 *per annum*. Apprenticeship to House-Surgeon, including five years' residence, and attendance on Hospital Practice, £315.—*General Hospital*. Medical or Surgical Practice, 6 months, £6; 1 year, £10; perpetual, £20. Extra Fee for Clinical Clerk or Dresser, £5 5s. for 6 months. Library Fee £1 1s. *per annum*. Resident pupils, £100 for the first year; £60 for each subsequent year; or 5 years, with apprenticeship, £260.

Clinical Instruction, etc. Clinical Lectures are delivered at the Royal Infirmary and the General Hospital.

The Royal Infirmary contains a Library of about 2,700 volumes; and a Museum, which contains, among numerous interesting and valuable specimens, a large series of preparations of diseased bones, and a remarkable collection of calculi. The General Hospital also has a Library with a commodious Reading-room and a Museum of numerous interesting and valuable specimens.

Prizes.—Prizes and Certificates of Honour will be distributed at the end of the Winter Session, after examination in all the subjects of each year.—Prize and Certificates of Honour for Practical Anatomy.—*Royal Infirmary*: Suple's Medical Prize, and Suple's Surgical Prize; each a gold medal value £5 5s., and about £7 7s. in money. The interest of £500, under the will of the late Henry Clark, Esq., to the prizeman of the third year in the medical school, if he have attended the Royal Infirmary.—*General Hospital*: a Medical Scholarship of £15, founded by the late Rev. Canon Guthrie; and a Surgical Scholarship of £15, founded by H. M. Clarke, Esq., of London, annually to the most diligent Students attending the medical and surgical practice respectively; also a Scholarship founded by the late J. N. Sanders, Esq., consisting of the interest of £500, awarded for proficiency in Medicine and Surgery.

LEEDS SCHOOL OF MEDICINE.—Aggregate Fee to Lectures required by Examining Bodies, £42. Entrance Fee to Library and Reading-

room, £1 1s. Separate Classes: *a, d, f*, 1st session, £4 4s.; 2nd session, £3 3s.; *b*, 1st session, £6 6s.; 2nd session, £5 5s.; *c*, 1st session, £5 5s.; 2nd session, £3 3s.; *g, h*, 1st session, £4 4s.; 2nd session, £2 2s.; *i, k*, 1st session, £3 3s.; 2nd session, £1 11s. 6d.; *l, m*, each course, £2 2s.—H.P.—*Leeds Infirmary*, Medical or Surgical, each—a Winter Session, £7 7s.; a Summer Session, £6 6s.; 12 months, £12 12s.; 18 months, £15 15s.; 3 years, £21.

Clinical Lectures are delivered by the Physicians and Surgeons of the Infirmary.—Demonstrations in Operative Surgery, and of Skin-Diseases, and Ophthalmoscopic Demonstrations, are given.—Instruction in the Use of the Microscope is given weekly.—The West Riding Lunatic Asylum at Wakefield is open to Students for the study of Mental Diseases.—Students can also attend the practice of the Leeds Public Dispensary, the Fever Hospital, and the Eye and Ear Infirmary.—There are several Resident Appointments at these Institutions. The school-buildings comprise Lecture-Rooms; Anatomical, Physiological, Pathological, Chemical, Botanical, and Materia Medica Museums; Laboratories; Dissecting Rooms; Library, etc.—The Library is well supplied, and is open to Students who have paid the entrance fee and to members of the Profession at an annual subscription of £1 1s. or nomination by a member of Council.—There is a private Dissecting-Room for the use of older pupils, in addition to a commodious room for general work.—There is a large and well-fitted Chemical Laboratory, where instruction in Practical Chemistry is given. The fees are: 1 month, £4 4s.; 2 months, £7 7s.; 3 months, £10 10s.; 4 months, £13 13s.; 5 months, £15 15s.; 6 months, £17 17s.; 9 months, £21.

Practical Surgery.—It is proposed to carry out a Course of Practical Surgery under the charge of Mr. Wheelhouse, Mr. Teale, and Mr. Jessop, in the following manner. The first period will be devoted to the consideration of the practical details of Minor Surgery, such as (a) Surgical Manipulations; (b) Incisions and the Use of Knives; (c) Use of Needles, Sutures, Ligatures, Setons, Knots, Torsion, Acupressure; (d) Anæsthetics and the various modes of their Administration; (e) Hypodermic Injections; (f) The general principles of Bandaging and varieties of Bandages; etc. This will be followed by the Special Surgery of the Head, Neck, and Chest, including the Demonstration, on the Dead Body, of all the operations appertaining to these regions. The Operations will be performed by the Third Year's Students, assisted by those of the Second Year, under the guidance of the Teacher, in the presence of the remainder of the Class. The after-application of all necessary bandages and appliances will form part of this portion of the work. The second period will be occupied in like manner by the consideration of the Surgical Anatomy and Surgery of the Abdomen and Perinæum, and of the Pelvic Organs, Male and Female; and the third period by the same consideration of the Surgery of the Limbs. For the illustration of all portions of the Course, one or more men will be present to be used as "models". On them every bandage described will be applied before the class; the methods of Physical Examination, by palpation, measurement, percussion, by the aid of transmitted light, etc., will be demonstrated. The "Surface-markings" of the Body, and their bearings upon Surgery, will be explained; the courses of the principal Arteries, Veins, and Nerves, will be chalked out; the normal configuration of Joints will be examined and discussed; and the altered relation of the various prominences in Dislocations will be pointed out. The principles involved in the use of external appliances and supports, such as Orthopædic Apparatus, Trusses, etc., will be demonstrated. At the close of every third week a written and *visû voce* examination will be given. This will consist of written and oral descriptions of pathological specimens from the *post mortem* room and museum, with an account of the probable symptoms that would be caused by, and the mode of treatment that would be required by, each specimen. The last six weeks of the Session will be devoted to the personal Examination of each Student, with a view to elicit his knowledge of the subjects of which the whole course has consisted. Each Student will be required—(a) To show his knowledge of the use of all varieties of Surgical Instruments, External Appliances, Splints, Bandages, etc., demonstrating them before the Class upon the "Models"; (b) To perform any required Operation; (c) To describe the means which he would adopt to ascertain the existence of any given disease or injury; (d) To Diagnose a few cases at the Bedside.

Hospital Appointments.—Every Student in turn must pass through the offices of Clinical Clerk and Dresser. Four House-Surgeons are elected from among the senior Students who have shown industry and skill as Dressers and Clinical Clerks.

Prizes.—At the close of each Session, Silver and Bronze Medals, Books, and Certificates of Honour, are presented according to merit.—The Hardwicke Clinical Prize, value not less than £10, is given annually for the best set of reports of medical cases in the Hospital during the Winter Session.—The Surgeons' Clinical Prize of £10 in money is

given annually by the Surgeons of the Hospital for the best set of reports of surgical cases during the Winter Session.—The Thorp Scholarship in Forensic Medicine (£10) at the close of each Summer Session.—Two Chemical Scholarships are offered annually for proficiency in Chemistry.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Aggregate Fee for Lectures (not including hospital practice), £42. Separate classes: *a, b, c, f, g, h*, one course, £4 4s.; *c*, £2 2s. to Students who have not a composition ticket; *d*, one course, £5 5s.; *i, k, l, n, q*, each course, £3 3s.; *m, o, p*, each course, £2 2s. Vaccination, £1 1s. Practical Pharmacy, £2 2s. Dental Mechanics, £2 2s.—H.P.—*Royal Infirmary*, Medical or Surgical, each—6 months, £5 5s.; 12 months, £6 6s.; perpetual to both, £31 10s. Lock Hospital attached to the Infirmary: 6 months, £2 2s.; 12 months, £3 3s.—*Northern Hospital*: perpetual, £31 10s.; a year, £12 12s.; 6 months, £9 9s.; 3 months, £6 6s. For either the Medical or the Surgical Practice separately, half the above Fees.

Appointments.—Six Dressers and six Clinical Clerks are elected quarterly from the Students of the Infirmary. Two *Post Mortem* Clerks are appointed at the Infirmary for 6 months. Four Apprentices are admitted to reside and board in the Infirmary for 1, 2, and 3 years, on payment of 70, 130, or 190 guineas, including library and lecture fees, but not hospital practice.

The Museum is open daily; it contains a large number of specimens of Morbid and Comparative Anatomy, and an excellent collection of Wax Models, illustrating the Anatomy of the Eye, the Internal Ear, etc. There is also a collection of Materia Medica, which has recently been largely extended.—The Library contains a good selection of standard works on Medical, Surgical, and the allied Sciences, which may be taken out under certain regulations. The Reading Room is supplied with the leading medical periodicals.

Exhibitions and Prizes.—Royal Infirmary Medical Scholarship, value £42, consisting of a Gold Medal, value £10 10s., and six months' free Board and Residence, with Dressership and Clerkship in the Royal Infirmary.—Four Exhibitions, value £31 10s. each, consisting of free Board and Residence in the Royal Infirmary for six months, with Dressership.—Silver Medals, Book Prizes, and Certificates of Honour, in the various classes.—Clinical Prize in May 1871, £5 for the best report of twelve surgical cases in the Infirmary.

MANCHESTER ROYAL SCHOOL OF MEDICINE.—Aggregate fee for Lectures, £42 (not including hospital practice). Separate classes, for one course, *a, b, d, e, f, g, h, k, l, n*, £4 4s.; *c, i*, £3 3s.; *p*, £2 2s. [In Practical Chemistry, there is an additional charge of 10s. 6d. for chemicals.]—H.P., Royal Infirmary, Composition Fee, £42; Medical and Surgical Clinical Fee, £1 1s.; Library and Museum Fee £1 1s.

Connected with the School are Museums of Human and Comparative Anatomy and of Materia Medica, and a Chemical Laboratory.

Prizes.—In addition to three Scholarships, value £20, £15, and £10, for Perpetual Students, Prizes for General Proficiency, and Certificates of Honour for regularity of attendance and general good conduct, will be given at the end of each session.

SHEFFIELD MEDICAL SCHOOL.—Aggregate Fee for Lectures, £40. Separate classes: *a* and *b*, 1st course, £6 6s., second course, £4 4s.; *d*, each course, £4 4s.; *c, f*, 1st course, £4 4s., 2nd course, £2 2s.; *g, h, i, k, l*, each course, £3 3s.—H.P., Sheffield General Infirmary, Medical or Surgical, 6 months, £6 6s.; 12 months, £10 10s.; Perpetual—Medical, £15 15s.; Surgical, £21.

Further opportunities for practice may be obtained at the Sheffield Public Hospital and Dispensary, and at the Sheffield Hospital for Diseases of Women.

The *Infirmary* contains a Museum of Pathology, a Library, and a *Post Mortem* Theatre, with Microscopes and all the appliances for Clinical Research.—The Library of the Medical School is open to Students.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE.—Fee for all the Lectures (except Practical Pharmacy): one payment, £46 4s.; two payments, each £25 4s.; three payments, each £18 18s. Single courses, £4 4s. each. Vaccination, £1 1s.—H.P., Newcastle Infirmary: 3 months, £4 4s.; 6 months, £5 5s.; 12 months, £7 7s. Perpetual Fee, £17 17s.; or by instalments, 1st year, £7 7s.; 2nd year, £6 6s.; 3rd year, £5 5s.

Two Resident Clerks, and four Resident Dressers and four Non-resident Dressers are elected half-yearly. They are provided with Board and Apartments free.

Midwifery can be attended at the Newcastle Lying-in Hospital, and

Diseases of the Eye at the Eye Infirmary.—Lectures on Psychological Medicine will be given at the Borough Asylum.—The Chemical Laboratories are open daily throughout the year, from 10 to 5 o'clock. Students can attend Laboratory Practice and receive instruction in Analysis for—6 days weekly, £31 10s. *per annum*; 4 days, £21 *per annum*; shorter periods, by arrangement.—The Libraries and Museums are open daily.

Pharmacy.—Special arrangements have been made for instruction in Pharmacy. The curriculum will consist of courses of Lectures in Botany, Materia Medica, Chemistry, and Pharmacy. Fee for curriculum, perpetual, £6 6s.; separate courses, each £4 4s.

Prizes.—A *Medical Scholarship*, annual value £25, for four years, in October 1870, to Students who have been registered at Durham.*—The Dickinson Memorial Scholarship, value £15 annually, after the first Examination of a Licensing Board.—A Silver Medal and Certificates of Honour in each Class.

UNIVERSITY OF ABERDEEN.—The Fee to each Class in the Faculty of Medicine is £3 3s., except Practical Anatomy and Demonstrations, for which the Fee in each Session is £2 2s. Matriculation Fee, both Sessions, £1; Summer Session alone, 10s. [This is additional to the Lectures on Anatomy.]

ROYAL INFIRMARY, ABERDEEN.—Perpetual Fee, £6; or 1st year, £3 10s.; 2nd year, £3. Clinical Medicine and Clinical Surgery, each £3 3s. Pathological Anatomy £2 2s.—A three months' course of Practical Ophthalmology is given in summer by Dr. A. Ogston.—The General Dispensary and the Lying-in and Vaccine Institution, and the Eye Institution, are open daily.—Clinical Instruction is given in the Royal Lunatic Asylum for three months in the year.

UNIVERSITY OF EDINBURGH.—The Annual Fee for each subject required in the ordinary curricula is £4 4s., except Anatomical Demonstrations, £1 1s.; Practical Pharmacy and Dispensing, each, £2 2s.; Practical Anatomy and Practical Chemistry, each £3 3s. The Fee for Histology is £3 3s.; and that for Medical Psychology and Insanity £2 2s. (both courses being delivered in the Summer Session).—Every Student, before entering with any Professor, must produce a matriculation ticket for the ensuing session. Tickets will be issued at the Matriculation Office at the College, every lawful day, on and after October 3rd, from 10 till 4 o'clock.—Enrolment in the general album is the only legal record of attendance in the University.—The Library will be open for the purpose of giving out books to Students, either on loan or for reference, every lawful day during the Winter Session, from 10 A.M. till 4 P.M.; on Saturdays, till 1 o'clock.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—The courses qualify for Examination for various diplomas and licences, and for degrees in those years in which University residence is not required.

Practical Instruction.—Royal Infirmary, 12 Noon; perpetual, £10; annual, £5 5s.; half-yearly, £3 3s.; quarterly, £1 11s. 6d. Separate payments for two years entitle the Student to a perpetual ticket.—Sick Children's Hospital: three months, £1 1s.; perpetual, £2 2s.—Dispensary: Royal Public Dispensary and New Town Dispensary, each, first six months, £3 3s.; three months, £2 2s.; each subsequent three months, £1 1s.—Practical Midwifery: Royal Maternity Hospital, Royal Public Dispensary, £1 1s.; New Town Dispensary, £1 3s.—Diseases of the Eye, Ear, and Teeth: Dispensaries, and the Edinburgh Eye Infirmary.—Practical Pharmacy: Royal Public Dispensary, New Town Dispensary, six months, £3 3s.

Fees.—For the first of each Winter Course of Lectures, £3 5s.; second, £2 4s.; perpetual, £5 5s. To those who have already attended a first course in Edinburgh, the perpetual fee is £2 4s. Second Course of Midwifery, £1 3s. Practical Chemistry and Practical Anatomy, £3 3s. Anatomical Demonstrations, £2 2s.; when taken along with Practical Anatomy, £1 1s.; perpetual, £4 4s. Analytical Chemistry, £2 a month, £5 for three months, or £10 for the session of six months. Vaccination, £1 1s. Summer Courses of Clinical Surgery, Clinical Medicine, Practical Anatomy, Operative Surgery, and Diseases of the Eye, each £2 2s.—The minimum fee for the education for the double qualification of Physician and Surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh, including the examination fee, is £90 4s., payable by yearly instalments; for the single diploma of either Physician or Surgeon, including the examination fee, £80.

[Continued at p. 317.]

* The Subjects of Examination will be:—1. The Gospel of St. Mark in Greek. 2. Latin Grammar. 3. Caesar, *De Bello Gallico*, Book IV. 4. Arithmetic and Algebra. 5. Euclid, Books I and II. 6. History of England to the end of the Reign of Henry II.

GUIDE TO HOSPITALS AND MEDICAL SCHOOLS IN THE PROVINCES: 1870-71.

For further particulars regarding each Hospital and Medical School, see p. 313.

Lectures, etc.	BIRMINGHAM QUEEN'S COLLEGE (a)	BRISTOL MEDICAL SCHOOL (d)	LEEDS SCHOOL OF MEDICINE (g)	LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE (i)	MANCHESTER ROYAL SCHOOL OF MEDICINE (l)	SHEFFIELD MEDICAL SCHOOL (n)	UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE (p)
WINTER SESSION.							
ANATOMY AND PHYSIOLOGY	Dr. Norris and Mr. T. H. Bartlett...M. Th., 4	Mr. Atchley and Mr. Steele...M. W. F. S., 9.15	Mr. Hall and Mr. Jessop...M. W., 10; Th., 6	Dr. Waters...M. W. F., 9.15	Mr. W. Smith...Tu. W. Th., 12	Mr. T. Leeds and Mr. S. Morton...Tu. F., 6	Dr. W. Murray...Twice weekly, 8.45 A.M.
ANATOMY, DESCRIPTIVE AND SURGICAL	Mr. C. J. Bracey and Mr. J. F. West...M. Tu. Th. F., 1	Mr. F. P. Lansdown and Mr. Tibbitts...M. W. F. S., 10.15	Mr. Seaton, Dr. R. T. Land, and Mr. J. A. Nunneley...Tu. Th. F. S., 10	Mr. W. M. Banks...M. W. Th. F., 3	Mr. Lund and Mr. Bradley...Tu. W. Th. F., 8.45 A.M.	Mr. Skinner and Mr. A. Jackson...Daily, 5	Dr. Nesham, Mr. I. Armstrong, and Mr. J. Russell...Four days weekly, 8.45 A.M.
ANATOMICAL DEMONSTRATIONS AND DISSECTIONS	Mr. Thomas...M. T. Th. F., 13; W. S., 1	Mr. Dowson and Mr. Dobson	The Lecturers on Anatomy, with Mr. Oglesby and Mr. C. J. Wright...Daily	Dr. Glynn and Mr. E. A. Browne...Daily, 9 to 5, exc. S., 9 to 2	Mr. S. M. Bradley...Daily	Mr. Woolhouse	Dr. Nesham and Mr. L. Armstrong...Daily, from 10 to 4
CHEMISTRY	Dr. Hill...Tu. Th. F., 12	Mr. Coomber...M. Tu. W. Th., 8.15	Mr. J. C. Wilson...M. Tu. Th. F., 11	Mr. J. C. Brown...M. T. Th. F., 10.15	Mr. D. Stone...W. F. Th., 11	Mr. Allen...M. W. F., 11.30	Mr. Freire Marreco...Four days a week, 4
MEDICINE	Dr. Russell and Dr. Foster...Tu. W. F., 3	Dr. Martyn and Dr. E. L. Fox...M. W. F., 8.15	Dr. Chadwick, Dr. Heaton, and Dr. Allbutt...M. T. W. Th., 5	Dr. Cameron...Tu. Th. S., 8.45 A.M.	Dr. Roberts and Dr. Morgan...M. Tu. Th., 1	Dr. Frank-Smith...Tu. Th. S., 4	Dr. Charlton and Dr. Embleton...M. W. F., 5
SURGERY	Mr. Pemberton and Mr. F. Jordan...Tu. W. F., 4	Mr. Coe and Mr. Crosby Leonard...Tu. Th. S., 8.15 A.M.	Mr. S. Hey, Mr. Wheelhouse and Mr. Feale...M. W. F., 6	Mr. R. Harrison...M. W. F., 4	Mr. G. Southam...M. Tu. Th., 2	Mr. W. F. Favell and Mr. Parker...M. W. F., 8 P.M.	Dr. Ilcath...M. W. F., 6
HOSPITAL PRACTICE	GENERAL HOSPITAL (b) QUEEN'S HOSPITAL (c) Daily (both hospitals) 9 to 12	ROYAL INFIRMARY (c) GENERAL HOSPITAL (f) Daily, 1 to 3	LEEDS GENERAL INFIRMARY (h)	LIVERPOOL ROYAL INFIRMARY (k)	MANCHESTER ROYAL INFIRMARY (m) Daily, 10 to 12	SHEFFIELD GENERAL INFIRMARY (o)	NEWCASTLE INFIRMARY (q)
SUMMER SESSION.							
MATERIA MEDICA	Mr. Wilders and Dr. Mackey...M. W. F., 4	Dr. Burder...Daily, exc. S., 9	Dr. Eddison...M. Tu. Th. F., 11	Dr. J. B. Nevins...Tu. Th. S., 8.30 A.M.	Mr. Somers...Tu. W. Th., 12; F. 12.30	Dr. Young...M. W. F., 8 A.M.	Dr. Humble...Daily, 4.45
MIDWIFERY, ETC.	Mr. Clay and Mr. Bassett...M. Tu. Th. F., 1	Dr. Swayne...Daily, exc. S., 8 A.M.	Mr. W. Hall...M. Tu. Th. F., 4	Mr. Steele...M. W. F., 8.30 A.M.	Dr. Thorburn...M. W. Th. F., 9	Dr. Keeling and Dr. Hime...M. W. F., 4	Dr. Gibson...Daily, 8.30 A.M.
BOTANY	Dr. W. Hinds...M. W. F., 3	Mr. Leipner...Daily, exc. S., 7 A.M.	Mr. E. Atkinson...Tu. Th. F., 12	Mr. W. Carter...Tu. Th. S., 9.15	Mr. Grindon...Tu. W. Th., 10	Mr. Birks...M. Tu. F., 6.30	Mr. Thornhill and Dr. Arnison...M. W. Th. F., 9.45
FORENSIC MEDICINE	Mr. Swain and Dr. Hill...Tu. Th. F., 12	Mr. Board...Daily, 9 A.M.	Mr. Scattergood...M. Tu. W. Th., 5	Dr. E. Whittle...M. W. F., 4	Mr. G. M. Harrison...M. W., 1; F., 1.30	Mr. Baker and Mr. Hanson...Tu. Th., 4	Dr. Donkin...M. Tu. Th. F., 11
PRACTICAL CHEMISTRY	Mr. Anderson...Th., 1; F., 2	Mr. Coomber...Daily, exc. S., 8 A.M.	Mr. J. C. Wilson...Tu. Th., 9.30 to 11	Mr. J. C. Brown...M. W. T., 10.30	Mr. D. Stone...Tu. Th., 11	Mr. Allen	Mr. Freire Marreco...Daily, 10 to 5
CLINICAL MEDICINE	Physicians of Hospitals (b, c)	Royal Infirmary: Tu. S., 11.30 General Hospital: Three days weekly, 2.30 Royal Infirmary: F., 1 General Hospital: W., 3	Physicians of Infirmary (g)...F. 5. Clinical Class: Dr. Allbutt...Tu. S. 11.30 to 1 Surgeons of Infirmary (g)...Tu., 6	Physicians Royal Infirmary (k)...Weekly	Physicians Royal Infirmary (m)	Physicians of Infirmary (o)	Physicians of Infirmary (q)
CLINICAL SURGERY	Surgeons of Hospitals (b, c)	General Hospital: W., 3		Surgeons Royal Infirmary (k)...Weekly	Surgeons Royal Infirmary (m)	Surgeons of Infirmary (o)	Surgeons of Infirmary (q)

(a) ADDITIONAL COURSES (SUMMER).—*Diseases of Women and Children*, Mr. S. Berry and Dr. R. C. Jordan, M. 12, T. 3. *Ophthalmic Surgery*, Mr. J. V. Solomon, Tu. 4. *Comparative Anatomy*, Dr. Savage, Th. 3. *Dental Surgery*, Mr. Hawkins.

(b) *Physicians*, Dr. Bell Fletcher, Dr. Russell, Dr. Wade, Dr. Foster. *Surgeons*, Mr. A. Baker, Mr. O. Pemberton, Mr. T. H. Bartlett, Mr. Goodall. *Clinical Lectures*, weekly. *Clinical Instruction*, daily.

(c) *Physicians*, Dr. Fleming, Dr. Johnston, Dr. Heslop. *Surgeons*, Mr. West, Mr. Gangee, Mr. F. Jordan, Mr. J. S. Wilders. *Dental Surgeon*, Mr. S. A. Parker. *Clinical Lectures and Instruction* daily.

(d) ADDITIONAL.—*Comparative Anatomy* (Summer), Mr. Atchley, daily, exc. S. 10.

(e) *Physicians*, Dr. Brittan, Dr. Fairbrother, Dr. F. L. Fox, Dr. Beidoe. *Surgeons*, Mr. Bernard, Mr. C. Leonard, Mr. T. E. Clark, Mr. Tibbitts, Mr. Steele. *Operations*, Tu. F. 1.30.

(f) *Physicians*, Dr. Martyn, Dr. Burder, Dr. Frapp. *Surgeons*, Mr. Coe, Mr. F. P. Lansdown, Dr. Marshall, Mr. Atchley. *Physician-Accoucheur*, Dr. Swayne, M. Th. 2 (for Uterine Diseases). *Operations*, Th. 1.30. *Dental Surgeon*, Mr. Parson, M. Th. 9.

(g) ADDITIONAL.—*Comparative Anatomy*, Mr. Wheelhouse and Dr. Allbutt (summer). *Operative Surgery*, Mr. Wheelhouse, Mr. Teale, and Mr. Jessop. *Demonstrations of Skin-Diseases*, Dr. Allbutt, F. 11.30. *Ophthalmoscopic Demonstrations*, Mr. T. P. Teale. *Instruction in Vaccination*, Mr. Holmes.

(h) *Physicians*, Dr. Chadwick, Dr. Heaton, Dr. Allbutt. *Surgeons*, Mr. S. Hey, Mr. Wheelhouse, Mr. T. P. Teale, Mr. T. R. Jessop. *Surgeons to the Eye and Ear Department*, Mr. J. A. Nunneley, Mr. J. Seaton, Dr. R. T. Land.

(i) ADDITIONAL COURSES.—*Diseases of Children*, Dr. Gee, M. F. 10. *Histological Demonstrations*, alternate Tu. 3. *Ophthalmic Medicine and Surgery*, Dr. Hibbert Taylor, Tu. F. 2 (summer). *Pathological*

Anatomy, twice weekly in summer. *Comparative Anatomy*, Dr. Davidson, twice weekly in summer. *Surgical Apparatus*, etc., Mr. Harrison, weekly (summer). *Vaccination*, Mr. Steele. *Dental Surgery*, Mr. Suape (summer), Tu. 9. *Dental Mechanics*, Mr. Stewart, F. 9. Mr. J. C. Brown lectures on Toxicology.

(k) *Physicians*, Dr. Vose, W. S. 12.15; Dr. Turnbull, M. Th. 12.15; Dr. Inman, Tu. F. 12. *Surgeons*, Mr. Stubbs, Tu. 12.30, F. 1; Mr. Bickersteth, M. Tu. Th. 1; Mr. Hakes, Tu. W. S. 1. *Assistant-Surgeon*, Mr. R. Harrison. *Dental Surgeon*, Mr. Snape. *Pathologist*, Mr. Banks. *Operations*, Tu. 1.

(l) ADDITIONAL COURSES.—*Physiology and Pathology of the Eye*, Mr. Hunt (winter), M. 8.45 A.M. *General Pathology and Morbid Anatomy*, Dr. Simpson, F. 12 (winter); M. Th. 12 (summer). *Comparative Anatomy*, Mr. Bradley (summer).

(m) *Physicians*, Dr. Eason Wilkinson, Dr. Watts, Dr. Brown, Dr. W. Roberts, Dr. H. Simpson, Dr. J. E. Morgan. *Surgeons*, Mr. Beever, Mr. W. Smith, Mr. Dumville, Mr. Southam, Mr. F. A. Heath, Mr. Lund.

(n) ADDITIONAL COURSES.—*Dental Mechanics*, Mr. Mosely (winter). *Dental Surgery*, Mr. Merryweather (summer). *Demonstrations of Pathology and Microscopy*, Mr. Hallam (summer). *Operative Surgery*, Mr. Favell and Mr. Parker (summer).

(o) *Physicians*, Dr. de Bartolomé, Dr. Iaw, Dr. Frank-Smith, Tu. Th. S. 10. *Surgeons*, Mr. Barber, Mr. W. F. Favell, Mr. Parker, Tu. Th. S. 10.

(p) ADDITIONAL COURSES.—*Pathological Anatomy*, Dr. C. J. Gibb and Dr. Philipson (summer), W. 6. *Operative Surgery*, Dr. Heath (summer). *Psychological Medicine*, Dr. H. G. Stewart. *Vaccination*, Dr. Gilchrist. *Practical Pharmacy*, Mr. B. S. Procter, Tu. 7.30.

(q) *Physicians*, Dr. Charlton, Dr. Embleton, Dr. Philipson. *Surgeons*, Dr. Heath, Mr. Russell, Dr. Arnison, Mr. L. Armstrong. *Assistant-Surgeons*, Mr. A. Bell, Dr. Hume, Mr. J. Hawthorn, Mr. C. Jeafreson.

TABLE OF THE MEDICAL OFFICERS, PROFESSORS, AND LECTURERS IN MEDICAL SCHOOLS OF SCOTLAND.

For further particulars regarding each Hospital and Medical School, see p. 314. The letters (W.) and (S.) in this Table denote respectively Winter and Summer Courses.

LECTURES, ETC.	ABERDEEN UNIVERSITY.	EDINBURGH UNIVERSITY. (d.)	ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH. (g.)	GLASGOW UNIVERSITY. (m)	GLASGOW, ANDERSON'S UNIVERSITY. (q.)
ANATOMY	Dr. Struthers, 11 (W.)	Mr. Turner, 1	Dr. Handyside, 1 (W.)	Dr. A. Thomson, 11, (W. and S.)	Dr. G. Buchanan, 5 (W.)
ANATOMICAL DEMONSTRATIONS	Dr. Struthers, and Demonstrator, 9 (W.); 2 (S.)	Mr. Turner, 4	Dr. Handyside, 4 (W.); 9 to 5 (S.)	Dr. A. Thomson, and Demonstrator, 2 (W.)	Dr. G. Buchanan, 1 (W.) ^r
DISSECTIONS	9 to 4 (W. and S.)	Daily (W. and S.)	9 to 4 (W.); 9 to 6 (S.)	9 to 4 (W.); (S.)	Daily (W. and S.)
PHYSIOLOGY OR INSTITUTES OF MEDICINE	Dr. Ogilvie, 4 (W.)	Dr. Bennett, 11 (W.)	Dr. A. Gamgee, 11 (W.)	Dr. Buchanan, 4 (W.)	Dr. E. Watson, 4 (W.)
CHEMISTRY	Mr. Brazier, 3 (W.)	Dr. Crum Brown, 10 (W.)	Dr. S. Macadam, 10 (W.)	Dr. Anderson, 10 (W.)	Dr. Thorpe, 12 (W.)
PRACTICAL CHEMISTRY	Mr. Brazier, 10 A.M. (S.)	Dr. Crum Brown (W. and S.)	Dr. Macadam, 9 to 5 (W. and S.)	Dr. Anderson, 12 (W.); 10 (S.) ^u	Dr. Thorpe, 10 to 4 (S.)
MATERIA MEDICA	Dr. Harvey, 3 and 4 (S.)	Dr. Christison, 9 (W.) ^e	Dr. T. R. Fraser, 9 (S.)	Dr. Cowan, 11 (W.)	Dr. Morton, 3 (W.)
BOTANY	Dr. Dickie, 9 (S.)	Dr. Balfour (S.)		Dr. Dickson,	Mr. Henedy, 10 (S.)
NATURAL HISTORY	Mr. Nicol, 2 (W.); 11 (S.) ^a	Dr. Allman, 2 (Win.); also in Summer ^f	Dr. H. A. Nicholson, (W. and S.)	Dr. Young, <i>Zoology</i> (S.)	
MEDICINE	Dr. Macrobin, 3 (W.)	Dr. Laycock, 3 (W.)	Dr. R. Haldane, 3 (W.)	Dr. Gairdner, 12 (W.) ^o	Dr. McCall Anderson, 12 (W.)
SURGERY	Dr. Pirrie, 10 (W.)	Mr. Spence, 10 (W.)	Dr. P. H. Watson, Dr. J. Bell, and Mr. Annandale, 10 (W.) ^h	Dr. G. H. B. Macleod, 1 (W.)	Dr. Dunlop, 11 (W.)
MIDWIFERY	Dr. Inglis, 2 (W.)	Dr. A. Simpson, 11 (W.)	Dr. Keiller, 11 (W.), 10 (S.); Dr. M. Duncan, 11 (W.); Dr. A. Macdonald, 10 (S.) ⁱ	Dr. Leishman, 3 (W.)	Dr. J. G. Wilson, 3 (S.)
FORENSIC MEDICINE	Dr. Ogston, 9 (W.) ^b	Dr. D. MacLagan (S.)	Dr. Littlejohn, 2 (W.); 11 (S.)	Dr. Rainy, 4 (W.)	Dr. P. A. Simpson, 11 (S.)
PRACTICAL PHYSIOLOGY & HISTOLOGY	...	Dr. Bennett (W. and S.)	Dr. A. Gamgee (S.)	...	...
GENERAL PATHOLOGY	Dr. Rodger	Dr. Sanders, 2 (W.); and in Summer	Dr. John Wyllie, 4 (W.); 9 (S.)	...	...
HOSPITAL PRACTICE	Royal Infirmary, c. Daily, 12	Royal Infirmary	Royal Infirmary, k	Royal Infirmary, p 9 A.M.	Royal Infirmary, 9.30 A.M.
CLINICAL MEDICINE	Dr. Harvey and Dr. Smith	Drs. Bennett, Laycock, MacLagan, & Sanders, Tu., F., 12 to 2	Drs. R. Haldane, G. W. Balfour, and Grainger Stewart, 12 (W.); Tu. F., 12 (S.) ^l	Physicians of Royal Infirmary, M. Th., (W.)	Physicians of Royal Infirmary, twice weekly, 9 (W. and S.)
CLINICAL SURGERY	Dr. Pirrie, Dr. Kerr, and Dr. Fiddes	Mr. Lister, M. Th., 12 (W.); also in Sum.	Dr. Gillespie, 12 (W.); M. Th., 12 (S.)	Surgeons of Infirmary, Tu. F., 8.30 (W.)	Surgeons of Infirmary, twice weekly, 9 (W. and S.)

a. Zoology with Comparative Anatomy.

b. With Medical Logic.

c. ROYAL INFIRMARY, ABERDEEN: *Physicians*—Dr. A. Harvey, Dr. J. W. F. Smith, Dr. Beveridge; *Surgeons*—Dr. Pirrie, Dr. D. Kerr, Dr. Fiddes; *Junior Surgeon*—Dr. A. Ogston; *Dental Surgeon*—Mr. Williamson.

d. Medical Psychology and Mental Diseases, with Practical Instruction, Dr. Laycock (S.)

e. With Dietetics.

f. Mr. Turner lectures on Comparative Anatomy in the Summer.

g. Vaccination, six weeks' courses in Winter and Summer, Dr. Husband. Diseases of Children (Hospital for Sick Children), Drs. Stephenson, Ritchie, Linton, and Gamgee (W. and S.) Diseases of the Eye, Dr. A. Robertson (S.)

h. Operative Surgery and Surgical Appliances, Drs. Watson, Miller, and J. Bell (S.): Orthopædic Surgery and Operative Surgery, Mr. Annandale (S.): Operative Surgery, Dr. Chiene (S.)

i. Practical Midwifery, Female and Infantile Diseases, Drs. Keiller and C. Bell (W. and S.)

k. EDINBURGH ROYAL INFIRMARY: *Physicians*—Dr. Bennett, Dr. Laycock, Dr. MacLagan, Dr. J. M. Duncan, Dr. Sanders, Dr. R. Haldane, Dr. G. W. Balfour, and Dr. T. Grainger Stewart; *Assistant-Physicians*—Dr. C. Muirhead and Dr. T. R. Fraser; *Consulting Surgeon*—Dr. J. Dunsmure; *Surgeons*—Mr. J. Spence, Dr. J. D. Gillespie, Dr. P. H. Watson, and Mr. Annandale; *Ophthalmic Surgeons*—Mr. Walker and Dr. D. A. Robertson; *Assistant-Surgeons*—Dr. J. Bell and Dr. John Duncan; *Dental Surgeon*—Dr. J. Smith; *Pathologist*—Dr. J. B. Pettigrew.

l. Dr. M. Duncan gives Clinical Lectures on Diseases of Women.

m. Lectures on Eye; Dr. G. Rainy.

n. Chemical Laboratory from 9.30 A.M. to 4.30 P.M. (W. and S.)

o. Dr. Gairdner gives a special course on two days in the week during summer.

p. GLASGOW ROYAL INFIRMARY: *Physicians*—Dr. Gairdner, Dr. Steven, Dr. Perry, Dr. McCall Anderson, and Dr. Scott Orr; *Surgeons*—Dr. E. Watson, Dr. Dewar, Dr. Macleod, Dr. G. Buchanan, and Dr. Morton; *Fever-Physician*—Dr. M'Laren;

q. Ophthalmic Medicine and Surgery, Dr. J. R. Wolfe.

r. Surgical Anatomy, Dr. Buchanan, 12 (S.) Osteology for Beginners, Dr. Buchanan (S.)

[Concluded from p. 314.]

EDINBURGH ROYAL INFIRMARY.—Fees: 6 months, £3 3s.; 1 year, £5 5s.; perpetual, £10 10s. Clinical Medicine and Clinical Surgery, each £4 4s. for the Course.—No fees for any medical or surgical appointment. Four Resident Physicians and four Resident Surgeons are appointed; they live in the house for six months free of charge. Candidates must be registered as legally qualified practitioners. Non-resident Clinical Clerks are appointed. Each surgeon appoints from four to nine Dressers for six months. Assistants in the Pathological Department are appointed by the Pathologist.—Instruction is given in special departments.

UNIVERSITY OF GLASGOW.—Fees, each course, £3 3s.; except Lectures on the Eye, £1 1s.

GLASGOW—ANDERSON'S UNIVERSITY.—Fees for all the Lectures and Hospital Practice required for the Diplomas of Physician and Surgeon, £45. Class Fees for each Course of Lectures: 1st session, £2 2s.; 2nd session, £1 1s.; afterwards free. Anatomy Class Fees, for Lectures and Demonstrations: 1st session, £4 4s.; 2nd session, £4 4s.; perpetual, £8 8s. The Dissecting-room is free for two sessions to those who attend both courses of Anatomy. After the second year, the fee for admission to the Dissecting-room is £1 1s. per session. There is a Matriculation Fee of £1 1s. at the beginning of each Winter Session.

GLASGOW ROYAL INFIRMARY.—Fees, admitting to all departments of the Hospital and the Clinical Lectures, perpetual, £10 10s.; 1 year, £5 5s.

GLASGOW EYE INFIRMARY.—Fee, 6 months, £2 2s.; for Students who are attending or have attended the Lectures on the Eye in the University, £1 1s.

NOTES OF THE WAR.

DR. GEORGE KORN, private teacher in the University of Breslau, was killed at Metz on August 18th.

SOME of the wounded at Reichshoffen have arrived at the military hospital of Versailles, and more are expected. The ordinary patients of the hospital have been sent to Alençon and other places.

LISTS of the wounded on both sides have hitherto been exchanged between the German and French Aid Committees by way of Geneva. An arrangement, however, has been decided on, by which the transmission will be direct.

THE *Journal des Connaissances Médicales Pratiques* says that in future, whenever time allows, the wounded will be transported on straw in open luggage-wagons, instead of, as hitherto, being shut up in closed compartments.

THE medical department of the Prussian Ministry, says the *Wiener Medizin. Wochenschrift*, has sent a large supply of disinfectants, as well as of medicines, to the districts around Metz. It is intended, when Metz has surrendered, to send away to distant healthy places the sick and wounded who are shut up there, after disinfection has been applied. The Prussian medical department has also sent to the army a supply of medicines for diarrhoea, which usually prevails at this season of the year. The state of the health of the German troops in France continues to be very favourable.

THE JOHANNITER CORPS.

A SPECIAL correspondent of the *Daily Telegraph* passes some severe strictures on the Johanniter Corps, which tally in every respect with reports which have come to us from other quarters, and they are the opinions of the German people themselves. "This corps is composed of gentlemen, many of whom have served in the army, but the greater number of them are civilians who have undergone their three years' regulation service. In order to qualify a gentleman to become a Johanniter, he must be able to show fourteen quarters upon his coat of arms, and an unblemished descent of many years; he is then entitled to wear a white enamelled Maltese cross, suspended by a green ribbon to his neck, and an uniform of the same description as the Prussian infantry, except that the buttons have a Maltese cross upon them, and the white badge with the red cross is worn upon the left arm. Under their care, for the purpose of distribution, are placed all the medical comforts—wine, provisions, and bedding—that are sent by individuals or communities for the use of the sick and wounded; and without a special order from them

none of these things can be taken even by medical men. Now, I am not going to say that all are alike; but the conduct of these gentlemen, for the most part, is beneath contempt. They live upon the fat of the land; they never know what it is to want a meal, and they take care it is a good one. The medical staff are continually at loggerheads with them, because they cannot get what has been sent out for the special benefit of the sick and wounded soldiers. They are always in the best quarters, and never where they are wanted." There are, however, some noble exceptions.

THE GENEVA CONVENTION.

COMPLAINTS of infraction of the Geneva Convention are, says the *Wiener Medizin. Wochenschrift*, made by both the belligerent armies. The Prussians and the French accuse each other of firing on the dressing-stations and field-hospitals, and of treating the surgeons and their helpers as combatants. Such complaints will be constantly heard; for, notwithstanding the best intentions of rulers and commanders in the field, excesses of this kind are not to be restrained in the heat of battle. The paragraphs of the Geneva Convention may be unknown to many officers and most subalterns of both armies—nay, they may be ignorant of the Convention itself; to say nothing of the natural savageness of a heated and raging soldiery. In spite of all, the blessings of the Convention have come to light in many points in this terrible contest; and, having been so far recognised, it will certainly attain its proper value.

LOAFERS UNDER THE RED CROSS.

A CORRESPONDENT at Berlin writes that communications received from the theatre of war complain of the great crowd following the army under the sign of the Geneva cross: only a minority of them are able and willing really to help, the rest coming for curiosity, and using the shelter and food intended for the sufferers. The soldiers have nicknamed such persons "battle-loafers." The Royal German Commissary for voluntary aid has, up to this day, distributed cards for more than 12,000 persons: it is evident that among this number there may be many unfit for the purpose, because, in the short space of time, a careful selection and examination of the competitors was not possible. The voluntary aid might perhaps be still more closely connected with and subordinated to the military medical service. Similar complaints couched in the warmest terms are made by other correspondents at the seat of war. They are in many cases not without truth; and one of our special correspondents says that several persons (happily not English) wearing the Geneva badge have been found robbing the dead and wounded.

THE WAR HOSPITALS.

THE following notes have been sent us by Dr. J. Ford Anderson, who has recently returned from a tour through some of the hospitals in the rear of the German armies.

At Aix-la-Chapelle I first saw the wounded. There, the existing hospitals being insufficient to accommodate the wounded, a large wooden hospital, on the pavilion system, was in course of erection. One wing was completed, and its sixty beds were occupied with patients suffering from wounds of every part of the body. There was a case of perforation of the wind-pipe and pharynx. The patient declined the use of the stomach-pump; and he was supported by nourishing enemata. In another case, a single ball had perforated both thighs and the external genitals. In a third case, the ball entering the external ear had passed out through the antrum, crushing in its course forward the temporal and malar bones. Most of the wounds, however, were in the extremities, and in many of these cases there was fracture of the bone. The patients were all Prussians, and their wounds were caused by the chassepot.

Through the kindness of Dr. Brandis I was enabled to see and assist in the treatment of these cases during my short stay. The treatment of wounds was by irrigation with a weak solution of Condy's fluid, followed by a dressing of charpie dipped in carbolised oil and covered with impermeable paper. This was done twice daily. In cases of fracture, the limb was enveloped in plaster of Paris. The mode of application was as follows. The limb was first bandaged with pressed cotton-wool, four laths were then laid lengthways, along the limb, and the whole was bound down with a bandage which was smeared thickly with plaster of Paris. The apertures of entrance and exit were left exposed for the purpose of irrigation and for removing portions of bone which were loose. The surgery was decidedly conservative. Several cases of fracture in joints were intended for resection. At that time (three weeks ago) Dr. Brandis had amputated in one case only.

As the hospital at Aix-la-Chapelle was not likely to be ready for a fortnight, and there was a sufficient number of assistants to do the work there, I resolved to go nearer the seat of war. On my way through Coblenz and Saarbrück I visited the larger lazarettes. Everywhere I

found the same conservatism in surgery. Resections of the elbow, shoulder, and knee will be numerous for some weeks to come. On the day I visited Saarbrück, three of these resections were performed in the tent of the Amsterdam Aid Society. I did not find the irrigation treatment of wounds so usual as I went on. Instead of it, baths of sheet-zinc filled with water were used; and in these the wounded limbs were immersed. This treatment is less troublesome, but appears to make the granulations soft and flabby. From Saarbrück I went into France, travelling by that slowest of conveyances, a *militair-zug*. At last, however, I reached Remilly and Courcelles, in time to aid in the dressing and preparation for transport of four or five hundred of the soldiers wounded in the battle at Metz, on August 31st. The wounded were brought down to these stations and laid on straw in sheds. All of them had been attended to in some way on the field, but here their cases were revised. Bad cases are treated in the local hospitals until they can bear being transported to Germany. I was much struck with the desire of the wounded soldiers to be considered by the doctor able to travel homewards. The German love for the Fatherland is intense; and I saw many a strong man stealthily dash the tears from his eyes when his sentence, "Hier bleiben", was pronounced. And when it is possible, the surgeon, who has to decide whether the wounded man shall go or stay, respects his feelings. Apart from sentiment, the disappointment of remaining and consequent depression must often have a retarding effect on the recovery.

Much of the dressing of wounds is done by non-professional volunteer helpers of the different Aid Societies—German and foreign. I have heard of sixty of these societies, and probably there are more. Their object is to assist in every way the sick and wounded. They carry them off the field of battle. They give them stores with which they are entrusted. They dress their lighter wounds, and call a surgeon for the severer wounds, and so on. Many of them are educated men, who leave their professions to do this work. The usefulness of these assistants individually cannot be over-estimated. But as each society acts independently, it often happens that helpers are in excess in one place, while another place is shorthanded. Many of the societies live in camp at their own expense, and provide comforts for the wounded, and ask for nothing but information as to where their services are required, but this they can with difficulty obtain. There is a general disposition to blame, as obstructive to their usefulness, the Knights of St. John (Johanniter). This order is composed of men of good social position and ample means, and theoretically they are supposed to look after the wounded; but the humbler workers complain that these gentlemen confine themselves to the light duties of verbal comfort, and the distribution of small delicacies, and rather discourage than assist others in doing the hard work which I have indicated. However it arises, the fact remains that much labour and philanthropy is wasted, and much suffering is unrelieved from want of a proper organising head. Two examples occur to me. A well educated member of the Hamburgh Krankenpfleger told me that, after the battle of the 31st August, at Metz, the detachments of his Society went on the field to remove the wounded. Having worked till nightfall, when complete exhaustion compelled them to desist from their labour, they rested for a few hours, leaving many wounded on the field who were still alive. At dawn it was found that all of these had died during the night; and who can say they would not have recovered with proper attention? And yet, hundreds of able volunteers—longing for work—might have been collected in a few hours from towns and villages where their services were no longer urgently required. Again, from want of organisation, it often happens that the wounded despatched homewards, travel for four and five days without having their wounds dressed. Yet, imperfect as is the action of isolated societies, they have better means of knowing where help is needed than individuals; therefore I would recommend any surgeon going abroad to attach himself to some society, and to go where it sends him; and none is better than our National Aid Society.

Of course my personal observation does not amount to much; but I may say that I did not see or hear of a bayonet-wound or a sabre-cut.

Another correspondent, writing from St. Marie aux Chênes on August 22nd, provides the following notes.

Although I left London on the 15th, I am still far from my destination—head-quarters. Travelling is indeed slow and wearisome. The endless trains of wounded one meets with testify to the cost which Prussia has paid for her unexpected successes. I passed through Saarbrücken and HERNY, Falquemont, and Remilly, and everywhere the houses and hospitals were crowded to overflowing. These, of course, represented the least severe cases—mostly flesh-wounds; though among them were many who were in a poor condition to undertake a long, tiresome journey. It was, however, absolutely necessary to transport

them somewhere, and the men were equally anxious to go home to their friends.

It was in Remilly that I first saw anything serious. I chanced to have quarters allotted to me in the Chateau Rolland, which had been fitted up as a lazarette, and was really very comfortable, but very short of surgical appliances. There was a poor fellow who had been shot in the head. The ball had struck him about the juncture of the parietal and occipital bones behind, and had made a complete furrow, tearing away scalp, and bone, and brain, altogether. He was of course *in extremis*. The Chassepot bullets make a very clean-cut wound. The calibre of the bullet is very small; and, being conical, I suppose it cuts more freely and with less laceration of the surrounding soft parts, especially near its exit. The exit, in many cases, is as small as the entrance hole, and it is often difficult to distinguish them. The balls sometimes make strange circuits. One patient was struck in the middle of the calf of the leg, and the bullet passed upwards and forwards, splintered the femur just above the knee-joint, and came out on the upper and outer surface of the thigh.

I only stayed one night at Remilly. I had to hurry on to St. Marie-aux-Chênes, where they had been fighting very hard for two or three days. We passed through several villages on our way—Gorse, St. Privat, and others. It was three days after the fighting; and it was said, officially, that there were upwards of 70,000 dead and wounded. I could well imagine that to be true, for they were lying even on the roadsides, every house, and stable, and church, and barn, being crammed to overflowing; and from the fields around for two or three miles there arose such a stench as must be smelt in order to be appreciated. In St. Marie, whence I write, there is a very large number of wounded; and it is more especially of these that I can speak, as a section was kindly handed over to me. In a barn, there were twenty-six men; of these, two had bullets through the lungs, one in front, one behind; three had compound fracture of the femur; two had bullets in the knee, either in or near the joint; one had a severe head-wound; and the remainder were cases of simple shot-wounds. This is a large proportion of serious cases; and I believe I speak truly when I say that in other houses and places the proportion is equally great.

There were no primary amputations under treatment. The medical staff and appliances were so utterly inadequate to the demand, that for the first five or six days nothing was done but arrange the men and get them under cover. On the 22nd (to-day), a few operations were performed—amputations—the circular method being chosen in each case. The surgeons seem unwilling to operate much, thinking it too late. I expect that in either case the mortality will be exceedingly great, as the greater number of the cases now remaining are of a very serious nature. My stay here will be much too short to give any detailed account either of the results or of the operations which may ultimately be performed. To make matters worse, there is a great want of water. The great demand made on the wells and the dry weather together somewhat account for this. Cold applications seemed to be the most agreeable; but water could not be had, not even enough for drinking purposes. There is a want of cleanliness. The charpie and other dressing from the wounds, now beginning to suppurate vigorously, are simply hidden beneath the straw, there to ferment and give rise to odours far from agreeable, and such as will not in any way conduce to the well-being of the patients who cannot get out of the way. I believe that this was the cause of a rather severe kind of diarrhoea, which troubled the poor fellows very much—the more so as they were lying on straw, and bed-pans were not to be had. Compound fractures of the leg are put up in plaster of Paris bandages, with a window opposite the wound. I am very curious to see the result of this treatment.

The same correspondent, writing from Pont-à-Mousson on August 26th, says:

I have just returned from a visit to one of the field-hospitals, and, thanks to the kindness of Staff-Surgeon Dr. D. E. Müller, I saw a good deal in a short time. I happened to reach the place just in time to see an excision of the right ankle-joint. The man had been shot through the joint obliquely, from without inwards. The extremity of the fibula was completely broken through, and a portion of the lower end of the tibia was also gone. It was eight days after the injury had been received. An incision had been made for the escape of some pus which had collected; and it was through this opening that the real condition of the joint was ascertained. A counter-opening was made over the inner ankle, through which a chain-saw was introduced. The lower ends of the tibia and fibula were removed, with the upper surface of the astragalus. The foot was then put up in plaster of Paris.

The next case was ligature of the femoral artery. The man had been shot through the calf of the leg, and the posterior tibial artery was injured. Bleeding had come on repeatedly in spite of styptics and ligatures, and

so the artery was tied. The man was simply put back to bed without further application of either wool or warmth of any kind to the limb.

I next saw exarticulation of the femur for a compound comminuted fracture of the thigh, very high up. The bullet could not be found. The patient had been sent from some one of the villages in the neighbourhood of the battle-field: he had been put up in a plaster of Paris bandage extending well round the hip, and had certainly borne the journey fairly well.

These were the only operations which I saw performed. We then went round the wards, in which were some interesting cases. There was a man on whom tracheotomy had been performed five days previously. He had been wounded in the throat: the ball had not passed through, but there was very great oedema; and respiration was so difficult that tracheotomy was determined on. He was doing very well, and it was proposed to take out the tube on the following day. I also saw three cases of excision of the elbow-joint. They were being dressed much as we do them in England. Instead of resting on cushions, they were suspended and swung about easily, according as the patient himself moved. We then came to a man who had been shot in the upper part of the chest. The clavicle had been considerably damaged. It was feared the splinters might injure or cut the vein or artery, and so nearly the whole clavicle had been extirpated. The patient was doing well. Dr. Müller showed me also a case of excision of the shoulder-joint. It had been done in consequence of a complicated injury involving the whole joint. He had performed several amputations both of the thigh and leg; but it was too soon to say much about them.

I endeavoured to find out whether there was much or any difference in the wound produced by the Chassepot and the Prussian bullet, but could learn nothing. The Prussian bullets, I think, are somewhat larger, and are egg-shaped, and are perhaps just a little heavier.

The hospital had been extemporised out of a large French barrack. The wards were large and airy, and the patients seemed to be very comfortable.

I cannot speak too highly of Dr. Müller's kindness and courtesy to me, a perfect stranger, who had to introduce himself as best he could. I leave here to-morrow for Commercy.

TENT-HOSPITALS.

THE following notes on tent-hospitals are from a German physician of London, who is at present in the neighbourhood of the Rhine.

The experiments which have been made in the war of 1866, and since, to treat the wounded and sick in tents or in wooden houses, have led to the adoption of this plan on a larger scale in the present war. A tent-hospital, containing at present two hundred and forty beds, is in full working order at Cologne. The tents, beds, and bedding are the gift of the German Association in London in aid of the sick and wounded in the present war. Twenty of the tents are already open; and there is a supplement of fifteen, which will either be used in the same place or forwarded to some other locality where they are more urgently needed. The tents were furnished by Messrs. Paget, Piggot, and Edgington; and the bedding by Messrs. Heal and Co., in London. Each tent contains ten beds; but, the superficial area being only sixteen by thirty feet, it appeared to us that the beds were too near each other, and that eight would be quite a sufficient number for each tent. It is worthy of notice, however, that even in those tents that were quite full of patients with suppurating wounds, the air was perfectly sweet. This is, no doubt, in part also due to the excellent system of disinfection which is carried out, and of which we shall have to say a few words hereafter. At one end of the tent, a portion about four feet wide is separated from the rest by a curtain drawn across, and opening in the middle, behind which, on one side, a table with different hospital appliances, and on the other a Müller-Schür's closet (earth-closet, with a disinfectant powder instead of the earth), are placed. Gas and water are laid on. In every tent are suspended one or two of Professor Esmarch's irrigators—tin cans holding about two pints of water, which flows out through an India-rubber tube of sufficient length to be used for all the beds. For each patient there is a separate nozzle of hard rubber; and this is kept, during the time between the dressings, in a glass filled with Condyl's fluid. These irrigators are simply used for syringing the wounds; and Condyl's fluid is used for this purpose.

A most extensive use is made of carbolic acid, dissolved either in water or in oil, for dressing the wounds. All articles of dressing which are not worth washing are burnt; the others are kept for twelve hours in a disinfecting fluid containing chlorinated soda, before washing them. The tents are pitched in a beautiful garden, and a conservatory has been fitted up as a washhouse; whilst a washhouse and stable have been admirably transformed into a kitchen and larder. The administration of the whole hospital is in the hands of the indefatigable

Mr. Deichmann of London. The medical service is performed by several practitioners of Cologne, of whom Dr. Servais, one of the leading men at Cologne, is day and night on the premises, besides two assistants. The household department and the nursing are in the hands of several ladies belonging to the first families of the town. Upon the whole, nothing could make a better impression than the order and cleanliness of this hospital. The diet is very liberal. Every patient gets meat twice a day, plenty of beef-tea, eggs, and beer; in fact, the only limit seems to be his capacity for digesting. If the military world has been astonished at the complete change which Germany has undergone in military matters within the last few years, the medical world may not be the less surprised at the complete overthrow of the notions which not long ago were prevailing in Germany as to diet, dressing of wounds, and ventilation. Open windows are now the order of the day; or the patients are kept under tents, or they are carried in their beds in the open air whenever the weather allows it. Condyl's fluid, carbolic acid, and chloride of lime, are used in all hospitals extensively.

Three tents at Cologne are of a somewhat different shape from the English ones, being somewhat wider. They are the regulation tents of the Prussian Army Medical Service, and were bought at Cologne. It will be gratifying for the English makers to learn that their tents stood the drenching rains prevailing lately better than those made at Cologne, although they also let a little rain pass through, especially over the ventilator at the top, the arrangement of which might be somewhat improved.

At Bonn there are altogether fifteen hospitals for the wounded; and several magnificent villas—among others, the house of Professor Busch—have been fitted up for the reception of patients. We saw many severe cases; about a dozen where the arm had been amputated; several amputations of the thigh; one case of resection of the humerus, and several of the elbow-joint. Most of the patients were doing remarkably well; all whom we saw were under the care of Dr. von Mosengeil. There were several curious cases of bullets having entered the pelvis, and where symptoms on the part of the bladder or rectum had been present, and in which there could hardly be a doubt of the peritoneum being wounded; and yet the patients were doing well, and no peritonitis had set in. The surgeons are under the impression that the wounds, upon the whole, heal more quickly in the French; but that the Germans bear pain better. There is a good deal of dysentery among the wounded coming from the front.

A tent-hospital similar to that at Cologne is about being established at Bingen. The tents (for two hundred and fifty to three hundred patients), with all the furniture and bedding, are also given by the German Association in London. Dr. Thudichum is at the head of the undertaking; and Mr. John Simon, who is spending his holiday at Bingen, is also taking a most active part in it, and his co-operation will prove most valuable. Eleven young English surgeons from different London hospitals are engaged to act as dressers and assistants. We learn that the National Society in London bears the expenses of the latter, and that this Society has also supplied instruments. A site has already been found on the Rochnenberg; and we trust that, before another week has passed, white flags with the red cross will indicate the existence of this truly international hospital.

MEDICAL SYSTEM OF THE GERMAN ARMY DURING WAR.

THE following is from our Special Correspondent, dated Berlin, September 7, 1870.

In my last letter (see JOURNAL, Sept. 3rd, p. 254) I gave a sketch of the organisation of the military medical service; and I still have to complete it in several points. Part of the places are filled by the military surgeons, whose number in peace is sufficient for all demands; when the army is mobilised through the whole country the medical men, as well as all other men of certain ages, are bound to military service, but in general their number, together with that of the military surgeons, does not fully make up the full medical staff of the mobile army (amounting to more than 3,000). The deficiency is made good, as far as possible, by medical volunteers taken partly from among the elder students. Any vacancies that remain are in general among the troops; the field-hospitals, the sanitary detachments, and the hospital reserve of every army corps are made complete, these bodies being destined for the first hospital treatment of the wounded. On the average, the proportion of the *personnel* among them is this: one surgeon for thirty-three patients, one Lazarethgehilfe (hospital helper) for twenty-five, and one nurse for thirteen patients. In the whole army, there is about one surgeon for each two hundred and fifty men.

The *reserve hospitals* are established either in garrison hospitals or in other buildings approved of by the provincial general surgeon. Their

administration is under the military medical service. Their medical staff is furnished from the surgeons of the town; for one hundred patients there are an ordinary and two assistant surgeons. Every patient ought to have at least 1,200 cubic feet of air.

A change in the military medical service, first made in the war of 1866, then worked so well that it has been renewed in the present war—I mean the institution of consulting general surgeons. They are nominated in case of war, and are selected mostly from the professors of surgery; they have to work in the dressing stations and in the field-hospitals, and may, without having anything to do with the administration, devote themselves entirely to scientific work, and advise the surgeons and the chiefs of the hospitals. The present circumstances, as well as the experience of 1866, have proved the advantage of this institution, not only to the wounded soldiers, but also to the surgeons of the field-hospitals, which are made thus a most excellent school of surgery. The present consulting surgeons are—Von Langenbeck, Wilms, Bardeleben, Busch, Roser, Wegner, Wagner, Stromeyer, and Esmarch. As in all probability the present war will give occasion to epidemics, Professor Frerichs has been made general consulting physician, in order that there may be a scientific authority to watch, and if possible to avoid, the outbreak of contagious disease in the army. The materials of medicine, instruments, and bandages, in the sanitary detachments and the field-hospitals, are very complete. In addition, in case of need on the battle-field, every soldier has, according to a new regulation, material for the first dressing sewed in his left pocket (in order that it may be found easily); namely, a piece of old linen, a linen bandage four yards long, half an ounce of charpie, and a piece of oiled linen.

[Instead of the bandage, Professor Esmarch proposes for the future (I think not wrongly) a triangular piece of linen, as more fit for the various kinds of bandaging. He thinks that by a woodcut printed on the cloth and representing these bandages, the men might be enabled to bandage themselves in case of need.]

To supply the field-hospitals with stores in proportion to what has been used after a battle, there are hospital reserve-depôts, one of which belongs to every army-corps and follows it as closely as possible. They are under the direction of the *General-Etappen-Inspection*, and are supplied by this board from the large depôts at home. But, however extensive the official arrangements may be, the experience of these last years has taught that they always remain insufficient in a certain degree and for certain times, particularly after great battles; and that will happen especially in Germany, where the army is a proportionally much larger part of the nation than anywhere else. Already, in 1866, when the extension and usefulness of voluntary aid were for the first time put to a severe proof, and where it had for the most part to be created, an endeavour was made to centralise it, in order to avoid confusion and waste. The speedy end of the war stopped the full realisation of the plan; but since, in the reform of the military medical service, every attention has been paid to voluntary aid. The official chief (royal commissary and military inspector) of voluntary aid is nominated by the King at the beginning of the war: in 1866 Count Stolberg held the office; in 1870 it is held by Prince Pless. He is in communication with the various aid societies and with the war-office; by delegates (chosen in a great part among the Knights of St. John) he is represented at different places in the country, as well as in the field-hospitals and on the theatre of war.

In general, the special functions of the voluntary aid department are to collect the voluntary gifts and distribute them to the field-hospitals and troops, where they are wanted; to establish and support reserve-hospitals, and, if necessary, to offer private quarters; and to prepare male and female nurses for the hospitals and for the transport of the wounded. Direct relief to the fighting troops is furnished as much as possible by the staff of the army, and only exceptionally by the volunteers. This restriction is evidently demanded by a regard to tactic operations; which, however, does not prevent voluntary aid from coming into action after a battle, and particularly after a victorious one. Thus, in the days after the great fights near Metz, a great number of volunteers were exceedingly useful by their personal help and the materials which they brought with them. Directions as to the places and hospitals where they are wanted are given to the volunteers by the royal commissary and by his delegates. Up to the 24th August 2,702 persons were sent in this way by the royal commissary to the hospitals and battle-fields. They came from various parts of Germany, and were of different stations in life (students, clerks, tradesmen, etc.); most of them were under the guidance of medical men.

Private societies may assist hospitals by undertaking certain branches of the administration; for instance, the provision of food, cooking, nursing, etc.; or by establishing new hospitals. Such hospitals are superintended, as regards their hygiene, by a military surgeon; and they must be provided for at least twenty patients, as, otherwise, mili-

tary control over the men would be impossible. A further explanation of the aid societies I delay to my next letter, preferring to give a short description of the large barrack hospital now established near Berlin on the field of Tempelhof. Besides the other buildings, there are fifty barracks, each fitted for thirty patients, the whole hospital containing 1,500 beds. One third of the expense of building it is borne by the military exchequer, one third by the city of Berlin, and one third by the Berlin Aid Society. Each department has its own administration, the dispensary and operating room alone being in common. The barracks form a w, or rather a \wedge v, with the base from north to south. Kitchens, laundries, administration and store rooms, are situated between the open ends of the wings of the v's. Each barrack is an oblong quadrangle, with its long diameter from east to west, forty paces long and ten paces broad. At one end are four small rooms, one for the bath, one for the clothes, a small kitchen, and a room for the nurse; at the other end, outside the barrack, but connected to it by the roof, is the closet. The ward itself has doors at the two opposite ends and ten windows on each side. The building material in all the barracks is wood oiled on the inside. The roofs are covered with fire-proof pasteboard, and have a ventilator, the openings of which can be closed. For the sake of experiment the various groups of barracks differ as to the height of their base above the ground, the shape and construction of the ventilators, the manner of preparing the floor (in some the latter is covered with asphalt), etc. Some of the barracks are surrounded with galleries, which can be closed by curtains; here the windows are not of glass, but of wire-gauze. At first sight, the greater obscurity of the interior seems to be a disadvantage. Every building has gas and water, the latter being given gratuitously by the liberality of the Berlin water-works. Rails are laid down within the barracks, so as to bring the soldiers thither directly; a telegraph communicates with the town. At present the barrack-hospitals are nearly finished, and contain some hundred patients already. It is to be hoped that the severity of the winter may not put a too early end to the utilisation of this well constructed hospital.

THE WOUNDED IN BERLIN.

UNDER date September 4th, our Special Correspondent writes as follows.

There are in Berlin and its suburbs at present twenty-eight hospitals of different sizes, with accommodation for 3,700 sick and wounded soldiers; a number which will be increased in a few days by 900 with the completion of the barracks. On September 1st, 2,503 of the beds were occupied by patients, viz., 1,960 Germans, and 543 French. A few days ago the number of the latter was much larger; but expecting a still larger number of patients, the administration sent away all the slightly wounded who could be removed without damage. Of severely wounded, there are in Berlin at present 303 Prussians, 100 French; of slightly wounded, 957 Prussians and 303 French. Of the whole number of beds above named, not quite half are furnished by the military administration, the rest by voluntary aid societies.

ARRANGEMENTS IN GERMANY FOR THE SICK AND WOUNDED IN WAR.

DR. GEISSÉ of Ems has furnished us with the following interesting information in continuation of his note published in the JOURNAL of September 3rd.

Voluntary Medical Department.—There never has been a war in which the sanitary arrangements have been sufficient to meet all the wants of the sick and wounded. Miss Nightingale has made her name immortal by laying the foundation to a system of private help; and Durant, taking up these ideas, became the father of the Geneva Convention, the most noble creation of our century. The white flag with the red cross covers the place where loving Christian hearts and noble hands rivalise in self-sacrificing zeal to soothe the sufferings of sick and wounded, whatever their name or nation may be. The first condition of making voluntary help useful in war time consists in a thorough organisation, and submission to the military sanitary department. The necessity of this was seen in 1866; and it has been still more apparent in the present war. Since 1866, the Association for the Relief of the Sick and Wounded in War has spread all over Germany. Both in large and in small towns societies have been formed for the purposes of collecting money, educating nurses, preparing hospital requisites, etc. All these small societies have joined the general association. Each member pays an annual subscription, of which one-third is delivered to the central fund, the remaining two-thirds being used as each society considers best. The association, in war time, acts in dependence on the military sanitary department. The war had not been declared many days when the central committee from Berlin sent their order to all the branch societies, desiring them to provide what

was urgently wanted, and the call was answered well and quickly. Minute details had been given as to the kind, size, and form of everything required in the shape of lint, bandages, etc. Thousands of persons collected money, blankets, wine, brandy, preserves, extract of meat, etc. Hospitals to contain from twenty to two hundred beds sprang up; barracks were built; a medical staff was prepared; well trained nurses appeared in numbers; companies of young men volunteered to carry the wounded from the battle-field, and went out well equipped for their purpose under the guidance of medical men. They were all trained, and had some lessons in applying the tourniquet and bandaging. As soon as they appeared in the field, they had to place themselves under the command of the army-surgeons. Hundreds of medical men went to the battle-fields and into the hospitals, either to help there or to accompany the trains with the sick and wounded to the different hospitals. Wherever such a train was telegraphed to stop a short time, all the medical men of the neighbourhood were ready to do their duty in renewing the bandages, and hundreds of hands were stretched out to give refreshments of all kinds. If our railway communication from the battle-fields had been better, no wounded soldier would have been lying on the field for so long as, I am sorry to say, they did in the beginning of the war.

VOLUNTEERS FOR THE NATIONAL AID SOCIETY FOR THE SICK AND WOUNDED.

We are enabled to state that the Society does not intend at present to accept any additional applications for service; at all events, from none but those who can speak French and German fluently, and who are prepared to give their services during the continuance of the war.

HOW SCARLATINA IS SPREAD.

THE remarks which have been recently made in the JOURNAL on the manner in which the infection of scarlatina is communicated from person to person, as a result of ignorance and neglect, have had the effect of eliciting some valuable information. We have received several important communications on the subject, which are here subjoined. One is from Dr. George Johnson, the Professor of Medicine in King's College; the second from Dr. James Russell, Physician to the Birmingham General Hospital; and the third from Dr. L. O. Fox of Broughton.

Dr. Johnson writes as follows.

"I am rejoiced to find that you are directing the attention of your readers to the preventable causes of scarlet fever, for I am sure that in doing so you will confer a great benefit upon the public. I have long been convinced that the spread of this formidable disease is, in a vast number of instances, the result of gross, culpable, and even criminal negligence. It is universally acknowledged that scarlet fever is highly contagious: it is doubtful whether it ever results from any other cause, although, as with other contagious diseases, it is not possible in every case to trace the source of infection. Over-crowding and defective ventilation unquestionably favour the rapid spread of the disease through schools and other large establishments, but there is no reason to suppose any special connection between scarlatina and filth, bad drainage, or impure water.

"I have known the case of several families becoming infected by scarlatina within a few days after going into lodgings by the sea-side. The explanation of this is not difficult to find. A case of scarlatina occurs, perhaps, in a London family. As soon as the patient is convalescent, but while the skin is still peeling and thus throwing off poisonous epidermis, he goes by cab and railway to the sea-side, infecting the public carriages on his way, and finally infecting the bedding and furniture of his lodging. The proprietor of the lodging knows nothing of any infection; therefore no disinfecting process is adopted, and the next occupants of the lodgings take the disease.

"It is obviously the duty of persons who take a convalescent into a lodging while there is still risk of infection, to state the facts of the case before-hand, and to make arrangements for the subsequent disinfection of the bedding and furniture. A lodging-house keeper who neglects disinfection, knowing it to be necessary, not only incurs great moral guilt, but is liable to a penalty of twenty pounds.

"In a sea-side town, where a few years since scarlatina was very prevalent, this occurred, as I was told by the residents on the spot. A child died of the fever in a lodging-house, and the day after the funeral of that child another family, ignorant of what had happened, entered the very same apartments.

"You have mentioned the case of a laundress's child taking the fever in consequence of infected clothes being sent without warning, and, there-

fore, without the adoption of needful precautions. I believe that this is a frequent source of infection. The baskets used to convey the foul linen, and the covers, which are commonly made of woollen, become infected, and thus the infection may be communicated to the clean linen on its way home.

"The clothing and bedding of a scarlatina patient before it is sent to the wash should be scalded and then disinfected with carbolic acid.

"Quite recently I saw in consultation a child suffering from scarlatina, his sister having died the day before of the same disease. These were the children of a tailor, whose workshop adjoined and opened into the room occupied by the sick child. This affords an illustration of the way in which new clothes may become infected.

"A few days afterwards I saw another child suffering from a malignant form of scarlatina, and lying in a room at the back of a greengrocer's shop. The family, who were in attendance upon the child, were continually passing from the sick room into the shop to distribute fruit and vegetables to their customers.

"Some time since I was consulted about a young lady who had albuminuria consequent on scarlatina. A few days before this lady had sickened with the fever, her pianoforte had been tuned by a man who was obviously unwell, and who, it was afterwards ascertained, had been suffering from scarlatina.

"When scarlatina is in a house, casual visitors should be warned and excluded. In the early part of the present year, a young lady was admitted as a visitor at a house where several members were ill. She afterwards learnt that the illness was scarlatina, and a fortnight afterwards she sickened with the disease. A younger brother of this young lady, some months before, was seized with scarlatina five days after returning to school after the holidays. On inquiry, it was found that the boy with whom he slept had suffered from scarlatina during the holidays.

"The master of a large school told me quite recently that one of his pupils while at home at the end of the holidays had symptoms which excited a suspicion of scarlatina; nevertheless, his parents sent him back to school. Fortunately, the disease proved not to be scarlatina.

"About two years since, an Oxford undergraduate sickened with scarlatina; and, in obedience to orders from his parents, he returned home, travelling in a first-class carriage with five other passengers, while the eruption was fully out upon him.

"Medical attendants, especially those who practise midwifery, should be careful to avoid conveying the disease to others, washing and disinfecting the hands after touching a patient, and driving, or better, walking, in the open air are obvious precautions. A friend of mine, Dr. B., attributes the illness and death of one of his own children to his having taken the child with him in his brougham when he was visiting a succession of cases of scarlatina.

"It is notorious that articles of furniture or clothing, if shut up without being cleansed and disinfected, may be a source of danger for an indefinite period. Some years ago the following illustration of this came to my knowledge. A child, on a visit to an unmarried aunt in the country, sickened with scarlatina immediately after her arrival, and it is probable that she took the disease with her. The child died of the disease. More than a year afterwards, another niece on a visit to the same house took scarlatina and died. On careful inquiry as to the probable source of infection, it was found that a dressed doll which had been nursed by the first child during her illness, and which since her death had been put away in a drawer, had been taken out and given to the second child some days before she became ill. What renders it the more probable that the doll's clothes were the source of infection, is the fact that in the interval between the deaths of the two children some older children who had visited the house, but who had neither seen nor touched the doll, remained well."

Dr. James Russell has addressed to us the following communication.

"It is greatly to be desired that the highly practical remarks you make respecting the propagation of scarlet fever may attract general attention. I apprehend that an important feature in the poison of scarlet fever is the tenacity with which it attaches itself to articles of clothing, particularly those of a woollen nature. The following occurrences raise a collateral question: How long will the contagium of scarlet fever retain its vitality, or, to speak without theory, continue able to generate the disease? I mention the first case simply as showing the curious manner in which this question may present itself. It would, of course, require very strong corroborative evidence to remove it from the category of coincidences. The other two cases have a directly practical bearing. A former physician to the General Hospital in this town, intimately known to myself, lost a sister from scarlet fever in early life. The death occurred at a boarding-school. The clothes were packed up in a carpet-bag, and sent in that state to the young

lady's home. For five years at least (I think for a longer period) these clothes were not unpacked. The bag was then opened; and the clothes were given to a younger sister, then going to school, who speedily afterwards fell ill with scarlet fever. A well known surgeon of this town, now deceased, went with his wife and only daughter to the house of a friend in a distant city. The family of this friend had been attacked with scarlet fever, but the disease had ceased entirely for six months. My friend's daughter was seized with the disease; and it was then ascertained that the blanket of her bed had covered the scarlet-fever patient, and had been put by in a closet unwashed. My own son slept for some nights in a bed which had been occupied by a patient, attended by myself, who had a *second* attack of scarlet fever, in which the eruption (and, if I remember rightly, the desquamation) was confined to the palms of the hands and to a small patch on the front of the chest. The bed-clothes had not been purified, and he broke out with the disease. The occurrence took place several years ago, and I am not certain about the interval of time. I know it was over three months; I believe it exceeded six."

Dr. L. O. Fox of Broughton, near Winchester, writes as follows.

"Twenty cases of scarlet fever at West Titherly, Hants, have been caused by carelessness and indifference to results.

"A servant girl took the disorder at the house of her master, four miles distant. To save trouble, she was sent home, where there was a family of five children, all of whom were attacked, together with eight others living adjoining. The disease was carried on by contact at school; and a woman recently delivered caught the disorder and died.

"There are no means of enforcing preventive measures, and so death and misery result."

In connection with this subject, we would also call attention to the valuable paper, published at another page, by Mr. Davies, the Medical Officer of Health for Bristol. Mr. Davies gives an excellent summary of the various circumstances which favour the propagation of scarlatina.

ASSOCIATION INTELLIGENCE.

THE ANNUAL MUSEUM, 1871.

THE following gentlemen have been appointed by the Local Committee at Plymouth as managers of departments. *Physiological and Pathological Anatomy*—W. P. Swain, Esq., F.R.C.S. *Medical and Surgical Appliances*—H. Greenway, Esq., M.R.C.S. *Literature*—R. Hogarth Clay, M.D.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Royal Clarence Hotel, Bridgwater, on Thursday, October 13th, at 5 P.M.; J. CORNWALL, Esq., of Ashcott, President, will be in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, September 13th, 1870.

MEDICAL NEWS.

THE LIVERPOOL FEVER HOSPITAL.

THE following Report of the Fever Hospital for the week ending September 10th, 1870, has been forwarded to us:—Remaining per last report, 774; admitted since, 268; discharged, 150; died, 7; remaining under treatment, 885.

VOLUNTEER MEDICAL ORGANISATION.

WE understand that at a Meeting of the Committee of the Volunteer Medical Association, held on Wednesday, a scheme for the organisation of the volunteer medical staff was prepared, which will be presented for consideration to a general meeting of volunteer medical officers, the date of which has not yet been fixed. In consequence of the absence from town of so many volunteer surgeons, it was thought expedient to defer the day of meeting until some time next month. A deputation will probably afterwards wait upon Mr. Cardwell, to request that some organisation of the volunteer medical staff be carried out; and, at the same time, to present the scheme as finally agreed upon by the volunteer medical officers.

UNIVERSITY OF LONDON.—First B.Sc. and Preliminary M.B. conjointly.—Chemistry.

Second Class.

Hetley, Henry (Prel. Sci.), Guy's Hospital
Carpenter, Philip Herbert (First B.Sc. and Prel. Sci.), University College and Royal School of Mines

Third Class.

Palmer, F. John Morton (Prel. Sci.), Guy's Hospital } equal
White, Ernest William (Prel. Sci.), King's College }
Crétin, Eugene (Prel. Sci.), St. Bartholomew's Hospital } equal
Rogers, Thomas King (Prel. Sci.), University College }
Groves, H. Joseph Firth (Prel. Sci.), Guy's Hospital }

Zoology.

First Class.

Keetley, Charles Robert (Prel. Sci.), St. Bartholomew's Hospital
Hetley, Henry (Prel. Sci.), Guy's Hospital
Batterbury, George Henry, (Prel. Sci.), King's College

Second Class.

Wackerbarth, Edward (Prel. Sci.), University College

Third Class.

Vines, Sydney Howard (Prel. Sci.), Guy's Hospital
Lamb, William Henry (Prel. Sci.), Guy's Hospital

Experimental Physics.

Second Class.

Lowe, John Landor (First B.Sc.), King's College

Botany.

First Class.

Maclean, Thomas Edwin (Prel. Sci.—Exhibition), University College
Vines, Sydney Howard (Prel. Sci.), Guy's Hospital

Third Class.

Batterbury, George Henry (Prel. Sci.), King's College

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, September 1st, 1870.

Parker, Alfred Henry, 36, Queen's Road, Dalston
Warner, Francis, 15, Highbury Crescent
Walton, Walter George, 112, Westbourne Grove

The following gentleman passed on September 8th.

Smart, David, Cranbrook, Kent

MEDICAL VACANCIES.

THE following vacancies are announced:—

BILLERICAY UNION, Essex—Medical Officer for the Great Burstead District: applications, 17th; election, 20th; duties, 29th.
BOLTON INFIRMARY & DISPENSARY—House-Surgeon: applications, 22nd.
ENNISKILLEN UNION, co. Fermanagh—Medical Officer for the Lisbellaw Dispensary District: 30th.
HASTINGS UNION, Sussex—Medical Officer for District No. 3.
KELLS UNION, co. Meath—Medical Officer for the Nobber Dispensary District: October 7th.
KIDDERMINSTER INFIRMARY—House-Surgeon: applications, Oct. 5th; election, 12th.
KIRKCALDY, Fifeshire—Medical Officer of Health.
LEICESTER INFIRMARY AND FEVER HOUSE—Physician: applications, 19th; election, 28th.
LETTERKENNY UNION—Medical Officer to the Workhouse: 23rd.
LIMERICK UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Annacotty Dispensary District: 19th.
LIVERPOOL DISPENSARIES—Assistant Resident House-Surgeon: applications, 28th; Medical Board, 29th.
MALMESBURY UNION, Wilts—Medical Officer for District No. 1.
MALMESBURY, Wilts—Certifying Factory Surgeon for District of.
MIDLAND RAILWAY COMPANY—Medical Officer for the Derby District.
MORVEN, Argyleshire—Parochial Medical Officer.
NEATH UNION, Glamorganshire—Medical Officer and Public Vaccinator for the Llangonydd District: applications, 19th; election, 26th.
ST. BARTHOLOMEW'S HOSPITAL, Rochester—Assistant-Surgeon: Oct. 13th.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Medical Officer for Out-Patients: applications, 30th.
SHETLAND—Medical Officer: applications, Oct. 18th.
SOUTHAMPTON DISPENSARY and HUMANE SOCIETY—Acting Medical Officer.
STOURBRIDGE DISPENSARY—Surgeon and Secretary: applications, 26th.
SURREY DISPENSARY, Great Dover Road—House-Surgeon: applications, 26th; Committee, 27th; election, Oct. 6th.
TREDEGAR IRONWORKS, Monmouthshire—Assistant-Surgeon.
UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine: applications, Oct. 1st.
WARRINGTON DISPENSARY—Resident Surgeon; Apothecary: applications, 19th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BUSBY, A. R., Esq., appointed Resident Medical Officer to the Bath Royal United Hospital, *vice* R. Carter, M.D., resigned.
*RAWLINGS, John Adams, L.R.C.P., appointed Medical Officer to the Out-door Patients of the Swansea Hospital.
SECCOMBE, E. H., M.B. Lond., appointed Assistant Medical Superintendent to the Royal India Lunatic Asylum, Ealing.

BIRTHS.

JESSOP.—On September 10th, at Leeds, the wife of *T. R. Jessop, Esq., Surgeon, of a son.
 LORD.—On August 26th, at Crewe, the wife of *Richard Lord, M.D., of a daughter.

MARRIAGES.

*CASSON, J. Hornsey, Esq., Surgeon, of Ashbourne, to Isabel Harriett, youngest daughter of W. H. Goodwin, Esq., of Wywell Grange, Derbyshire, at Wirksworth, on August 24th.
 FURNISS, *Joseph Junius, L.K.Q.C.P.I., of Castle Eden, Durham, to Elizabeth Loughhead, only daughter of the late William KENNEDY, Esq., of Sandymount, co. Dublin, at Dublin, on August 30th.
 *MAPOTHER, Edward Dillon, M.D., Dublin, to Ellen, youngest daughter of the late John TOBIN, Esq., M.P. for Halifax, Nova Scotia, at Halifax, on Sept. 7th.
 *SARGENT, Henry Edwin, M.D., of Lewannick, Launceston, to Anna Maria, only daughter of Thomas PEARCE, Esq., Surgeon, Holsworthy, North Devon, on September 6th.
 WOOD, Thomas Outterson, L.R.C.P., of Dunston Lodge Asylum, near Newcastle-upon-Tyne, to Caroline Augusta Charlotte, youngest daughter of the late Edward POTTER, Esq., of Cramlington House, Tynemouth, on September 9th.

NITRO-GLYCERINE.—An explosion of nitro-glycerine occurred near Greenock, on Monday last, which has resulted up to Wednesday in the death of six persons. Several others were much injured.

THE foundation stone of Lytham Cottage Hospital was laid on Friday in last week. The entire cost of the building is to be defrayed by Colonel Clifton.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
 WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
 THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M.
 Mr. B. T. Lowne, M.R.C.S., "On so-called Spontaneous Generation."

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

MEDICAL REFORM.—A member of the Medical Council writes to us:—"What a host of Medical Bills there will be for next Session. I fear they will all come to grief. But as I don't think I shall stay in the Council much longer, I am disposed to watch the sport as an outsider."

THE LATE MR. W. J. CLEMENT, M.P.—A correspondent writes as follows respecting our late worthy associate. "There are some points which I think deserving of notice. He was the first surgeon in Great Britain who opened the ascending colon for intestinal obstruction. (The case was successful.) Although never connected with a public hospital, he obtained the largest consulting practice in Shropshire, especially as an operating surgeon. He was the first medical man elected Member of Parliament who continued to practise his profession; and he often said that he particularly valued the honour, as a compliment paid to the whole profession, in the choice falling on one of its working members. He was thoroughly imbued with a love of the profession to which he belonged. He always zealously upheld its dignity and its rights. His purse was never shut to his poorer medical brethren; and now that he is gone, there are few persons who have had the pleasure of meeting him in society, or in consultation by the bedside, who will not feel that they have lost a kind friend for ever."

NOTICE.—It is requested that all Letters, etc., intended for the Editor or the Publisher of the BRITISH MEDICAL JOURNAL be addressed solely to the Office, 37, Great Queen Street, London, W.C.

UNREGISTERED PRACTITIONERS.

SIR,—Will you kindly inform me how I can ascertain for a positive fact whether a gentleman holds a diploma or not. A person, whose name, as far as I can find, appears in no medical register, is now practising in partnership (so I presume, from the two names appearing on a brass plate as Drs. so and so Surgeons, etc.), with a qualified practitioner; and, in the event of his holding no qualification, the means at my disposal to expose and prevent him from practising. A reply through the JOURNAL will much oblige.
 I am, etc.,
 Bakewell, September 8th, 1870.

PHILIP S. FENTEM.

* * * The only course which we can suggest is to summon the person alluded to before the magistrates, for using a title implying that he is registered under the Medical Act or recognised by law as a medical practitioner. He would then have to prove that he is registered or entitled to be so; and, if not, would probably be amenable to the penalties mentioned in Clause 40 of the Medical Act. But, as previous experience has shown, the attempt to bring home a charge of illegal practice in such a case is, as the law now stands, attended with great risk of failure.

THE MEETING OF THE ASSOCIATION, 1870.—A photograph published by Messrs. W. and D. Downey of Newcastle-upon-Tyne, of the "British Medical Association, 1870," is one of the most satisfactory photographic records on a large scale which we have seen. It gives accurately, agreeably, and naturally, a portrait-group of nearly a hundred members assembled in the open air in front of the Prudhoe Convalescent Home. Among the portraits immediately recognisable are those of Dr. Charlton, Dr. Chadwick, Mr. Husband of York, Dr. Falconer, Dr. Sibson, Dr. Waters of Chester, Dr. Beatty of Dublin, Dr. Paget of Cambridge, Mr. Watkin Williams, Dr. Embleton of Newcastle, Mr. Wood of Shrewsbury, Dr. Hayden of Dublin, Dr. Robert Barnes, Dr. Protheroe Smith, Dr. Graily Hewitt, Dr. Aveling of Rochester, Mr. Heckstall Smith, Mr. Southam of Manchester, Dr. W. Roberts of Manchester, and very many other prominent and familiar members. The portraits are excellent, and the general effect of the group is unusually pleasing and natural.

INTRODUCTORY ADDRESSES.—A Member of the University of Edinburgh writes to us:—"I was glad to read 'Honoured in the breach.' We have now no general introductory at the University. Each professor gives his own, with the utmost freedom as to topics. I give an outline of the plan of study and of subjects, ending with advice as to keeping the brains clear from drinks and exhaustion, etc."

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

DISGRACEFUL PARSIMONY.

SIR,—In an Union, for which I have sometimes done deputy work for one of the medical officers, extra medical fees used to be paid for all fractures, etc., in the Workhouse. Lately, it has been decided that the medical officer is not entitled to receive any extra fee for any such extra work in the House.

A short time ago, a man broke his collar-bone. He applied to the relieving officer for an order to be attended to by the medical officer of the parish in which he resided and where the accident happened, and he was told that he could not have it set there, but must go to the Workhouse (a distance of about eight miles), as it would cost the parish £1 to have it done at home. Finding that his efforts to get relief at home were in vain, he at last got an order for "the House," where he arrived, and had the surgeon to see him, on the fourth day after the accident. The bone was almost through the skin; and the present result is a standing disgrace to the system which could allow a man to suffer the pain of an unset bone for such an unnecessary time, and to leave him with a permanent deformity, and all to save a paltry fee. Comment is unnecessary.
 I am, etc.,
 September 1870.

INDIGNATION.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, August 15th; The New York Medical Gazette, August 27th; The Parochial Critic, Sept. 15th; The New York Medical Record, Sept. 1st; The Boston Medical and Surgical Journal, Sept. 1st; The Madras Mail, July 4th; The Shield, Sept. 10th; The Birmingham Daily Post; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Herbert M. Morgan, Lichfield; Letts, Son, and Co., London; Mr. W. G. Kemp, Wellington, New Zealand; Mr. D. Davies, Bristol; Mr. T. Charters White, London; Dr. Littleton, Plymouth; Dr. Andrew Clark, London; W. A. R., Carlisle; Dr. L. O. Fox, Broughton; Dr. Sargent; Launceston; Mr. Gamgee, Birmingham; E. H.; Mr. E. H. Seccombe, Ealing; Messrs. Davies and Co., London; Mr. R. Craven, Southport; Mr. J. T. Hester, Hastings; Mr. J. Carter, Cambridge; Mr. W. M. Whistler, London; Dr. Oppert, London; Mr. J. Bruce, London; M.R.C.S.; Dr. E. Andrew, Shrewsbury; Dr. Kelly, Taunton; Dr. Potter, London; Dr. George Brown, London; Mr. E. Balshaw, Tring; Dr. Christie, Ealing; Mr. Jessop, Leeds; Mr. A. R. Busby, Bath; Dr. Spedding, Holywood; Dr. J. Ford Anderson, London; Dr. Bree, Colchester; Dr. Wood, Dunston Lodge; Dr. A. White, Malvern; Dr. R. St. J. Mayne, Dublin; M.D.; Dr. Johnston, Dublin; Mr. E. L. Hussey, Oxford; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. G. W. Balfour, Edinburgh; Mr. J. Parker Martin, Cork; Mr. J. W. Hulke, London; Dr. James Russell, Birmingham; Dr. George Johnson, London; Mr. Jonathan Hutchinson, London; Mr. Wheelhouse, Leeds; Mr. H. Greenway, Plymouth; Dr. J. C. Brown, Edinburgh; The Honorary Secretary of the Quekett Microscopical Club; Dr. Bäumer, Frankfurt-on-the-Main; Dr. Christie, Ealing; Mr. F. J. Wilson, London; M.R.C.S.; Mr. T. Watkin Williams, Birmingham; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Mr. T. Clarke, Weston-super-Mare; Mr. Hopkins, Bath; Dr. Stokes, Dublin; etc.

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NOTES

ON THE EPIDEMIC OF RELAPSING FEVER IN LIVERPOOL.

By ROBERT GEE, M.D., M.R.C.P.,

Physician to the Liverpool Fever Hospital, etc.

As the epidemic of relapsing fever gained ground, and it was found impossible to provide accommodation in the Fever Hospital and other isolated departments of the workhouse for the increasing number of cases, a Special Committee of the Select Vestry was nominated to make further hospital provision, and to take this matter under its special charge. Its admirable arrangements shall be detailed in a future paper. My object in referring to the appointment, based as it was on the satisfactory results of the labours of a similar Committee during the cholera epidemic of 1866, is to record the valuable services which the Committee has rendered at the present juncture, and to urge the desirableness of such a Board—a special Board—being constituted in other localities when visited by epidemic disease.

This Committee, together with the members of the Workhouse Committee, held a special meeting on August 31st, for conference with the district medical officers of the town, to ascertain their views as to the propriety of treating patients in their own homes, as the hospital accommodation was becoming exhausted. Provision had already been made for nearly eight hundred patients; but there were seven hundred and thirty-one in the wards on that day, and the admissions were daily increasing in number. The Committee, moreover, was anxious to obtain information as to the location and spread of the disease in the several districts, in order to form an estimate as to the probability of a further increase, and that further hospital accommodation might be provided, if thought desirable.

The information furnished by the medical officers was of considerable value. It was ascertained that the disease appeared in the first instance in one of the most densely populated parts of the town, in a district inhabited by the lowest class of labourers, where the streets and courts are foul and ill-ventilated. The area of which Dr. De Zouche is the district medical officer is notorious as being the chief seat of epidemic disease, typhus being rarely absent from its precincts. Dr. De Zouche stated that he had observed cases of relapsing fever in the early part of the year, and had seen one case, if not more, at the latter end of last year. He recommended the early separation of the sick, and uniformly advised the patients to go into hospital. He invariably found that the disease spread to the adjoining houses when the patients refused to go, and was satisfied that it was highly contagious. During the previous four weeks, his numbers were about stationary, but still maintained the highest point.

Dr. Paterson, in whose district the largest number of cases had occurred, composed as it is of the same class of streets and residents as the former, but covering a larger area, corroborated Dr. De Zouche's views as to the contagious nature of the fever. He found that, when a case occurred in a house, it spread through the family; and, as the houses are generally inhabited by two or more families, they in their turn became also affected. He strongly advised the early removal of patients.

Drs. Anderson and Fisher referred to a steady increase in their districts, and particularly in inhabited cellars.

Dr. Prytherch stated that there was a considerable increase in his district; that the disease did not spread from one centre, but appeared in several parts simultaneously.

Dr. Garthside, whose district is situated in the most elevated part of the town, embracing but few densely populated streets, had not had as many cases as the other gentlemen. He was convinced that the disease spread from centres, but thought it was the result of atmospheric influences, and not direct contagion. He did not deny the contagious character of the fever.

Dr. Sinclair spoke strongly on the importance of the early removal of patients, with the view of stamping out the disease.

Dr. Finegan believed that the disease was propagated by contagion, but favoured by the filthy condition of the people. He did not recommend an increase of hospital accommodation, as he thought patients might be isolated in their own dwellings, and be properly attended to there.

Dr. Robertson, who has charge of the temporary hospital in Ashfield Street, in addition to a district of the town, stated that in every case but one, out of eighty-seven investigated by him, he could trace the disease as having been communicated by others. He strongly recommended isolation.

Drs. Caldwell and Lowndes concurred with their colleagues in regard

to the contagiousness of the fever. They stated that their districts were not exhausted, though dotted throughout with cases. They had several unhealthy streets in which the disease had not yet appeared.

The obvious conclusions to be drawn from the statements of these gentlemen were:

1. That relapsing fever is highly contagious.
2. That the epidemic was confined to persons who reside in close dwellings in thickly populated localities, and who are regardless of personal cleanliness.
3. That the districts were not as yet exhausted, as portions of each had not been visited.
4. That, with one exception, the medical officers advised the early removal of patients to hospital.

The Committee, at the termination of the interview, decided by a large majority in favour of erecting another shed, capable of holding sixty cases, in near proximity to the Kirkdale temporary hospital.

It is worthy of notice, that no reference was made by the district medical officers to *destitution* as a remote or proximate cause of the disease. It is also singular, when the contagious character of the disease is considered, that it had not extended to the better classes. It was not met with in the private practice of these gentlemen, residing as they do in different parts of the town, who consequently are a fair representation of medical practice in general.

A NEW SOURCE OF LEAD-POISONING.

By GEORGE JOHNSON, M.D.,

Physician to King's College Hospital; Professor of Medicine in King's College, London; etc.

EDWARD BAILEY, aged 23, was admitted under my care on the 16th July with symptoms of poisoning by lead. He had constipation, with severe pains in the abdomen; the muscles of his forearms, especially the extensors, were flabby, weak, and tremulous; there was a very distinct blue line at the margin of the gums.

It appeared from the history of the case obtained for me by my clinical clerk, Mr. Richmond, that Bailey had suffered from these symptoms occasionally during the last two years; that he had twice before been in the hospital during that period; each time he had obtained relief; but the symptoms had returned soon after his leaving the hospital and resuming work. The symptoms were obviously due to the presence of lead. The question then arose, What is the source of the lead? The patient is a portmanteau-maker, living now in Clare Market; but he has changed his residence more than once during the last two years. He drinks New River water from a leaden cistern; but so do many thousands who have no symptoms of lead-poisoning. I questioned him very closely as to the materials with which he works at his trade. He uses no paint, and is not aware that lead is contained in any of his working materials; but in the course of my examination, I learned that he works much with a black glazed cloth, which he calls "overland-cloth". This is used for making portmanteaus and covers, and it occurred to me as probable that this might contain lead. The patient gave me some pieces of this fabric, which my colleague, Dr. Miller, was good enough to examine for lead. I give the result in his own words.

"Three or four square inches of the glazed cloth were immersed in a porcelain crucible; a considerable quantity of a greyish-white ash was thus obtained. It was treated with nitric acid, which dissolved it pretty completely with a brisk effervescence. Lead was found in the filtered solution by the following tests. 1. A white sulphate on the addition of dilute sulphuric acid; 2. A yellow precipitate of chromate on the addition of potassic chromate; 3. A yellow iodide in silky scales on the addition of potassic iodide. The reaction in each case was well marked. The ash contained also a good deal of chalk."

Here, then, we have traced the lead to its source. The man works at his own home, and he confesses that he often takes his meals without previously washing his hands. It is probable, therefore, that in cutting the cloth he would get his hands covered with a lead-contaminated dust, and that some of this might be swallowed with his food. He says, too, that he has been in the habit of using the cuttings and remnants of the cloth as fuel for melting his glue, etc. Thus it is probable that some volatilised lead might enter the system through the lungs.

Having pointed out to the man the source of his sufferings, I advised him in future, while working this poisonous fabric, to wash his hands carefully before taking his food, and not to burn the cloth where he would be exposed to its noxious fumes and dust.

I have headed this communication "A New Source of Lead-Poisoning". To me at any rate it is new; and I have thought it right to advertise the fact that portmanteau-makers who work this glazed "overland-cloth" incur the risk of being poisoned by lead.

THIRTY-EIGHTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in NEWCASTLE, August 9th, 10th, 11th, and 12th, 1870.

SECTION A.—MEDICINE.

Functional Hemiplegia in Child-bearing Women. By T. CLIFFORD ALLBUTT, M.A., M.D., Leeds.—This disorder presented, in Dr. Allbutt's opinion, so uniform a clinical group of symptoms, it was so alarming to the patient and her friends, and was nevertheless so certainly curable by appropriate means, that he urged the recognition of the affection in our text-books. The affection was nearly always seen on the left side; there was a sense of weight and numbness, especially affecting the arm, and there was often neuralgia, apparently associated with the inframammary neuralgia of such persons. The bowels were always disordered, generally confined, and the appetite and digestion were depressed. Dr. Allbutt related several cases of this disorder, in one of which central nervous disease had been diagnosed: it was nevertheless quite cured. He entered into the question of the pathology of the cases, and also into the question of treatment, which required much care and discrimination, but was mainly tonic.

Notes of a case of Biliary Fistula. By G. H. PHILIPSON, M.A., M.D.—The patient, a woman aged 34, was in the Newcastle Infirmary, under his care. The fistulous opening was situated at the umbilicus, and had existed for ten months. Eight gall-stones, of about the size of small hazel-nuts, had been extracted from the sinus. It was considered that the ductus communis choledochus was still pervious; and that in all probability, in consequence of gall-stones having become impacted in the biliary passages, the gall-bladder had become widely distended, and, from consequent inflammation, adherent to the abdominal wall, which subsequently ulcerated. In contrast, the chief points of a case of fistula of the right pleura, in a boy aged 17, also in the Newcastle Infirmary, under the care of Dr. Philipson, were given.—In reply to a question from the President, Dr. Philipson said that the only aperient medicine which he gave when the increased flow of bile came on, was castor-oil in repeated doses.

The Beneficial Effects of Combining Tonics with Aperients in Obstinate Constipation. By the Rev. DAVID BELL, M.D., Goole.—The author said that, during the time when he was in practice as a physician, he had met with many cases of irregular and slow action of the bowels with prolonged constipation. In these cases, ordinary aperients or purgatives, if taken in sufficient quantity to act, generally overacted and caused depression, and also appeared to leave the bowels weakened. He had therefore tried various combinations, and had come to the conclusion that the best formula was the following: \mathcal{R} Aloes socotrinæ, extracti hyoscyami, āā gr. xij; quinae disulphatis gr. vj; ferri sulphatis gr. iv. To be well mixed, and divided into twelve pills. One of these pills should be taken in the afternoon, between four and six o'clock; it will produce on the next day, between ten and twelve, relief from the bowels without any pain. Dr. Bell had found these pills to produce uniformly good results, without inconvenience.

Syphilis in Physicians' Practice. By C. R. DRYSDALE, M.D.—The object of the paper was to point out that many cases of disease of internal organs, coming under the physician's care, were due to syphilis, and might often be treated successfully with iodide of potassium. In conclusion, Dr. Drysdale pointed out the necessity for the study of syphilis on the part of physicians as well as of surgeons.

The Case of a Man who had a Vesicular Eruption on the Abdomen, which Discharged at times great Quantities of a Chylous Fluid. By WILLIAM ROBERTS, M.D., Manchester.—The patient was a clogger, aged 45. Two and a half years previously he suffered for six months from a succession of abscesses in various parts of the body. One of these was situated in the hypogastric region, and about the site of this—after it had healed—there arose an eruption of vesicles which gradually extended over nearly the whole of the lower half of the skin of the abdomen. These vesicles at first contained a serous fluid, but afterwards this assumed a perfectly milky appearance. Some of the vesicles were as large as peas; others as small as pins' heads. Sometimes the eruption was quite dry for days and weeks; but some half a dozen of the largest vesicles often discharged immense quantities of milky fluid. This fluid coagulated spontaneously; it contained albumen and finely divided fat; also cells resembling the pale blood-corpuscles. This eruption remained—sometimes dry and sometimes discharging—without

much change for a period of two years. No local appliance or internal remedy availed anything. The patient finally became tuberculous and died. The skin of the abdomen was removed after death, and it was found that the disease was situated in the cutis vera and the subjacent connective tissue; the altered part appeared to consist of a net-work of short channels, or lacunæ lined with spheroidal gland-cells. These communicated with each other and with their vesicular expansions on the surface. This man passed chylous urine on two occasions; but no anatomical change could be discovered in the urinary passages. The lymphatic glands in the groin and the lymphatic vessels were unaffected, and the lacteal system had no connection whatever with the eruption. Reference was made to the cases of Dr. Buchanan and Dr. Carter, and the bearing of the case on the pathology of chylous urine pointed out.

SECTION B.—SURGERY.

Case of Femoral Aneurism Cured by Rapid Pressure. By JOHN RUSSELL, M.R.C.S.—The patient, Matthew Powell, aged 38, was a puddler and furnace-man. A swelling was first noticed in the right groin after a fall against a pig of iron twenty years ago. No inconvenience was, however, felt till a year before admission into the Infirmary in May 1870, when, after a strain, the swelling increased and became painful. Pulsation was first noticed seven months before his admission. The swelling extended upwards to Poupart's ligament, and five or six inches below; its size was about that of a clenched fist. After two days' rest in the recumbent posture, digital pressure was made on the external iliac artery, and was kept up by the resident staff of the Newcastle Infirmary (eight in number) in turns of twenty minutes each, for twenty-four hours. The temperature of both limbs fell somewhat; the tumour became slightly harder, but the pulsation was unchanged. The patient complained of much pain during the compression, and took two grains of opium and two and a half grains of morphia. On May 31st, at 10.45 a.m., a common horse-shoe tourniquet was applied over the left common iliac artery, the patient being deeply under the influence of chloroform. There was difficulty in applying the compression in consequence of the slipping of the instrument; but the horse-shoe tourniquet was found to answer better than others. At 3.15 p.m., the tourniquet was relaxed; pulsation was much less, and the tumour was harder. At 5 p.m. it was again relaxed, and ether-spray was applied. At 6 p.m. the pulsation was less; distal pressure was now applied in addition. At 7.30 p.m., in consequence of the patient's breathing being difficult, the tourniquet was relaxed. The pulsation was almost imperceptible. At 7.55, pressure was altogether removed; pulsation ceased entirely in a few minutes, and the tumour felt quite solid. The patient was kept throughout under the influence of chloroform, which he bore very well; thirty-five drachms in all were used. Enemata of beef-tea and brandy were given frequently. After this, up to June 16th, there was sometimes slight pulsation, and the tumour felt harder and smaller than before the application of pressure. On June 16th, chloroform was given, and pressure was made over the common iliac artery by means of Lister's abdominal tourniquet, for five hours, during which it was relaxed twice. There was still occasional pulsation up to June 24th, when it ceased altogether, and had not recurred on July 10th, when the patient was discharged. Mr. Russell said the great object of the rapid pressure treatment was, that there should be a cure outright and at once. If the treatment had to be prolonged for an hour or a day, the portion of the clot which might have formed in the tumour might occasionally be carried out and do great mischief. As Newcastle was the birthplace of the rapid pressure treatment, he thought it only fair to say what was believed there. It was originated by Dr. William Murray, whose case was successful; two cases had been successfully treated by Dr. Heath, and the case he had reported was the fourth in Newcastle; but there were several other scattered cases. He thought that cure took place almost instantaneously, and that it was owing to the rapid coagulation of the blood in the sac. He recommended the plan of letting in fresh blood, which might coagulate more readily. There was another very important thing in the case, and that was, that the man was under chloroform ten hours. In some cases of aneurism, the tumour had disappeared very rapidly.

The CHAIRMAN (Mr. H. Power) said the members were much obliged to Mr. Russell for his paper: such cases were not quite so uncommon as Mr. Russell seemed to think. He had seen two cases treated in London by rapid pressure; one case succeeded, and the other failed. It was an important recommendation that they should allow a little fresh blood to pass into the sac and coagulate; and Mr. Russell's explanation, that the coagulation was sudden, was a correct one.—Mr. LAWSON TAIT (Wakefield) was surprised that the writer of the paper should have expressed as something unusual the treatment of aneurism by rapid pressure. He thought that his case was not one of treatment by

rapid pressure. He had in the last few months treated four cases by this pressure, and in the cases cured the result was obtained in four hours. He did not think Newcastle was entitled to claim the cure of aneurism by rapid pressure as one of its merits; if any school could claim that merit, it was Dublin. The treatment which had been adopted in this case was open to very serious criticism. There was an instrument which had originated in the Dublin School for these cases. He had tried it in seven cases, and in not one single instance had it failed him. It gave no inconvenience whatever. No man could keep up digital compression perfectly for more than five or six minutes. He agreed that the rapid coagulation of the contents of the sac was essential to perfect cure.—Mr. RUSSELL said that he still claimed for Newcastle the absolute commencement of the rapid pressure treatment under chloroform, as distinguished from the slow intermittent treatment pursued by the Dublin surgeons. He believed this was a typical case of treatment by rapid pressure. He had not heard of the instrument mentioned by Mr. Tait, or he would have given it a trial.—Mr. GREGSON (Sheriff of Newcastle) had no hesitation in saying, from what he had heard and what he had seen in practice, that the rapid pressure treatment was very efficacious. Many years ago, a celebrated surgeon in Munich applied gradual pressure, and he was successful. If they tried gradual pressure, whether by the fingers or anything else, the results would be perfectly satisfactory. He had had a case of very considerable hæmorrhage after amputating a limb, and he found that a little pressure of this kind saved him the trouble of opening the limb.

Successful Ligature of the Superficial Femoral Artery on Lister's Plan. By C. J. GIBB, M.D.—R. T., aged 35, was admitted into the Newcastle Infirmary on December 17th, 1869, with popliteal aneurism of four months' duration. The limb was enveloped in cotton-wool and bandaged, placed on an inclined splint, and allowed to rest for a few days. Curtis's and Signoroni's tourniquets were then continuously applied, alternated occasionally with a nineteen pounds' weight of lead. As this treatment caused great pain, and increased the swelling and redness of the leg, without benefiting the tumour, it was discontinued after two days' trial. Continuous digital pressure was then carried out for twenty-four hours, with the effect of destroying the pulsation of the tumour and of hardening it; increasing the size of the leg, however, and making it very painful and inflamed. For two days, the aneurism became a little harder and smaller, and lost pulsation; after which, this gradually regained pulsation, and appeared worse than on admission. A fortnight after admission, the superficial femoral artery was tied with carbolised catgut; the ends were cut off close, and the wound closed according to Lister's plan, the slight roll of bandage above the plaister being also kept saturated with carbolised oil. The tumour ceased to pulsate, solidified, became less, and progressed in the usual favourable way. On the eighth day, the wound was found to be united by the first intention, the superficial skin cut alone discharging a slight ichor for a fortnight afterwards. He was now able to leave his bed; when, on the fifth week after the operation, another patient with erysipelas being in the ward, he was seized with rigors, followed by phlegmonous erysipelas of the limb, ending in death seven weeks after the operation. The *post mortem* examination was made by Dr. Philipson, who found all the viscera perfectly healthy; there were no pyæmic deposits in any part, and the external iliac artery and vein were open and healthy. The soft parts in the thigh were carefully dissected by Dr. Black. A large knot of hardened lymph surrounded the wound and the adjacent ligatured part of the artery; no trace of the catgut ligature could be found, although the artery at that part remained with its coats perfect, and narrow and compressed. The usual clots in the artery above and below, and in the aneurism, were also present.

The CHAIRMAN had seen many cases of amputation where the artery had been tied with catgut; but he thought there must have been some oversight in this case as to not being able to find the ligature. He thought that catgut could hardly be absorbed in the course of six or seven weeks; but at the same time it might be possible.—Mr. GOWANS (South Shields) said that Mr. Lister tied an artery in a horse with a ligature of catgut; and, on the horse being killed nine weeks afterwards, he found the ligature absorbed.—Mr. LAWSON TAIT did not think that experiments on the lower animals were any guide as to the human subject. He had not found a case of catgut disappearing in the human subject. There was no reason why it should not disappear, but he was not aware of a case in which it had disappeared. When Mr. Lister brought out the carbolic acid treatment, it was in a crude form; he had since brought it from paste down to oil, and from oil up to lac-plaster, and through other stages. He (Mr. Tait) had made diligent trials of the carbolic acid treatment, and had met with disappointment until he came to the lac-plaster treatment; and he could substantiate the published statement of Mr. Lister on the matter, and also of Mr. Bickersteth. Altogether, the lac-plaster treatment was one of the

greatest advances which had ever been made in surgery.—Mr. F. JORDAN (Birmingham) could scarcely agree that the ligature of the femoral artery belonged to the past age. In both the General and the Queen's Hospitals at Birmingham, there were several cases in which pressure had been tried in the most careful manner, and had been repeated after failure on the first occasion. In several cases it had been absolutely intolerable. There were cases in which ligature was necessary.—Mr. SPENCER WATSON (London) said that in this case there seemed to be very little irritation of any kind going on in the wound; and, the ligature being cut off short, the aneurism would very rapidly become smaller. He had seen many cases treated under Mr. Lister's plan, and he was much impressed with the very great success of his treatment.—Mr. TAIT asked in what manner pressure was applied in Mr. Jordan's cases.—Mr. JORDAN said it was applied in several ways—by digital pressure and other means. He thought every surgeon had found pressure necessary; but they must not speak too lightly of the ligature, which might succeed in cases where pressure failed.—Mr. WHEELHOUSE (Leeds) was one of those who did not consider that any one plan was applicable to all cases. There was one case in Leeds where the application of the instrument mentioned by Mr. Tait had answered; but there were other cases where this pressure could not answer, and they had applied the ligature. In one case where he had applied the instrument for pressure, in about twenty minutes or half-an-hour the house-surgeon was called to the man, and he found him in a profound collapse. The compressor was removed, and after the removal the man regained his normal condition. A week or ten days afterwards, he (Mr. Wheelhouse) applied a ligature on the femoral artery. There was no difficulty, and everything appeared to be perfect; but in the night, gangrene set in in the foot and spread, and on the following day the man died.—Mr. RUSSELL said that Mr. Wheelhouse had explained to him that the patient was not under chloroform during the time of the compression; and he (Mr. Russell) argued that it was necessary for the patient to be under chloroform during the time of the pressure to enable him to bear the pain. Had Mr. Jordan put his patients under chloroform?—Mr. JORDAN: I had not.—Mr. RUSSELL: We consider that these are cases which do not bear on our practice.—Mr. JORDAN said that Mr. Russell's patient was under chloroform ten hours; and it required great courage on the part of a surgeon to keep a patient a very long time under chloroform.—The CHAIRMAN said that, in regard to the application of digital pressure, in the cases which he had seen (he had had very few under his care) there had been a considerable difference in the amount of intelligence of the students who had been in attendance on the patients. One student could keep the artery closed with much less pressure than other students used. Some might use a great amount of pressure, and subject the patient to inconvenience.

Epileptiform Convulsions of Sixteen Years' Duration from Parietal Depression: Trephining: Recovery. By ANTHONY BELL, M.R.C.S., Newcastle.—The patient, a young lady aged 24, was first seen by Mr. Bell on June 1st, 1869. At the age of seven she fell down stairs; her head coming into contact with the angle of a chair, a depression of the cranium over the right parietal eminence was produced. From this time she had never been a day free from pain at the seat of injury; she had also suffered from epileptiform convulsions, headache, vertigo, loss of memory, and other head-symptoms. There was a depression about the size of a half-crown over the parietal eminence, pressure over which caused some pain. There was cedema of the face, especially on the right side; her countenance was dull and heavy; she was unable to count to five, or to remember her own name or that of the commonest articles. During two months, she was treated by blistering, bromide of potassium, etc.; the fits, however, went on increasing in intensity and frequency. On August 1st, Mr. Bell applied the trephine (the patient being under the influence of chloroform), and removed a piece of bone of the size of a shilling, at the most depressed part. The dura mater was somewhat congested, bulging, and without pulsation. It was opened with the point of a bistoury; and about an ounce of clear serum was driven out by the pressure of the brain as the organ regained its position. The patient went on well, losing the pain and the fits, recovering her memory, and improving in health and general appearance. At the time of relating the case (a year after the operation) she had been quite free from pains in the head and from fits, was strong and vigorous, and her memory was tolerably good. In commenting on the case, Mr. Bell said that the conditions which might be met with inside the cranium in such a case were, softening of the brain, suppuration or cystic abscess, thickening of the dura mater from strumous or tubercular deposit, or effusion. For reasons which he detailed, the existence of either of the three former conditions was very improbable; and there remained only the diagnosis of effusion of serum, which proved to be correct, except that, instead of being between the dura mater and bone, as Mr. Bell expected, it was within the dura mater.

Traumatic Ophthalmitis. By W. SPENCER WATSON, F.R.C.S.—Mr. Watson related two cases. In the first, there was general ophthalmitis following iridodesis. The inflammation was arrested by iridectomy; permanent impairment of sight and chronic congestion of the affected eye remaining. There was impending sympathetic irritation of the fellow eye. In the second case, suppurative ophthalmitis was treated by excision of a portion of the cornea at its lower margin, with a good result.

The Exhausting Needle-Trocar a Means for the Diagnosis and Treatment of Tumours and Effusions. By PROTHEROE SMITH, M.D.—The author reverted to his former exhibition in 1867 and subsequent years of his needle-trocar on a small scale, in order to introduce the description of a much larger and more complete instrument which he now exhibited. The instrument consists of a large receiver which, when exhausted of air, is connected with a fine exploring needle-trocar by means of an elastic tube, a portion of which, near the needle, is of glass. The tube and receiver are each closed with stopcocks. To use the apparatus, the receiver is well exhausted and the needle introduced into the tumour, the tube is attached, and, on the taps being turned on, the fluid rapidly flows into the receiver, passing through the glass portion of the tube, by which its character can be easily detected. By means of this instrument, a cyst can be emptied without the least admission of air; and, without removing the trocar, fluid may be injected. There is scarcely a portion of the body, however delicate, that cannot be traversed with these fine needles with no risk of subsequent mischief.

The CHAIRMAN (Dr. Heath, Newcastle) said that he himself used a similar instrument, which he got from an instrument-maker in Paris. It drew with an India-rubber ball and not a syringe. The instrument also had a glass tube to show the character of the fluid that came out. He used it in tapping the knee-joint, and in opening abscesses, where he wished no air to enter.—Dr. PROTHEROE SMITH said he showed the instrument to the successor of the instrument-maker in Paris mentioned by Dr. Heath. The French instrument was the same as his own.—Dr. CUMING (Belfast) said that the instrument was one of very great value in regard to tapping the chest.

Treatment of Hemorrhoids. By DANIEL MACLEAN, M.D., Glasgow.—The paper advocated a new method of treatment of hæmorrhoidal tumours. The treatment was founded on the pathological fact that all these tumours are composed of a sac and fluid contents; and that the proper method of treatment is to empty the sac of its contents, and enable the vessel to resume its primary condition, and its walls to acquire the tone which they had lost from the pressure of the blood. This was proposed to be done by a process of treatment analogous to the taxis, and explained in the paper.

The CHAIRMAN thought the treatment which had been spoken of was one which was quite novel to him at least. He would like to ask whether Dr. Maclean would employ the plan in the treatment of piles when inflamed.—Dr. MACLEAN would not, if they had gone into a state of suppuration. There was very seldom pure inflammation in piles, the same as inflammation in other parts. Generally, the pain was very severe, causing much constitutional disturbance; but he believed that the pain arose from the irritation and disturbance.—Mr. J. R. HUMPHREYS (Shrewsbury) said that the remedy seemed likely to be very useful, particularly in the early stages; and he could well understand that the remedy would be followed by very satisfactory results. But, unfortunately, the attention of surgeons was not called to piles in the earliest stage; and in the majority of cases they found the piles painful, hard, and sometimes black; and he concluded that the treatment in usual circumstances would be to incise the pile and turn out the clot.—Dr. MACLEAN said that, in the condition in which it was necessary to turn out the clot, he believed that his plan of treatment would succeed.

SECTION D.—MIDWIFERY.

On the Advantages to be derived from Curving the Handles of Midwifery Forceps. By J. H. AVELING, M.D.—Dr. Aveling proposed to curve the handles of midwifery forceps backwards throughout their whole length, by which means the blades were more easily introduced and the instrument locked. But the great advantage of this modification, he said, was the increased traction power which it gave, the handles being at an angle to the line of traction instead of parallel to it. The handles were also more out of the way of the patient's legs when the head of the child passed forward over the perinæum.

Dr. KEILLER (Edinburgh) had brought with him a specimen of forceps which he had been using for a short time. Instead of using the forceps in the ordinary way, he had used it with the curve backwards, and found that he could extract the head in that way without the danger of ripping up the perinæum. The instrument usually sank well into

the side of the head; and, if it were guarded in coming out, it would be found that it did not project beyond the head. By using the instrument in that way he had found it more easy of appliance. He had never had it curved in the same way as Dr. Aveling's instrument; but he went a little further than it. Instead of curving it backward in the opposite direction from the blade, he had curved it backward in the same direction. He had found it exceedingly useful in short forceps cases. The traction in this instrument was very great. He quite agreed with Dr. Aveling that his instrument would acquire great traction. It was of importance to get the occiput well down; and he had got an instrument to go up against the occiput and press it down on the blade while applying traction, without danger of injuring the perinæum. The instrument was an ordinary one, converted into the shape in which they saw it. If he were to make a new instrument, he would not make the curves so great. The one he showed was an ordinary short forceps, with the curves bent back and the handles slightly elongated.—Dr. CANDLISH (Alnwick) asked the advantage of applying the concavity to the hollow of the sacrum?—Dr. KEILLER: The advantage of position. It is not required to place the patient so much across the bed.—Dr. CANDLISH, in cases where it was not objectionable to move the patient across the bed, was in the habit of using Sir J. Y. Simpson's forceps, with the convexity to the hollow of the sacrum. He did not use short forceps.—Dr. REEVES (Carlisle) had had much experience in the use of the forceps. He had tried a great number of forceps, and he gave up all forceps with catches in them. They were apt to catch the soft parts, and to slip over the head. He used straight forceps, and with them a practitioner who was thoroughly cautious would not rupture the perinæum. Such a thing as a rupture of the perinæum he had scarcely known. People might think they could improve on the old forceps; but he did not think they could improve on Assalini's forceps, which might be used without locking them.—Dr. CANDLISH had been in the habit of using Simpson's forceps for a long time, and had used them without locking them. There were two objections that might be made to them in hypercriticism; they are apt to slip over when tied, and the knots at the junction of the handles with the blade are very apt, if not cautiously used, to irritate the soft parts. It only demands a little time and care in order to obviate these faults.—Dr. GIBSON (Newcastle) said that in the hands of Dr. Keiller or Dr. Aveling, operations with these instruments would be comparatively easy; but in order that a pair of forceps should be thoroughly useful, in order that it should pass into the world as an instrument for recognition, it should be an instrument that admitted of very simple application and very effective use. In the hands of Dr. Keiller or Dr. Aveling, probably almost any instrument would do for a very large number of cases; but in order that an instrument should be thoroughly effective, it required certain peculiarities which were scarcely found in Dr. Aveling's forceps, and which could not possibly be got in Dr. Keiller's. A pair of forceps should be capable of application in almost all ordinary cases; and for this purpose it must recognise the pelvic curve. In the matter of traction, he could easily understand that Dr. Aveling's instrument would do its work well. Ordinary forceps were not introduced with difficulty in moderately skilful hands; the patient did not require to be shifted here and there in order that the forceps might be applied; and if they subtracted that usefulness claimed as the peculiar advantage of those shown, it would be found that other forceps had every recommendation that these had. He was perfectly sure that the forceps before the Section would not be available for general use.—The PRESIDENT said that what struck him in Dr. Aveling's forceps, which he had the opportunity of using once, was that the handles were rather awkward, and did not give any great increase in power. The great objection that he had to this forceps was, it was too short. If they had a forceps long enough to bring down the head through the whole course of the canal, it would answer well enough. It certainly was not convenient to multiply instruments. He had been called in hurriedly at different places, and obliged to use whatever instruments came in his way.—Dr. AVELING was sorry the discussion had not been confined to the curve of the handles. What he wished was, to gather the opinions of the members as to the useful effect of curving the handles of the forceps backwards. He simply maintained that by doing so there was greater ease of application and increased traction power.—Dr. GIBSON asked if the additional force was directed to the handle?—Dr. AVELING said that it was more likely to be applied in the direction required by curving the handles backwards.

Recent Improvements in the Pelvic Band. By PROTHEROE SMITH, M.D.—Dr. Smith shortly enumerated the advantages of the pelvic band in labour, pointing out the muscular deficiency which it was designed to obviate, viz., that of the voluntary abdominal muscles in relation to their conjoined action with the involuntary uterine, mentioning that in his practice it had fully equalled, if not surpassed, his expectations.

Glancing at its construction, he detailed the improvements which he had lately made, viz., fastening the steel bands to the pubic pad by screws, thereby rendering them less liable to slip; the mechanism whereby the bands are disengaged from the sacral pad is made more effective, and instead of the belts being buckled to the transverse springs it is divided into three portions, and is easily tightened by three separate straps running through rollers at the end of the springs and on the belt, thereby obtaining three distinct directions of force, viz., depressing, constricting, and uplifting; in this sense corresponding with the natural action of the abdominal muscles, capable of being employed either separately or conjointly. To produce greater comfort to the patient, a caoutchouc cushion is placed underneath the sacro-lumbar springs and also beneath the lower portion of the abdominal belt.

Dr. KEILLER thought that, although the band might be useful in certain cases, there being the objection first of the cost, and again that few women were accustomed to such an apparatus, it would not admit of general use. In Scotland, midwifery practitioners were doing away with bandages altogether. Sir James Simpson would not allow the use of bandages at all.—The PRESIDENT said one could not help admiring an application of this kind, which brought into the system of labour an external force which was sometimes wanted. They knew that in Germany some accoucheurs had been advocating the plan of squeezing the child out by external pressure. He had adopted that plan with most marvellous success, and under difficult circumstances. He had more than once gone to a distance to a case of labour, not knowing for what he was required, and, being without instruments, had in one or two cases to squeeze out the child. He could, therefore, well understand that in cases of that kind they would have in the pelvic band a most valuable assistant. To women of lax fibre and peculiar organisation the band would be of immense assistance; but they could hardly go to any extent in assisting uterine labour. They must remember that the action of some women was so great that it rather required restraint.—Dr. SMITH said, in answer to Dr. Keiller, that he had never known, except in one instance, a woman to refuse the assistance of the pelvic band. The observations of Dr. Barnes were very valuable, as showing that the band was sometimes capable of giving relief.

Polypus Uteri. By C. GIBSON, M.D., Newcastle-upon-Tyne.—Dr. Gibson shewed several simple cellular polypi which had been removed from the uterus by operation. The patient, aged about 52 years, and much emaciated, had suffered for a long but indefinite period from hæmorrhage and from pain referred to the uterus. This organ was anteverted and very large; the os uteri was carried back nearly to the sacral surface, a little way beneath the promontory, while the fundus reached to the symphysis pubis, the whole uterus being placed high up in the pelvis and above its brim; the urinary bladder followed the vagina backwards, so as to be pressed into the angle formed by its anterior wall and the horizontal uterus. The vaginal portion of the cervix uteri was very small, being constituted by a narrow ring of somewhat firm tissue. The uterus was quite fixed in its position, and filled by polypous tumours, which became moulded into forms by the pressure of the masses against each other. These growths were removed from time to time—two or three at a sitting—up to the number of fifteen. The organ, however, was never completely emptied. The points whence the tumours were detached could not be satisfactorily cauterised; and perhaps from this circumstance, but probably from an inherent power in the mucous membrane itself, the final history of the case shewed that some of the tumours were reproductions of former growths. Agents were employed to deodorise and to remove accumulating foetid discharges; to check and to prevent hæmorrhage; and to produce, if possible, a more healthy condition of the mucous membrane of the uterus itself. The treatment was unsuccessful. The patient died. No *post mortem* examination could be obtained.

SECTION E.—PUBLIC MEDICINE.

On Intemperance, in its Medical and Social Aspects. By J. W. EASTWOOD, M.D., Darlington.—The object of this paper was to consider drunkenness in its relation to insanity, crime, and pauperism. The various forms of insanity produced by intemperance were: acute mania, delirium tremens, dipsomania, dementia, chronic alcoholism, and general paralysis of the insane. The author objected to the use of the term chronic alcoholism for a distinct affection, and considered that all the results produced by alcoholics should be included under acute and chronic alcoholism. The greatest difficulty is with the cases called dipsomania, as the law at present makes no provision for them; and the Habitual Drunkards Bill of Mr. Dalrymple, withdrawn for the present, is the first public recognition of the connection between intemperance, insanity, and crime. This is not the only connection to be observed, for drunken parents have frequently drunken, criminal, in-

sane, or idiotic children, and eventually the family dies out. Where drunkenness is voluntary, it is a crime; where it is involuntary, it is insanity. Though serious crime has not increased of late years, drunkenness and pauperism have continued to increase, and much of the latter is due to the former. The total consumption of intoxicating drinks has considerably increased. Ale and beer are still the chief drinks of the people of these islands, as with our Saxon and Danish ancestors. The Germano-Scandinavian nations are a beer-loving race. The medical profession has kept aloof from temperance societies in this country. This is owing partly to indifference, and partly to the extreme views of those who profess total abstinence. Medical men have not examined the question in a scientific spirit; and they prescribe alcoholics thoughtlessly, thus encouraging false views. The total abstinence movement has failed to check drunkenness, and its doctrines are utopian. It has not created a sound public opinion. It should be more generally known that drunkenness is allied to crime on the one hand, and to insanity on the other. Some alteration of the licensing laws has become necessary, although the permissive Bill of Sir Wilfred Lawson has been defeated. Medical men should support Mr. Dalrymple's Bill, that dipsomaniacs and habitual drunkards may be treated as persons of unsound mind. The whole subject of intemperance deserves being inquired into by a committee, and examined in a calm scientific manner. The medical profession ought to do something to stem the torrent of drunkenness, acting as leaders in a general movement for the regeneration of our country from its greatest curse.

Dr. REID (Newbiggin) said that thanks were due to Dr. Eastwood for calling attention to the subject of intemperance, especially as it existed amongst the working classes. It had been his opinion for more than thirty years that the only cure for inveterate drunkards—no matter whether they belonged to the class of "constant tipplers" or of "periodical drunkards"—was restraint and confinement. There was a class of drunkards that could be sober for six months at a time, and then would relapse into drunkenness for a period of six weeks. He had had drunkards under his care who were willing on their own accord to enter a lunatic asylum; but such was the state of the law that they were prevented from admittance. There was no doubt whatever that a vast amount of pauperism was due to intemperance; and the working classes as well as the higher classes were much addicted to it. It was not very long ago that a gentleman came to him—a confirmed drunkard—and complained that there was no place to which he could voluntarily go as an inmate, in order to be cured of periodical drunkenness. He saw no reason why intemperance should be under any less restraint than theft and robbery. It was a great pity that there was no place of refuge to which drunkards could resort when the passion seized them.—Dr. C. B. TAYLOR (Nottingham) could not agree with Dr. Eastwood that drunkenness had been on the increase during the past few years: among the upper classes, drunkenness had considerably decreased. He did not think that voluntary institutions would meet the case; and he thought it unjust that the law of compulsion should only be applied to the poorer classes. Why not apply it to the upper classes as well?—Dr. A. P. STEWART (London) thought that there was much need of some measure by which habitual drunkards could be reclaimed: it would greatly diminish the sufferings of wives and children, and relieve the community of an enormous burden. He felt sure, from thirty years' experience, and after considerable observation, that the greater part of pauperism was caused by excessive drinking. It was true that habits of drinking amongst the better classes had greatly diminished during the last forty years. He recollected, as a common occurrence at a dinner-party some years ago, that gentlemen went to the drawing-room scarcely able to speak, making fools of themselves in a shameful way before ladies. That, now, had completely disappeared at such gatherings. At the present time there were enormous facilities for promoting drinking: gin-palaces and public-houses were to be found on every hand. He felt convinced—and he believed it was generally admitted—that, if there were not so many public-houses, a great amount of drunkenness and misery would be avoided. If a person had to go and seek strong drink, he would be much less likely to indulge in it than when he met a gin-palace or public-house at every turn. He believed that, from a continued indulgence in strong drink, the mind became deranged, and different phases of insanity were caused. It was not in the lower classes only that prohibitory measures were essential. The extent to which the vice went privately was still very great in the upper classes. It was not common to see ladies and gentlemen in a state of intoxication in public; yet in private the habit was very extensive indeed. He had known many melancholy cases; and he had been consulted by heart-broken relations to see what could be done to restrain a member of the family from indulging in that which was destroying his or her character and health; and not only was his or her own happiness at stake, but the happiness of all connections. He was of

opinion that temporary resorts for periodical drunkards or habitual drunkards were of little or no utility. He had known instances where a person had been placed in one of these establishments in order to reform. After he had been there some time, a certain amount of improvement took place, and he thought he would be able to manage himself; but, on coming out before the cure was effected, he had fallen into his old habits. He believed that several drunkards' reformatories had been compelled to shut up in consequence of lack of encouragement. Some power was required to make drunkards submit to restraint, or to send them to a reformatory; and unless this were done he did not think there would be much improvement. It was most desirable that the subject should be discussed, and that the minds of the people should be directed to the question; and they should all try to contribute their quota towards elucidation of the matter.—The CHAIRMAN (Dr. Morgan) agreed with what Dr. Stewart had said as to the very general way in which drunkenness is carried on. He had seen a great deal of the poor in the lowest slums of Manchester, and he had been told by the district-nurses in that city that, however poor the parents and the family, they were in the habit on a Saturday night and on Sundays of spending their money and wages in drink. He also agreed with Dr. Stewart's statement with respect to the immense amount of "tippling" carried on in the upper classes of the people. He himself had many a time been astounded to hear his patients—young ladies—say that it was a usual custom for them to drink brandy, especially before going to bed. It was advisable to have as few public-houses as possible. In Scotland, in the small island of Lewis, belonging to one proprietor, with something like 2000 inhabitants, there were only two public-houses, and these were at a distance from the dwellings; and it was a noteworthy fact that the inhabitants enjoyed the most robust health. Whether this was from the absence of drink or not he could not say; there might be other causes at work. He thought that many drunkards ought to be exceedingly thankful to have the opportunity of being kept away for a time from temptation. He thought it was their duty to assist, as far as lay in their power, in shutting up the public-houses.—Dr. REID proposed a vote of thanks to Dr. Eastwood, which was seconded by Mr. JOHNSON (Lancaster), and unanimously agreed to.—Dr. EASTWOOD returned thanks, and took the opportunity of replying to Dr. Taylor's remark that drink was not on the increase. He could only say that magistrates, judges, and statistics, all went to show that drinking habits during the last few years had been rapidly increasing. He supported this statement by giving some statistical returns on the subject.—It was ultimately resolved to appoint a Committee to consider the subject of intemperance, and to report to the British Medical Association.

The Forcible Introspection of Women by Governments. By C. B. TAYLOR, M.D., Nottingham.—Dr. Taylor first questioned the right of Governments to forcibly introspect women. He admitted the propriety of State interference in times of pestilence, or of great public danger, when people could not help themselves and suffered from no fault of their own. But even in such cases three essentials were needed: first, the necessity for interference must be undoubted; secondly, the law must be limited to the shortest possible period; and, above all, it must be impartially applied. He pointed out that the living a loose life and catching disease is a voluntary act, for which no citizen has any right to call on the State to protect him. He asserted that there is no adequate necessity in this country for any legislation on the subject of venereal diseases, because these diseases have for years prior to the enactment of the Contagious Diseases Acts been declining in extent and virulence, both in the army and out of it; also, because there is only one disease of venereal origin—true syphilis—that affects the constitution, or can on any pretence be considered a matter of State concern; because true syphilis constitutes but a small fractional proportion of the mass of cases which are classed under this head; because, in the language of Mr. Simon, "in an enormous majority of cases this worst form of venereal disease is not of more than transient importance to the person attacked"; because, also, the milder forms of venereal maladies (nine-tenths at least), though unimportant in themselves, are still great checks upon incontinence, and consequently the means of saving thousands from the more serious malady. Dr. Taylor dwelt on the injustice of the Acts as applied to women only. There was abundant evidence to show that men (notably soldiers and sailors) are equal if not greater sinners. He questioned the wisdom of State interference with prostitution as a trade, with a view to supply men with a good article for their money. There could be no trade without a buyer, and if the trade were immoral, buyer and seller were equally guilty; nor could Government virtually or actually license it without being implicated in its immorality. What would be said if a deputation of prostitutes waited on Parliament to demand despotic and indecent laws against men only, on the ground that they communicated disease to them and their children? He quoted Parliamentary evidence to show that modest women were grossly inter-

fered with by the police employed to enforce the Act; also that milliners, dressmakers, servant girls, and labourers' wives were classed as prostitutes for the purposes of the Act; and that one Parliamentary witness had declared that "the Act would never succeed if it were confined solely to those who got their living by prostitution." He then proceeded to state that the means proposed are certain to fail in the attainment of their objects: 1. because absolutely healthy women, by mediate contagion, communicate infection; 2. because the examinations cannot be carried out in a large proportion of cases; 3. because it is impossible to distinguish from venereal diseases numerous affections to which most respectable women are subject; 4. because the women examined are exposed to great danger of infection from contaminated instruments; 5. because the examination and restriction of one sex only, for a disease common to and propagated by both sexes, is not only a cruel injustice, but a delusion and a snare; 6. because the system calls into existence and fosters a numerous class of clandestine prostitutes, who, from fear of detection, conceal their diseases and become permanent sources of infection; 7. because true syphilis can so rarely be detected in the female that the examinations, by giving a false security, offer a direct inducement to thousands (especially married men) to contract disease. Dr. Taylor referred to the statistical tables of MM. Puche and Fournier, according to which, "of 873 men who contracted syphilis in Paris, 625 owed this worst form of infection to intercourse with registered and regularly inspected women." He also called attention to the following statement from M. Lecour, the head of the Parisian police employed in carrying out these regulations: "We may fairly consider the 9,500 patients who are treated in hospitals as representing certainly not more than one-fifth of the venereal patients of Paris." Dr. Taylor contrasted this statement with the fact that in London, with a population double that of Paris, we find from the careful investigations of Mr. Wagstaffe, and the Report of the Medical Officer of the Privy Council, that among a poor population of a million and a half there are only 455 cases of syphilis, a proportion which, as stated by Mr. Simon, cannot be held so large as to call for exceptional action on the part of the Government. Dr. Taylor quoted statistics compiled by Dr. Balfour, to show that venereal diseases in the army were declining at a rapid and satisfactory rate previously to the passing of the Act, and that since the Act was put in force the decline had in no case been so great as formerly, but that at certain stations where the Act had been rigidly enforced there had even been an increase of disease. Similar evidence came from Holland, Bengal, and Bombay, to prove that State interference for the prevention of venereal maladies made matters worse instead of better. Finally, Dr. Taylor stated that other means, entirely unobjectionable, Christian, merciful, and in full accord with the free spirit of English institutions, would suffice to check the spread of disease; in proof of which he gave evidence to show that women are most eager to apply to hospitals for treatment when diseased; and he asserted that there was no need whatever for police spies, disgusting periodical examinations of healthy women, or the infamous degradation of the sex generally, such as is too surely accomplished by the present law.

Mr. C. JOHNSON (Lancaster) objected to the opinion expressed in the paper, that it was a punishment for women to be subjected to inspection when labouring under an attack of syphilis. He agreed with Dr. Taylor when he said that it was highly objectionable to intrust the inspection of women to the police; and he knew that the less the profession had to do with them the better it would be for themselves.—Mr. ANTHONY BELL (Newcastle) was of opinion that, if the Contagious Diseases Act were carried into effect throughout the civilised world, there would be quite a different state of things from that on the Continent. He saw the other day—he believed in a paper by Dr. Drysdale in a medical periodical—that there were about 40,000 clandestine prostitutes in Paris, and only about 4000 prostitutes that paraded the streets. In Newcastle, they could not pass through the streets at night without being molested at every corner by prostitutes. He was in Paris about a week a short time previously, and was out late at night, and during his stay there he was never spoken to by any prostitute. They could not go to an hospital now without finding syphilis in women and children; and how did this occur? He had been told by these unfortunate women that their husbands had become intoxicated, and, coming through the streets at night, had been stopped by prostitutes, and then contracted the disease. If the prostitutes were removed from the streets, he thought that a grand result would be achieved.—Dr. REID said that Dr. Taylor had at least been consistent in the contents of his exhaustive paper. On the whole, he thought it was a question on which medical men would rather be silent. At the same time he thought it would have been much better if some ladies had been attending to their duties, rather than going on the platform and making such nasty statements as had recently been heard of.—The CHAIRMAN had had a considerable amount of experience in the treatment of venereal disease in the hospi-

tals at Salford and Manchester, and his experience simply went directly opposite to these statements made by Dr. Taylor. For those who made a trade of their bodies, he thought that it would be justifiable to adopt some sort of legislation. He agreed with Dr. Bell that prostitutes who paraded the streets at night should be suppressed.—Dr. A. P. STEWART agreed with Dr. Taylor, that if the principle of legislation were applied to introspection of women, it would be necessary to apply legislative interference to many other matters. He thought it a perilous principle that they should ask the Legislature to interfere in order to shield persons from the results of their own immorality, committed with a free will and in a state of sound mind. The diversity in the statement of facts on each side almost defied any one to come to a decision. There ought to be some general investigation made by the Government throughout the whole kingdom, in order that the real extent of the disease might be known. He had not yet been convinced that any method could be adopted to put a stop to the disease. It was not by legislation that the evil would be checked; it was by putting some respect into the heart and conscience of men—some respect for morality.—Mr. LEONARD ARMSTRONG (South Shields) said that prostitutes, in his experience, delayed seeking relief until they were unable to carry on their trade from disease, and when all the injury had been committed.—Dr. ACLAND (Oxford) was much struck with the contradictory statements of facts made on the question by the advocates on each side, and adverted to the large number of unfortunate women reclaimed in Plymouth solely by philanthropic means, and without the questionable aid of legislation.—Dr. TAYLOR replied to several of the objections raised.

On Certain Circumstances which Contribute to Impede the Progress of Scientific Medicine and Surgery. By D. CAMPBELL BLACK, M.D., Glasgow. After some preliminary remarks, the author divided his subject into: (1) obstacles that refer to the practitioner of medicine; (2) obstacles that refer to the public; and (3) obstacles that refer to the peculiarity of the pursuit. Under the first head, he charged medical specialism with exaggeration, repetition, and too hasty deduction. He contended that the object of furthering individual ends, and a desire on the part of the specialist to be something different from ordinary practitioners, resulted in a multiplication of names for given diseases, and a multiplication of remedial agents, and illustrated his position by a reference to dermatology, gynaecology, and ophthalmology. He disputed that a knowledge of the different nomenclatures, and a knowledge of an interminable number of remedies, was an advancement of scientific knowledge. What was wanted was, the elucidation of principles to which to reconcile treatment. He referred to the reprehensible practice of what he termed precipitate diagnosis, contending that personal vanity and a desire for reputation were the incentives. Under the second section of his subject, Dr. Black referred to the fickleness on the part of the public in medical matters, and deplored the pampering to this taste by medical practitioners. Characteristic examples of what he termed the therapeutical paroxysm, were too numerous to be illustrated in detail. He instanced, in passing, a sulphur *penchant* which fascinated Scotland a year or two ago, and the all but universal application, in more recent times, of carbolic acid and bromide of potassium. It was the misfortune, he held, in the case of hobbies, that there was generally a grain of truth in them; for this, with other circumstances, rendered it difficult to disprove the universal applicability. He admitted that new remedies and new applications must be introduced, in order to the perfection or improvement of the old; but held that their introduction should not be empirical. He descanted on the dangers of enthusiasm, and portrayed the "medical man of the period" as an unworthy "institution." In referring to public credulity, he held that it was not as a rule the most illiterate who enthusiastically supported quackery, but, unfortunately, men who flattered themselves that they knew a great deal. Under the latter section, he referred to the sources of fallacy against which the scientific practitioner must guard, confessing that they were somewhat difficult to eliminate. He held that the natural history of diseases ought to be more studied. He had no faith in the truth of what is dignified as experience. He held that the grand aim of therapeutics was to "separate accidental conjunctions from established connections, and to ascertain those laws of the human frame which rest on the universal experience of mankind." Towards such a consummation, he contended that medical men must be actuated by higher motives than purely those of gain, and that, notwithstanding the temptations that quackery holds out, honesty is in the long run the best policy, and that, as it has been in all time, it will continue to be in all time, that virtue is its own reward.

On the Transmission of the Infection of Fevers by Means of Fluids. By MICHAEL W. TAYLOR, M.D., Penrith.—It was stated that the two principal modes by which the contagium of epidemics was propagated were,—1st. Transmission by the air, by inhalation; and, 2nd. Transmission by fluids, by swallowing. It was for too long the opinion that

the first mode was the only and exclusive medium by which epidemic diseases were diffused. It was shewn how it came to be acknowledged that water might become the vehicle for the transmission of cholera and enteric fever, by contamination with the excreta, in which the most virulent part of the specific poison, by which contagion takes effect, resides. The argument was, if it be conceded that water is capable of receiving and maintaining in activity these morbid germs, and, when drunk, of inciting disease in the healthy, why may not articles of food and drink, exposed to a like contamination, be the occasional cause of the propagation of these diseases? This was stated to be possibly more frequently the case than was generally admitted. It might occur from soiling of the hands; by the direct admixture of the exuviae or discharges with liquids or vessels used by the patient; by the drying up of those discharges, and the dissemination of their poisonous elements, either in the form of dust, already existing in the apartment, acting as carriers of the infective germs, which, when absorbed by liquids, by adhering to clothes or by currents of air, might be carried to distant quarters. The origin of an epidemic of typhoid was traced, in which it was believed that milk from a public dairy, which had been exposed to the reception of fever-virus, acted as the vehicle for the transmission of the disease to several households. It was farther argued, that other diseases capable of throwing off poisonous exuviae from the skin and fauces, might be propagated sometimes in a similar manner. The exudations of diphtheria, and the dry epidermic dust from the desquamative plates of scarlatina, by being drawn into the mouth and mingling with the saliva, might infect by contact, or, by becoming attached to solid or liquid ingest, spread the disease by these means from place to place. Observations on a series of cases which occurred in 1867, at the commencement of an epidemic of scarlatina, were related. The investigation of the circumstances which attended this group of seizures, led very strongly to the inference, that a polluted milk-supply carried the virus of scarlatina and infected those who drank.

Poor-law Dispensaries and Medical Relief. By JOSEPH ROGERS, M.D., London.—Dr. Rogers commenced by stating that the system of medical relief in Ireland was, up to 1851, very unsatisfactory. The relief was partly voluntary, and partly supported by a grant from the Grand Jury; and it utterly broke down under the pressure of the Irish famine and fever. In 1851, an Act was passed by which a medical commissioner and medical inspectors were added to the Poor-law Commissioners for Ireland; and provision was made for the division of each Union into Dispensary Districts. The Act came into force in October 1852; and in less than thirteen months afterwards the whole of Ireland had been distributed into dispensary districts. At the present time there are 719 dispensary districts, with 1,045 stations; some of the districts having several stations. There are 793 dispensary medical officers and 38 apothecaries; and, in the urban districts, 116 midwives. The expenditure for the year ending September 29th, 1869, amounted to £123,718; viz., medicines and medical appliances, £22,492; stipends of medical officers and apothecaries, £77,721; other expenses, £23,500. In addition, about £10,000 might be put down for cost of drugs and stipends of the workhouse medical officers. The dispensaries are managed by committees consisting of certain of the guardians of the Union, of ratepayers of the district appointed by the guardians, and of the resident magistrates, who are members *ex officio*. Each member of the committee, and the relieving officer, can give a ticket for medical attendance. A red ticket directs attendance at the patient's house; a white one requires the patient to attend at the dispensary. During the year lately ended, 775,327 cases of disease were attended, of which 195,797 were visited at their own homes. The dispensary medical officers are the registrars and vaccinators in their respective districts. Out of 144,318 births registered in 1867, 125,741 children were vaccinated at the dispensary stations. Every week there is made a return of the gross number of cases of disease, and of the number of cases of scarlatina, measles, small-pox, fever, and diarrhoea, attended in each district, as well as of the existence of any specially prevalent disease. The results of the dispensary system were described by Dr. Rogers. During the first year of operation of the Medical Charities Act, the total expenditure on the poor was £937,556. At the end of seven years, it had fallen to £513,048. After that date it slowly rose, but in 1868 was £108,035 less than in 1852. The last report shows a diminution to the extent of £30,000; while the Poor-law expenditure in England increased by £200,000 above that of 1868. The total amount expended last year on medical relief in England amounted to £282,180; this sum included, besides the salaries of the medical officers, the subscriptions of boards of guardians to hospitals, and the expenses of sending patients to fever and other hospitals, and of maintaining them at sea-side hospitals. As to the stipends of medical officers, in 16 Unions they ranged from 8d. to 1s. for each patient; in 239, from 8d. to 3s.; in 348, from 3s. to 7s.; in 51, from 7s. to 16s. In England, the average annual

salary (the medical officer providing drugs) is £49; in Ireland (where he does not supply drugs), £90. Thus England, with a population of 21,700,000, expends £282,000 in medical relief, the gross amount of relief being £7,673,100; Ireland, with a population of 5,798,564, spends £133,000 in medical relief, the gross amount being £799,602. While the expenditure has diminished in Ireland since 1852, in England it has increased from £4,897,685 to £7,673,100. This great difference, Dr. Rogers said, mainly arose from the inefficiency and insufficiency of our arrangements for medical relief. Sixteen years ago, Dr. G. Wallis stated that 72 per cent. of our pauperism was due to sickness. The last Report of the English Poor-law Board showed that, of 1,085,000 paupers, 4 per cent. only were adult males destitute from want of work; and that 30 per cent. of the in-door and 13 per cent. of the out-door paupers—not including the families dependent on them—were on the medical officers' books; and, besides these, there were vast numbers of people disabled by old age or special causes, and of children, many being orphans. To show the results of the two systems, Dr. Rogers gave an analysis of the returns obtained by Mr. W. H. Smith, M.P., exhibiting the differences in the mortality from zymotic diseases. [A summary of the statistics contained in Mr. Smith's return will be found at page 573 of the JOURNAL for June 4th, 1870.] Dr. Rogers further pointed out that the average amount of medical expenditure per head of the population was—in England, 6s. 11½d.; in Scotland, 5s. 7½d.; in Ireland, 2s. 11¼d. In conclusion, he said that the following amendments were required in the English system. 1. All drugs and appliances should be provided by the guardians, and dispensaries should be established throughout England and Wales. 2. The expenditure on medical relief should be assimilated to the Irish standard, the stipends being put on a uniform basis, and, in order to disarm the opposition of guardians, paid wholly from the Consolidated Fund, instead of partially, as at present. 3. A weekly return of all cases of disease, and notably those of a zymotic character, should be made to a central office, on the staff of which there should be a high class Medical Commissioner—such a man, for instance, as Mr. Simon. 4. There should be a rigid inspection of out-door and in-door sick, by competent professional gentlemen. 5. The district medical officers should be deputy health-officers of their respective localities, so that the existence of any unusual amount of sickness or preventable disease could be communicated without delay to the borough or county health-officer; and the reports should be paid for by a fee varying in amount according to the size of the district and the importance of the report. The scale of fees should be determined by the central authority. 6. Such fee should be a charge upon the borough or county rate.

Mr. MANLEY (West Bromwich) considered that the temperature of Ireland conducted materially to the general health of the country. The average temperature was between 50 and 65 degrees; and he presumed that in no other country in Europe was that temperature to be obtained.—Dr. ROGERS, in answer to a question, said that emigration from Ireland had no effect whatever upon diminishing the Poor-law expenditure.—Dr. MANLEY said that all must admit the justice of what had been stated by Dr. Rogers, and that the dispensary system was the most approved way of administering medical relief. He asked Dr. Rogers whether there existed in Ireland a system of appointing medical men irrespectively of competition? He thought that some system ought to be devised whereby the office of Poor-law medical officer ought to be taken out of the province of competition.—Dr. HILL (Belfast) said that in Belfast there was a sanitary inspector, not a medical man, with a staff of assistants; and almost daily one of these assistants would go to the medical officer and ask whether he had any cases of fever. If an affirmative reply were received, a visit was paid to the house where fever existed, and the rooms were thoroughly disinfected. According to Dr. Rogers's statement, the salaries of medical men varied in Ireland from £85 to £120; and this was accounted for by appointments in large towns and small country districts. In country districts there was a small chance of paving the way for a good practice, whereas in a large town every opportunity of getting practice was placed in the way of the Poor-law medical officer.—Dr. RUMSEY (President) thought that the dispensary system prevented both disease and pauperism, and that the statistics given by Dr. Rogers amply illustrated that point. Although the rate of mortality in Ireland was necessarily lower than that of England, it was perfectly clear that the system which prevented disease and pauperism was the dispensary system. The system very strongly showed how advantageous it would be to have a connection between medical relief registration and the registration of sickness. He was glad that the Section had been so unanimous on the merits of Dr. Rogers's paper; and he thought that gentleman was entitled to thanks for his communication.—Dr. ROGERS thanked the Section for the attention they had paid to his observations. It was gratifying to him, after having visited the Association at the request of Dr. Rumsey, to find that he had suc-

ceeded in making such a good impression. He proposed the following resolution: "That, in the view of the efficiency of the Irish dispensary system, as contrasted with the English mode of Poor-law medical relief, it is most desirable that the principles of the system should be adopted in the country as the best means of prevention as regards both disease and pauperism." He further moved "That a Committee of the Association should be appointed for the purpose of considering the subject of medical relief in Great Britain and Ireland, and of communicating with the Poor-law medical Officers' Association."—Dr. RUMSEY thought there could be no objection to the first resolution; and he hoped that suggestions might be thrown out by some of the members of the Association. He approved also of the second resolution. It was very right for the members to sit there and deliberate and come to conclusions; but he liked to see something beyond this, and he would like to see the matter carried into the House of Commons, by which means they might obtain legislative reform. He always maintained that the members of the medical profession had very great power with Parliament if they had a mind to exercise it. The interest of Parliament could be obtained if the members of the profession would only be at the trouble of communicating individually with members of Parliament with whom they were acquainted. He had no doubt that the Legislature would then pass an amended Medical Relief Bill.—Mr. MANLEY was much pleased that the matter had been brought before a Section of the Association, under the Presidency of so able a man as Dr. Rumsey. At the general meeting at Oxford, a resolution was passed that a Committee should be formed to co-operate with the Metropolitan Association; but that Committee never met. He had great pleasure in seconding Dr. Rogers's motion, which was unanimously adopted.

The Climate of Algeria. By J. HENRY BENNET, M.D.—The author brought forward important facts deduced from an exploration of Algeria made in the spring of 1869. Algeria is a kind of Switzerland, extending about 400 miles from east to west, from Tunis to Morocco, and about 120 from north to south, from the Mediterranean to the desert of Sahara. This region is entirely occupied by the mount Atlas, which divide into three ranges, running from east to west, the lesser, the middle, and the greater Atlas, with connecting buttresses and intervening valleys and elevated plains. These mountains, not attaining an elevation of above 7,000 feet, do not reach the line of eternal snow, so there are no glaciers to form large rivers. But they are high enough to precipitate rain and snow in winter from moist air. The constant rarefaction of the atmosphere over the immense desert of Sahara causes, nearly all the year round, a rush of cooler air from the northern quarters—that is, from the Mediterranean and the Atlantic. The atmosphere being thus all but constantly charged with moisture, winter and summer, rain and snow fall in abundance during the six months of winter, and heavy dews fall at night both in winter and summer. The climate of the mountain regions of Algeria is, therefore, rainy and cold in winter. Algeria being on the sea-level, is warm, indeed warmer than the North Mediterranean shores, but moist and rainy. The average rain-fall is thirty-six inches; the average number of rainy days is ninety. The climate of Algiers, being mild and moist, is not suited to those cases of phthisis that require a dry bracing atmosphere, such as is found on the east coast of Spain, and on the Genoese Riviere.

Dr. A. P. STEWART inquired if the rainfall was very frequent in Algeria?—Dr. BENNET replied that rain in the Mediterranean and Algeria assumed the tropical form; it was very heavy for a few hours, and then it disappeared. The fall would approach the extent of one or two inches, and then there was a few days' immunity from rain. He had stated in the paper that there were 78 days of rain in the winter, which gave 175 days clear from rain in that season. The average temperature of Algeria varied much, and there were only two seasons; viz., winter and summer. October and December were warm months, and March was warm; thus the high average of the temperature was accounted for. He believed the average temperature was 64 degrees for the earlier months and 52 for the winter months.—Dr. STEWART asked what provision there was in Algeria for the comfort of patients?—Dr. BENNET said that he considered the comforts of the residents to be very inferior; great difficulty was experienced in getting good meat. There were one or two good hotels in Algeria, but they were soon filled. The first customers that arrived might obtain comfortable quarters; but after that, the comfort of residents was questionable. There were apartments to let in the town; but there was a liability to dysentery and fever of all kinds. Want of accommodation at this spot was attributable to the very small number of people that had visited it hitherto. Out of the town itself there were twenty or thirty good villas, but the rents were very high: in fact, Algeria was like a large French town, and the Frenchmen were notorious for their excellent cooks. The officers of the regiments or companies stationed there

always took good care to avoid bad meat and obtain good provisions. —Dr. STEWART said that Algeria was a climate about which medical men wished to have accurate details. He knew some patients who had been sent there, and who had not derived the slightest benefit from the climate. He thought that Dr. Bennet's paper would serve to guide medical men upon the vexed question of sending patients to that part of the world. The question of the comfort of patients and residents was one of great importance.

The Distribution of Disease in the Northern Counties. By G. W. TOPLEY, F.G.S.—The object of the paper was to illustrate the distribution of the four diseases, or groups of diseases, classed by the Registrar-General as phthisis, diseases of the lungs, cancer, and heart-disease and dropsy, during the ten years 1851-60. The statistics employed were obtained from the supplement to the Twenty-fifth Annual Report of the Registrar-General, which gives the mean annual death-rate from various diseases, calculated to one hundred persons living, for each registration district in England and Wales. The numbers thus obtained were expressed by the author in a series of maps, one for each disease; showing by means of coloured discs the death-rate for males, females, and the mean of the two sexes, in each district of the four counties. The mean rate for all England and for the four northern counties was also shown on each map. The paper was further illustrated by a geological map and a map of the country coloured in contours, showing the true elevation of the land.

Dr. RUMSEY said that, although Mr. Topley was not a member of the medical profession, he had brought forward a paper which would be an honour to any member of the profession, alike for its scientific and its general bearing. He thought that the Section was greatly indebted to Mr. Topley. He could not help thinking, after hearing the paper, how much benefit it would be to the public and the profession if the death-returns could be combined with the return of sickness. Much more could then be known about the distribution of disease, and also about the distribution of fatal diseases. He offered the thanks of the Section to Mr. Topley; and he thought that the paper should be published in the BRITISH MEDICAL JOURNAL, with engraved plates, similar to those with which Mr. Topley had illustrated his subject.—Dr. A. P. STEWART thought that if they transmitted a resolution from the Section, recommending the Editor of the JOURNAL, if possible, to publish the maps, properly coloured, along with the paper supplied by Mr. Topley, it might conduce to its publication in a full form. He proposed a motion to that effect.—Dr. BENNET seconded the proposition, which was unanimously agreed to.

Dr. RUMSEY offered some concluding remarks. He thanked all those who had taken part in the proceedings connected with the Section, for the valuable co-operation which they rendered to him in the chair, and particularly for the very important information they had brought together and disseminated in what was, to his mind, the most weighty Section of the Association; for it was in relation to medicine for the public that they might hope for the future to find their great success. Internal dissensions as to organisation would occur, yet these would be heard nothing of ten or twenty years hence; but the fruits of the papers and the discussions that had occupied that particular Section would be permanent. He again expressed his thanks for the support awarded to him whilst fulfilling the position of Chairman; and he hoped that they might meet on many future occasions in the Public Medicine Section of the British Medical Association. The Section then separated.

[The remarks made by Dr. Stokes in the Public Medicine Section, reported at page 306 of last week's JOURNAL, should have followed the abstract of Dr. Ransome's paper instead of preceding it.]

SECTION F.—PSYCHOLOGY.

THE proceedings were commenced by the PRESIDENT (Dr. Laycock, Edinburgh) reading a paper on "How far can the Relations of the Body and Mind be investigated scientifically and practically?" It was published at p. 218 of the JOURNAL for August 27th.

Dr. SANKEY (Cheltenham) said he had to ask the members of the Section to join with him in returning their most grateful thanks to the President for his admirable address, containing an epitome of a very highly interesting subject, and which must have cost him a great amount of thought and labour. He had paid great attention to it while it was being read, and he looked forward with a great deal of pleasure and satisfaction to its publication. He proposed the thanks of that Section to the President for his address.—Dr. WOOD (London) seconded the proposition, which was carried with acclamation.

Case of Rhythmic Chorea of the Right Arm and Left Leg. By R. H. B. WICKHAM, F.R.C.S.Ed., Edinburgh.—The patient was a man aged 77, who was admitted into the Royal Edinburgh Asylum on July 20th, 1870. Three weeks previously, he had become subject to mental

delusions. He was a hale looking man, rather tall. There was slight drooping of the right side of the face, and the tongue turned to the right for about an inch at the top: the uvula also drooped to the right. The pupils acted equally and hearing was equally good on both sides. The left arm was slightly tremulous. The right arm was always put through a series of rhythmic movements, commencing when the patient began to converse, and ceasing when conversation was over. The movements were sometimes confined to the forearm and hand; but, when he was much interested in the subject of his delusions, this extended to the upper arm. The left leg dragged much in walking. He had difficulty in sitting down and in rising. There was no history of the case; but it was probable that the patient had at some time—not very recent—suffered from paralysis. It seemed as if he had partially lost the command of words to express his ideas, and endeavoured to supplement the defect by the movements.

Epileptic Chorea of the Right Arm. By THOMAS LAYCOCK, M.D.—The President, referring to cases of epileptic patients, observed that the administration of bromide of potassium had been attended with great advantage in checking the disease and causing sleep. In some cases, however, it lowered the temperature and depressed the system injuriously, besides producing an eruption on the face and shoulders. He mentioned the case of a lady who had had this eruption of her skin in consequence of the continued use of bromide of potassium, which otherwise had been exceedingly effective in checking the epilepsy and causing sleep. It was then discontinued, and a general treatment adopted. The eruption disappeared, and strength was restored, while at the same time the good effects remained. He related the following case. J. C., a domestic servant aged 39, was admitted into the Edinburgh Royal Infirmary on May 27th. Her memory was very defective, so that no clear account of her family history could be obtained. Eighteen months before admission, she began, without any known cause, to have fits, the number of which varied from one to three or four in a day. The fits lasted about three minutes; during each fit she was unconscious, and there was a slight convulsive movement of the right hand and arm, with jerking of the head. She came into hospital in consequence of having scalded her feet during one of the fits, and remained in the surgical wards under Dr. Gillespie for five weeks; after which she was transferred to the medical wards. The fits continued to occur, and appeared to consist of clonic spasms of the right arm and hand, which were jerked up and down: the head was also jerked from side to side; and the mouth was opened and shut, but she did not bite her tongue. No other part of the body seemed to be affected. Her general health appeared very good. From May 29th to June 21st, she took valerianate of zinc, but without benefit. Iodide and bromide of potassium were then given in doses of five grains each in infusion of quassia. Under this treatment, the fits diminished; and on July 29th, she was discharged greatly improved—there having been no recurrence of fits since the 13th.

Dr. SANKEY cited a very severe case of epilepsy where bromide of potassium had been administered with good effect, the fits having greatly decreased.—Dr. STANLEY HAYNES (Laverstock, Salisbury) had found bromide of potassium a most valuable agent in the prophylaxis of epilepsy, and had also known it to be a depressing sedative. In one case he was able to prevent epileptic attacks by giving the bromide in half-drachm doses, when he saw, by intense congestion of the patient's head, that fits were imminent; but, if the doses were continued after the congestion had disappeared, the depressing effects of the medicine were very marked, the pulse being slow and weak, and the temperature low.

Syphilitic Insanity. By H. GRAINGER STEWART, M.D., Newcastle-on-Tyne.—Dr. H. G. STEWART read histories of the cases of three patients in the Newcastle Borough Asylum, which presented the following characters in common. 1. They all occurred in subjects who had suffered from syphilis. 2. All the patients had similar delusions: they believed themselves the victims of conspiracy, persecution, and undeserved cruelty. 3. They all had hallucinations of touch, hearing, and sight. 4. They were all suicidal: two of them had made actual attempts on their own lives. 5. They were all dangerous to others when under the influence of their delusions, and were quite unfit to be at large. 6. They were all worst at night; which might point to the syphilitic nature of their disease. 7. They all suffered severely from cephalalgia. 8. Treatment produced but little effect. The disease was probably incurable; but still, by the relief of symptoms, much of the distressing character of the disease might be assuaged.

The PRESIDENT said it would be interesting to have the experience of members as to the points generalised by Dr. Stewart. He mentioned a case of syphilitic insanity somewhat similar to those adduced by Dr. Stewart, and pointed out that the delusions entertained differed according to the education which the insane had received. All small doses

of iodide of potassium were useless in these cases, as a general rule, whatever tissue be affected. The minimum dose in syphilitic insanity should be ten grains, and the maximum thirty grains, three times a day.—Dr. SANKEY (Cheltenham) thought there was not any very distinctive character in the cases cited by Dr. Stewart. He should have called the cases “insanity with syphilis”, rather than “syphilitic insanity”. The fear of danger, according to his experience, existed in every case of acute insanity. He was in the habit of calling the phenomena of such cases “morbid apprehensions”. He could not admit that there was a disease which could be called syphilitic insanity. There might as well be syphilitic broken legs in persons who happened to be suffering from syphilis at the time of a fracture.—Dr. T. S. CLOUSTON (Carlisle) thought a weak point in the cases referred to was, that the connexion between the syphilitic and the mental symptoms was not clearly followed out. He thought it was undoubted that there were morbid states of the brain largely dependent on morbid conditions of the body. They ought to lay hold of those cases, and connect them with the mental states.—Dr. STANLEY HAYNES referred to a case of a man who had remissions of syphilitic insanity without having been exposed to any fresh kind of disease. The remissions were not regular; sometimes a few months, sometimes a year and a half, intervened.—The PRESIDENT thought the discussion had elicited one or two practical points, and trusted it would lead those who were present to better observations of these cases of insanity.

The Use of the Thermometer in the Diagnosis and Treatment of Insanity. By T. S. CLOUSTON, M.D.—As the result of observing the temperature of the body in five hundred and eighty cases of various forms of insanity, very great importance is attached to the use of the thermometer; and it has been established as a regular part of the examination of every case admitted into the Carlisle Asylum, that the morning and evening temperature should be taken and recorded. The unerring accuracy of the instrument, and the feeling that its indications are in no degree dependent on one's sensations or judgment at the time, soon make one trust very greatly to it. Its regular use shows that the temperature of the insane rises from two causes—1, inflammatory affections; 2, disturbances in the action of the central nervous ganglia. It is the second class of causes that should be studied and observed carefully. The difference in the temperature of a patient when quiescent or depressed, and again when he labours under acute excitement, is sometimes as much as 5.8 degrees. The temperature of the body in the insane is higher than in the sane. The most marked characteristic of the temperature of the insane, however, is the rising of the evening temperature, which in the mildest forms of insanity is much higher than in health, and in general paralysis is as much higher than the morning temperature as in health it should be lower. This rising of the evening temperature is found to bear a definite and striking relation to the rate of mortality in the class of the insane among whom it exists, gradually rising as the mortality rises, from mild dementia to general paralysis. Thermometrical observations are not only important as regards classes of the insane, but equally or more so as regards individual cases. As a general rule, the temperature seldom rises above 100 or 101 degrees from functional disturbances in the brain. Such a rise in temperature sometimes precedes an attack of acute excitement, enabling its occurrence to be predicted. Such rises in temperature are not certain in their significance, but are most reliable so far as they go. Thermometrical observations are most valuable as giving indications for treatment. Any drug which has the effect of bringing the temperature in the direction of health may generally be considered to be indicated. In certain cases, opium tends to raise an already abnormally high temperature; while bromide of potassium, alone or in combination with cannabis Indica, will reduce it. One kind of puerperal insanity is associated with chronic inflammation of the uterus. This is shown by the use of the thermometer. A blister over the womb almost certainly abates the maniacal excitement. General paralysis, in its early stages, can often, too, be diagnosed from simple acute mania by the increase in the evening temperature. This instrument is of very great value, too, in making known the existence of the beginning of pneumonia, or pleurisy, or phthisis; or in revealing the presence of injuries in maniacal patients in whom the sensation of pain is blunted. Valuable indications as to the giving of diet, tonics, and stimulants, may be got from the use of the instrument. A high temperature does not at all contraindicate stimulants. On the contrary, a stimulant such as whiskey will be followed in such cases by a fall in temperature of a degree or more in many cases. The whole tendency of the use of such an instrument is to give an approach to definiteness and scientific accuracy to the treatment of insanity.

The PRESIDENT asked if it was not possible to get some guiding principle in the observation of the temperature of the insane. A series of most excellent practical facts had been brought forward, and he

would like to know if it were not possible to develop some principle. Without doubt, the condition of the nervous system had an important influence on the development of the heat of the body. That was very well known in all fevers. That being established, the next question was, how could the condition of the nervous system influence the temperature? It had been elicited in the discussion on a previous paper, that the continued administration of bromide of potassium lowered the temperature. Upon what particular brain-centres did the bromide of potassium act? Was there a centre which regulated the temperature of the body? and, if there were such a centre, what was the condition of that centre when there was an increased temperature or a diminished one? There was no disease in which the question of temperature might not arise, and might not determine the treatment; and, that being so, practical questions rose in every direction. With respect to the difference in the condition of the patient in the morning and at night, he was inclined to think that it was due to the variations of the temperature of the brain itself. Unfortunately, there was no means of ascertaining the temperature of the brain; but still there was the broad general fact which might be established by careful clinical observations, and which might be well established by all keepers of lunatic asylums. A series of careful observations might lead to some very important conclusions—for example, as to the administration or the withholding of opium. If the thermometer could tell exactly what should be done in cases where there was doubt, it would be very valuable. He could not but think that in the paper which had been read there were the germs of some very important practical results; and that, although in the first instance it might only be the generalisation of experience, yet it would find its result in a scientific generalisation.—Dr. S. HAYNES asked Dr. Clouston if he had observed the temperature in epileptics during the fit and during the interval, and with what result.—Dr. CLOUSTON replied, that the temperature was decidedly higher in those who had a great number of fits than in those who had not. The effect of an epileptic fit was generally to depress the temperature for the first two hours, and afterwards to raise it, if the fit were very severe. If the patient slept after an epileptic fit, it appeared to modify this to some extent: the temperature seemed to keep down.—Dr. H. G. STEWART spoke of the value of the thermometer in cases of acute pneumonia, when they could hardly approach the patient, and certainly when they could make no physical diagnosis. If the thermometer could be applied so as to discover any inflammation in the patient, that of itself was a matter of extreme importance. By means of the thermometer he thought that the existence of inflammation might be decided in insane patients who had received injuries. He asked if there was any difference in the temperature just before the patient was going to have the fit and during the fit itself.—Dr. CLOUSTON replied, that he had not had sufficient time to settle the question.—Dr. STEWART asked, with regard to paralytics, whether the temperature on one side was different from that of the other.—A MEMBER mentioned a case where the temperature of the paralysed side was one degree higher than on the other.—Dr. CLOUSTON stated that it was nearly always so, except in cases of very long standing.

The Etiology of General Paresis. By W. H. O. SANKEY, M.D., Cheltenham.—The author was disposed (excluding cases of imperfect development, climacteric decay, and epileptic mania) to class the cases met with in asylums into, 1, ordinary insanity in its various stages; and 2, general paresis. In patients of the first class, there has been a stage of depression of spirits, followed by morbid apprehension, alteration of the moral faculties, illusions, and disorders of intellect: they have also shewn either restlessness and violence, or dulness and stupor; but no form of paresis. In many cases of paresis, before any motor defect is present, there are great garrulity, exuberant spirits, alteration of character, sexual impropriety, etc. Dr. Sankey believed that in ordinary insanity the nutritive processes of the cerebrum are affected through the blood; and that in general paresis there is a direct effect on the nerve-tissue by mental or physical shock acting on the nerve-centres. In ordinary insanity, there is, primarily, distinct disturbance of the digestive functions, and disease of the blood-making organs is found after death: while in general paresis there is no such condition. In cases of ordinary insanity of long standing, he had found decided hypertrophy of the coats of the smaller arteries of the brain; while in general paresis there is no such thickening, but the small arteries are contorted and varicose. He believed that the hypertrophy of the arteries in insanity was to be explained in the manner suggested by Dr. George Johnson in his paper on hypertrophy of the arteries in renal disease: while, in paresis, the nervous plexus of the vessels was paralysed in common with all other parts of the nervous system, and consequently the vessels could not resist the influx of blood, and were thrown into a varicose state.

Dr. GRAINGER STEWART characterised the paper as fitting, and at

the same time containing a large amount of information. Cases of insanity might be divided into two forms, as Dr. Sankey had done; but in the great mass of cases which he separated from general paresis there were also subdivisions which were well worth attention and discrimination. He thought that the little progress made had been to differentiate those forms of insanity which Dr. Sankey included in his second series. There was no doubt that general paresis was a distinct form of disease, and perhaps much more distinct than those other forms to which he had referred. He thought that to generalise the other forms as simply being not general paresis was to stop short in the middle of a most important work.—The PRESIDENT said the question before the members was the question which had been raised on the previous day. They could clearly see the action of what were termed two schools of thought. He did not know that it was an evil that there should be schools of thought upon any subject. The facts remained, and were sometimes reorganised. Ever since he went to Edinburgh, he had endeavoured to teach systematically, and on a scientific basis, the doctrine of the diseases of tissues, as distinguished from diseases of organs. With the doctrine of tissues was introduced the doctrine of diathetic nosology and pathology and therapeutics; and his plan had been to discuss with his class the diathetics—the diseases which affected every organ of the body in which there was the same kind of tissue. He separated the diseases of the nerve-tissues from the disease of the blood-vessels, and the disease of the blood-vessels he separated from those of the blood itself; but he also separated from all these the connective tissue and the membranes which cover the brain. What change took place in the blood-vessels? Was it a sufficient explanation in the case of hereditary insanity, which came on in such a subtle manner that they could hardly ward it off? The explanation given was very ingenious, but it was quite insufficient. The old theory of the enlargement of the heart in cases of dropsy was, that it had to overcome greater pressure caused by the effusion of the serum. But, in the majority of those cases of dropsy, there was an enlargement of the heart before the dropsy. He had lately used large doses of iodide and bromide of potassium in aneurism; and the change was clearly due to the action of the larger dose. He thought that, where the iodide of potassium could be borne in full doses, a very beneficial change might be caused in the blood-vessels of the brain.

Alcoholic Stimulants: Delirium Tremens.—The PRESIDENT introduced the question, “How far are alcoholic stimulants necessary for the treatment of ordinary cases of Delirium Tremens?” At the outset he set forth what really was included in the word; for he found that, practically, there was much difference in the idea of what was included under the term, which was made to comprise cases arising from habitual drunkenness, and cases occurring in total abstainers, who sometimes had an irresistible craving for drink. Alcoholic stimuli were very likely to produce delirium tremens; but our intoxicating drinks contained a good deal more. Some of them contained very little alcohol. Our bitter beers were very little stronger than the lightest French wines. Some beers, however, contained a bitter ingredient. He was in the habit of describing bitters as nervine tonics, not as stomachics; and these bitters acted in a most important degree upon the nervous system. He pointed out that before treating delirium tremens, it was necessary to inquire the history of each patient, the kind of drink which he had taken, and the state of his health. It was only in the case of what we called “the horrors” that alcoholic stimuli should be given. He suggested that good would follow from considering, first, in what particular cases it was necessary to give alcoholic stimuli; and, secondly, in what particular cases they should not be given.—Dr. CUMING (Belfast) said that a very large number of persons would get into “the horrors”, as they were called, but would pass out of them without ever going into delirium tremens at all. That was a matter of familiar observation. With regard to the treatment of delirium tremens, he gave alcohol, not because the patient was suffering from delirium tremens, but sometimes in consequence of the state of the circulation, sometimes in consequence of the coldness of the extremities, sometimes—he was ashamed to say—on the urgency of the patients’ friends; and if he were to make an average of his practice, in two cases out of three he gave alcoholic stimuli. To a patient who drank a quart of whiskey in a day, he would give half a glass every hour. Alcohol was not a thing very foreign to our organisation. It was a liquid which a number of men took with impunity. In considering the etiology of delirium tremens, it was necessary to take into account the element of time. He never saw, nor knew, nor heard of the disease coming on after a few days’ drinking, or after a single day’s drinking. He believed that no man had ever observed that.

An unanimous vote of thanks to the President terminated the business of this Section

INVENTIONS, &c., IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

LEAD-ENCASED BLOCK-TIN PIPES FOR THE PREVENTION OF LEAD-POISONING.

MEDICAL readers will not need to be reminded of the importance of preserving drinking-water from contamination of lead. The production of a lead-encased block-tin pipe—strong, ductile, durable, and cheap as lead, but having none of its sanitary objections—has long been a desideratum. This has been successfully achieved by Haines’s patent. They have even greater power of resisting the expansive action of frozen water when thawing than the ordinary lead pipe. Messrs. James Navon and Co., of 5, Barge Yard, Bucklersbury, London, are the agents for the supply of the block-tin pipes. These pipes are well worthy of the attention of medical officers of health and medical men generally, whether in charge of public institutions, or controlling the arrangements of dwelling-houses.

IRRIGATING APPARATUS.

By HENRY GREENWAY, Esq., Plymouth.

IN the BRITISH MEDICAL JOURNAL, June 18th, there appeared a report on cases treated by irrigation by Mr. Haynes Walton, at St. Mary’s Hospital; and the reporter did me the honour to speak in flattering terms of the irrigating apparatus which I had invented. As there was no attempt to describe it in detail, I trust the present occasion will be regarded as opportune, considering the number of cases now in the military hospitals on the Continent.

The employment of water as an external application in surgery has long proved useful in reducing or preventing inflammation by evaporation, and in the treatment of superficial wounds. But neither the wet compress, nor the “drip” from strands of cotton issuing from the mouth of a bottle will suffice in cases of deep sloughing wounds. To conduct irrigation successfully in such cases, the water must be conveyed to the limb in quantity sufficient to *cleanse*, not merely to moisten; and it must afterwards have a ready way of escape without wetting the bed. Last year, at the suggestion of my friend Mr. Walton, I commenced experiments in devising an efficient irrigator; and in the early part of the present year it was put to the test at St. Mary’s Hospital with the happy results already made known to the profession.

The apparatus consists of a shallow metal tray, six inches wide, and of any required length, in which is placed a perforated drainer, of nearly the same depth and length, but an inch narrower, so as to leave a channel on each side. On this drainer is placed a pad made of reed, for the reception of the limb. The tray is suspended from a one-sided framework, somewhat similar to my “leg-suspender” (but not possessing all its movements) described in the *Lancet*, February 24th, 1866. Outside the bed, at one end, a reservoir of some sort, capable of holding several gallons of water (one and a half cubic feet of water would suffice) is to be placed about three feet above the level of the limb.* Through the side of the reservoir, and a little above the bottom, a tap is fixed. On the inner end of the tap a small filter is screwed from within the reservoir. To the outer end of the tap a long flexible tube (the supply-pipe) is connected for conducting the water to the irrigator.† Irrigation may be carried out on either of the following plans, according to the requirements of the case.

1. *Irrigation by Conduction.*—The limb being placed in position, a small wedge-shaped cistern, six inches long and three inches deep, is hung on the swivel-bar of the suspender. The narrow bottom of this cistern has a row of perforations, half an inch apart, throughout its length. Through each hole is passed a piece of twine, about six inches long, the upper end having a knot to prevent it from slipping through entirely. At one end of the cistern a short metal tube is fixed, to which the lower end of the supply-pipe is connected. The lower ends of the strings being laid on the parts to be irrigated, the tap at the reservoir should be turned to the required extent. The water will then run

* Where several cases in the same ward require irrigation, it would be found convenient to have a service of water laid on, with a branch pipe, instead of a reservoir, for each patient.

† The vulcanized India-rubber tubing should contain a coil of wire to prevent compression. Such tubing is sold at about a shilling a yard, quarter-inch bore.

through the supply-pipe into the perforated cistern, and then through the holes, following the course of the strings. Should the supply to the cistern accidentally exceed the demand, the water will not overflow but will pass off by a waste-pipe into the tray; and should the irrigation be excessive when all the perforations are free, any number of them may be plugged. The smaller the size of the twine employed, the larger will be the streams. The water having done its duty, passes through the reed pad and the drainer into the tray, and thence through a flexible discharge-pipe into a bucket or other vessel placed on the floor at the bedside.

2. *Irrigation by Jets.*—On one side of the tray a piece of very stout sheet-lead, about six inches long and one inch wide, is fastened by a clip so as to stand erect. By means of a nut and screw, it supports horizontally a brass tube, about nine inches long, closed at one end, and having a row of very fine holes along the side facing the limb, for about six inches. On the open end of the tube, the flexible supply-pipe is fixed. By bending or twisting the lead tube-holder, the tube can be set at any angle or inclination, thus gaining by a simple contrivance all the advantages of a complicated piece of machinery. By turning the tap at the reservoir, the water will issue in jets from the side of the tube. The force of the jet will of course depend on the degree to which the tap is turned, and on the height of the reservoir from the bed. Various tubes may be employed, some discharging from the side, others from the end. If the jets are too numerous, a piece of elastic tubing should be drawn over a portion of the metal tube so as to cover some of the holes. To prevent any splashing of the bed-clothes, a waterproof screen encloses the limb and jet-tube.

3. *Irrigation by Injection.*—This is intended for the treatment of deep-seated disease or injury, opening on the surface by a sinus. Having ascertained with a probe the length and direction of the sinus, withdraw it from the wound and pass it into a small flexible tube of sufficient length, having openings in its sides near its closed end, as in a catheter; then introduce the tube into the sinus, and push it with the probe as far as it will go; withdraw the probe from the tube, and connect the open end of the latter to the small end of a brass "union", and fix the supply-pipe on to the large end. The "union" (about two inches long) is attached to a band which encircles the limb like a garter and keeps the tube in the required position. By turning the tap at the reservoir, the water will be conveyed to the extreme seat of the disease, and will thus prevent any purulent discharge accumulating. Various forms of cannulae may be employed. Should the application of the band around the limb prove injurious, the "union" can be fixed in the tube-holder mentioned in the second plan, and the lead be bent down so as nearly to touch the limb. Of these three plans, the first and third will be found the most useful.

When a leg is to be treated, a slide, with a footpiece attached, must be passed over one end of the drainer. When a thigh requires irrigation, the foot-piece must be removed to allow the leg to project beyond the lower end of the tray, and a special mattress be employed, having a long and deep notch in its side for the reception of the tray, as both it and the limb must be kept horizontal to prevent an overflow or a trickling back of the water towards the hip. In irrigating the upper limbs, the reservoir should be placed at a proper elevation at the head of the bed; when the lower limbs, at the foot of the bed.

The duties of the nurse are very simple. She must keep the reservoir supplied with water, which may be medicated with some disinfectant, as carbolic acid, if necessary; see that the tap is not turned on too much; that the flexible tubes are not compressed by any weight resting on them; and that the patient's limb remains in a proper position on the drainer. She must also, as occasion requires, throw away the discharged water which has accumulated in the receptacle on the floor.

I believe that the employment of strings, simply to conduct streams from a cistern, is a novelty. In irrigation, strands of cotton have hitherto been used to produce a flow of water. I have used reed as a pad that the water may pass straight through it, and not spread in it, thereby preventing the lodgment of foul discharges and the skin from becoming sodden, which would occur if an ordinary pad were used. It should be occasionally replaced by a new one. The account to which I have turned lead in the tube-holder is novel, so far as I am aware. By keeping the supply of water outside the bed, it is fresher when it arrives at the limb, and there is less space occupied in the bed; there is also less trouble for the nurse. As regards the temperature of the water, if it be desirable in any case to use it warm, the nurse must feed the reservoir with such, and cover the vessel over with a blanket. Means might be adopted for heating the water in the reservoir.

The irrigating apparatus, which may be seen at St. Mary's Hospital, is inexpensive, apart from the suspender. The latter, however (which should always be unilateral, as an arm could not otherwise be suspended), could be made in a rough manner at a moderate cost.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 24TH, 1870.

CONCERNING ETIQUETTE.

WE have before had occasion to express an opinion which is possibly worth more elaborate statement and discussion. Cases are frequently referred to the editors of medical journals, in which we and they are called upon to decide what are described as questions of medical etiquette. The anonymous character of the decision adds something of mystery, but nothing of value, to the verdict; and the little air of infallibility and mild pomp of language in which such decisions are sometimes decked have a tendency still further to reduce their value in the eyes of sensible men. Nevertheless, such cases are frequently brought under editorial notice for commentary and opinion; and, on the whole, it seems to be a salutary though troublesome practice. The advantage is, that a case which both sides sometimes think to be one that affords ground for complaint is thus informally brought into court and submitted to public opinion, while a commentary is furnished on it by a writer probably experienced in the consideration of such difficulties, and having a position of more or less responsible impartiality. Such decisions are, however, often materially impaired in value to the reader by the difficulty of referring them to any known standard, or testing them by any acknowledged code. They are, too, often badly worded, and rarely based upon any other perceptible principle than a recognition of some unknown and unwritten code, and a law known only to the sages by whom it is arbitrarily expounded in morsels, as of oracular origin and traditional reverence. Medical etiquette is nothing more than minor medical ethics; and it is, in the opinion of some persons, much to be regretted that no code of medical ethics exists here. That is a matter open to some doubt. Subdivisions materially complicate questions of the kind; and, if there are advantages in having framed and specialised rules of conduct ready for every emergency, there are disadvantages in becoming accustomed to formulæ which are apt to be insufficient, but whose use has removed the habit and the power of acting correctly upon principles when the application is general. There is also an obvious disadvantage in setting up a standard which is in appearance and in name different from that which governs mankind in general. The tendency of class regulations is not generally thought to be salutary; and, if we can find a common banner under which to range ourselves, there is an apparent disadvantage in selecting a sectional flag. We can think of little to counterbalance these considerations. They are not by any means theoretical: on the contrary, they are entirely real and practical. Medical etiquette is commonly spoken of by very sensible men outside of our profession, who have been misinformed by very worthy but less sensible men in it, as something unwritten but well defined—a code invented in the interests of the medical profession, and intended to preserve it from the encroachments of a sceptical public. It is referred to with a sneer or a compliment, ac-

cording to the temper of the moment, as a purely professional arm of internal discipline and external defence, used commonly with intentions hostile rather than friendly to presumed public interests. This view is by no means unusual amongst members of the profession; it is apt to be openly expressed by one or other of the parties to a controversy such as that which has suggested these remarks, and of which particulars are given in the letters published in another column. It is, however, not a very wise, or at all a well founded opinion.

Medical ethics are nothing else than particular cases of general ethics. We have all got on very well up to this time without any code of medical ethics—although it is possible that we might get on better with one—because they consist in nothing more than an application of the principles of justice and honour to circumstances frequently arising in medical practice. There is no conceivable case of difference which might be supposed to call for the application of such a code as we speak of, that cannot be settled by the logical application of these broad principles. It is very mistaken and very mischievous to think and to say that these principles are one-sided, or that they act for the benefit of the practitioner, and not of the patient. If they did so, they would be principles, not of justice, but of injustice; they would be opposed to ethics. Let us take an example, such as this correspondence suggests. Is it according to medical etiquette for a practitioner to see a patient under the care of another medical man, and to take part in the treatment, or to animadvert upon it, during his absence, and without giving him notice? To answer this question, it is only necessary to translate it into wider terms—to make the case general, instead of particular. Is it right to give a decision upon which health depends, without having all the existing elements of judgment at command? This, so far as the patient is concerned. Is it right to express an opinion, possibly hostile and injurious, upon the skilled and technical proceedings of a man, upon data furnished by an unskilled and interested bystander, who cannot possibly understand all his reasons of action, and who is exceedingly likely to give a very inaccurate account of that action? But is it wrong under all circumstances, according to professional etiquette, to give temporary advice and assistance to a patient under treatment, during the absence of the practitioner in ordinary attendance? Let us translate this, again, into broader terms. Is it wrong to do to another as you would have him do to you, and for another as you would have him do for you? It is and must be right to meet an emergency, when it is real, by relieving pain or distress, mental and bodily: it must be wrong to use such an emergency and to pervert such motives of action by using them to injure or supplant an absent man. Once more: Is it right, according to etiquette, for one practitioner to take charge of a case already partly treated by another, who has been summarily dismissed? This, too, may be translated easily, and then answers itself. Is it right for a man to do his duty honestly? The duty of a practitioner of medicine is to honestly use his skill for those who honestly ask it, on agreed terms of remuneration. He may, however—and, if a man of honourable spirit, he will—refuse to take up an unfinished piece of work in which his predecessor has been treated coarsely or unfairly by the person who now claims his aid by virtue of a tacit compact. That compact has obviously two sides. The claim for medical assistance is correlative with the duty of fairness and right conduct to those who give it; and so the demand on any man to give medical assistance can hardly ever be so urgent as to call upon him to waive his right to insist upon the observance of that correlative condition. He may and ought to object to be made a party to an act of injustice, if injustice there be. While, then, the rules of etiquette to meet the variety of cases which occur under this head could hardly ever be sufficiently numerous to meet all the varieties of life, the general ethical rule, fairly and honourably applied, will always meet the demands of professional honour, which does not differ from abstract honour; and satisfy also the demands of humanity.

It is unnecessary here to pursue these remarks further. They were suggested by the intimation in Mr. G. P. Heyward's letter of the by no means novel view that medical etiquette is a thing apart from, and very

likely to be hostile to, the interests of humanity. We hope that we have furnished him with grounds for changing that opinion, and for altering his own view of some of the facts stated in his letters.

THE THERAPEUTICS OF MENTAL DISORDER.

At a meeting of members of the Medico-Psychological Association held at the College of Physicians, Edinburgh, on the 25th November, 1869, a Committee was appointed for the purpose of taking into consideration questions relating to the uniform recording of cases of insanity, and to the medical treatment of insanity. This Committee included Dr. D. Skae, Dr. R. Smith, Dr. J. C. Haden, Dr. J. Sibbald, Dr. J. Batty Tuke, and Dr. T. S. Clouston. Besides recommending a mode of uniform classification and record (for which we may refer our readers to the pages of the *Journal of Mental Science* for July), they propose a series of therapeutical observations undertaken on an uniform plan. Their propositions on this head are of general and considerable interest. In this day of little faith and anxious search, we think that the propositions for combined therapeutical investigation put forth by this Committee deserve, and will receive, the attention of medical men generally. The symptoms of disease which they select for experimental treatment in order to discover the best mode of examining them are—1. Sleeplessness; 2. Delirious excitement; 3. Simple depression without delusions; 4. Periodicity;* 5. A craving for stimulants.

They have prepared a form of "Case-Book" for use in all the cases experimentally treated, and suggest that, if found suitable, it might be used for all cases in asylums, or might be so altered after experience of its use that it would be suitable for such universal employment. They have also appended certain memoranda, which they recommend for use in taking cases. The patients who are to be specially treated should be kept under observation for twenty-four hours in the urgent and acute cases, and for a week in the more mild forms of disease, without any medical treatment, except that intended to nourish the body and remedy obviously disordered functions other than that of the nervous system. The symptoms during this period of observation, and the effect of change of circumstances and of the asylum dietary, should be accurately noted; and when there is an obvious tendency to convalescence during this time, no neurotics need be given. The medical treatment should be classified under three divisions: 1. That intended to nourish and strengthen the body; and for this, concentrated foods given extra to the ordinary dietary, alcoholic beverages, cod-liver oil, quinine, and iron, and such universally recognised tonic medicines should alone be used; 2. That intended to remedy ascertained disorder of function other than that of the nervous system; 3. That intended to act directly on the disordered brain-function; and they recommend that opium, chloral, hyoscyamus, cannabis Indica, bromide of potassium, strychnia, hydrocyanic acid, and veratrum viride, should be used in the first instance. Along with the medical treatment should be approximately recorded the amount of nutritive material in the ordinary dietary calculated on Dr. Smith's table; the seclusion used, the classification of patients adopted in the wards, the outdoor exercise, and the recreations. After neurotics have been used for a fortnight, if the patient have not recovered, they should be stopped for a week, and the patient's state noted during that time.

As hydrate of chloral is a new and comparatively untried medicine, it should be largely used, and its effects most carefully studied. The following rules for its administration should be observed. 1. It should be given for sleeplessness in all forms of insanity that come under observation for the next six months, in doses beginning with twenty grains, and by increasing ten grains until sound sleep is produced. The following are the points to be chiefly noted: (a) the dose required to produce sleep in the various cases; (b) the length of time which elapses before

* A tendency to regular or nearly regular intermissions and attacks of the disease or of any symptoms of the disease.

sleep is produced after the patient gets the medicine; (c) the character of the sleep; (d) its duration; (e) the state of the patient after he awakes, as regards excitement or depression; (f) the state of the appetite; (g) the state of the mucous membrane of the mouth and of the tongue; (h) the state of the bowels afterwards; (i) whether the same dose has the same effect at all times; (k) whether the medicine loses its effect after being given for some time, and after how long; (l) the temperature. 2. It should be given during the day every three hours in the insanity of pregnancy, of childbirth, of lactation, of climacteric insanity, in insanity from uterine disorders, from tuberculosis, from masturbation, from alcoholism, from delirium tremens, in febrile insanity and hysterical insanity, and in epileptic, senile, and paralytic insanity (but not in those cases in which simple depression, stupor, and hypochondria, are present) in doses beginning with 20 grains and going up to 40 grains; and its effects should be carefully noted as regards the functions of the brain, the spinal cord, the digestive system, the heart, and on the weight and temperature; negative results should be noted as well as positive.

If chloral should fail to do good or do obvious harm, they suggest that opium be given in the same manner, except the mania of melancholic insanity of pregnancy—and in cases of general paralysis, epileptic insanity, and paralytic insanity; or when stupor and hypochondria are present—in doses beginning with 45 minims of tincture and increasing till the effect is produced, up to 4 drachms to procure sleep at night, the same facts being noted as in the case of chloral. Also, that opium be given thrice a day during the day in the same classes, in doses beginning at 30 minims, and increasing up to 90 minims, of the tincture. In all the cases in which opium fails to do good, after a fortnight's trial, hyoscyamus is to be used in the same way, in doses beginning with two drachms of the tincture, and increasing up to 6 drachms to procure sleep, and in doses rising from 1 drachm to 4 drachms during the day. If hyoscyamus fail to do good, the bromide of potassium is to be used in doses of from 30 grains to 2 drachms to procure sleep, and from half a drachm to 1 drachm thrice a day. If the bromide of potassium fail to do good, from 30 minims up to 1 drachm of tincture of cannabis Indica are to be added to each dose of the bromide to procure sleep, and from 30 minims up to 45 minims to each dose during the day. If the combination of the bromide and cannabis Indica fail to do good or do harm, from 2 drachms up to half an ounce of the tincture of hyoscyamus are to be added to each dose of the bromide to procure sleep, and from 1 drachm up to 3 drachms to subdue excitement.

All cases of epileptic insanity should be put on bromide of potassium thrice a day, in doses beginning with 10 grains, and increasing by 10 grains up to 50 grains, then by 5 grains up to 60 grains; the patients to get each quantity for a month, so that the experiment last for six months. The following facts are to be noted every week: (a) The number of fits; (b) the kind of fits; (c) the weight; (d) the morning and evening temperature; (e) the pulse; (f) the mental state. The good or evil or negative results are to be particularly observed.

The effects of any of the neurotics above mentioned, when given for any of the symptoms enumerated at the outset, in cases not under systematic treatment or included in any of the groups of the classification, should be recorded, the doses mentioned above being adhered to, so as to accumulate a body of facts that may in time be capable of being analysed. The following questions are considered especially worthy of investigation.

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| 1. The effects of opium | on | Simple depression. |
| 2. " " | " | Delirious excitement. |
| 3. " chloral | " | Sleeplessness |
| 4. " " | " | Delirious excitement. |
| 5. Effect of chloral and bromide of potassium | on | A craving for stimulants. |
| 6. " bromide of potassium | " | Periodicity. |
| 7. " " | " | Simple depression. |
| 8. " " | " | Sleeplessness. |
| 9. Effect of hydrocyanic acid* | " | Delirious excitement. |

* By the mouth or subcutaneous injections in doses of from two minims up to ten minims.

10. " hyoscyamus " General paralytic excitement.

11. " " along with

bromide of potassium "

12. " veratrum viride* " The length of convulsive attacks.

Any medicine causing much continuous sickness, want of appetite, loss in weight, temperature, above 99.5 deg., positive aggravation of the symptoms of the disease, faintness, or any effects threatening danger to the patient's health or life, to be at once discontinued.

THIRTY cases of yellow fever were reported at Barcelona on the 20th instant.

Dr. W. H. STONE and Dr. W. M. Ord have been elected Assistant-Physicians to St. Thomas's Hospital.

THE foot-and-mouth disease appears to be spreading among cattle. It has appeared among the herds of the Duke of Northumberland, at Isleworth, in the neighbourhood of Yeovil and Langport, and in some parts of Lancashire.

IT has been announced in several papers that it is the intention of the Government to greatly increase the number of medical officers employed for the purposes of sanitary supervision under the Privy Council. The whole of the kingdom will be divided into sanitary districts, each under a medical officer with a salary of not less than £600 per annum.

ACCORDING to *Nature*, there is good report of the progress of ipecacuanha cultivation in India, where it is found so valuable in that prevalent disease, dysentery. Since Dr. John Murray obtained for it the notice of the Indian Government, it has been successfully planted in the Neilgherries and other of our hill settlements, and in the plains. It has done well even at Calcutta.

THE SOCIAL SCIENCE CONGRESS.

The fourteenth Annual Congress of the National Association for the Promotion of Social Science was opened at Newcastle on Wednesday. The inaugural address was delivered before a large and distinguished audience by the President, His Grace the Duke of Northumberland.

THE LIVERPOOL FEVER HOSPITAL.

The following is the return for the week ending September 17th. Admitted, 319; discharged, 209; deaths, 13; in hospital, 1,006; outside district returns, 136. *Classification of disease*: typhus, 13; simple continued fever, 41; relapsing fever, 952; deaths, 2 typhus, 11 relapsing: in hospital, 1,006.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE business of the fortieth annual meeting of the British Association was concluded on Wednesday last. Invitations for the next meeting were received from Edinburgh, Brighton, Bradford, and Belfast; and it was agreed to hold the next meeting in Edinburgh, and that of 1872 in Brighton. Sir William Thomson, D.C.L., Professor of Natural Philosophy in the University of Glasgow, was chosen President for 1871.

DEATH UNDER THE ADMINISTRATION OF CHLOROFORM.

ON Friday of last week an unfortunate occurrence happened at the Royal Free Hospital. A man thirty-four years of age had on the previous Wednesday received a severe wound on the finger from the kick of a horse. A suture had been put in at one of the hospitals. He was admitted into the Royal Free Hospital on the following evening with symptoms of tetanus. It was decided on the following day to remove the finger. While the chloroform was being administered on a piece of lint, and after having inhaled the anæsthetic for three or four minutes, he struggled violently, and shortly expired. Every means was adopted to resuscitate the patient, but without success.

* Injected subcutaneously when the attacks begin.

THE NAVAL MEDICAL SERVICE.

NOTICE has been given that a competitive examination for the admission of assistant-surgeons to the Navy will commence on November 7th, at the London University, Burlington Gardens. There will be at least twenty-five vacancies. Candidates must apply to the Director-General, and present their certificates, on November 3rd.

DISINFECTANTS FOR THE SICK AND WOUNDED.

At the meeting of the Chemical Section of the British Association, a letter was read which had been addressed by the Chemical Society of Berlin to the Chemical Society of London, asking for co-operation in procuring a supply of disinfectants. Those specified were, liquid residues of the manufacture of chlorine, chloride of lime, sulphate of iron, permanganate of potash, and carbolic acid both crude and purified.

PRESERVATION OF HAMPSTEAD HEATH.

FROM a statement made by Mr. Le Breton, representative of the parish of Hampstead on the Metropolitan Board of Works, it appears that, so far as negotiations between the Board of Works and the Lord of the Manor have up to the present time reached, there was a very good prospect of the main part of the heath (240 acres) being saved.

UNIVERSITY OF OTAGO, NEW ZEALAND.

WE are glad to hear that the Council of this University have resolved to institute a Chair of Natural Science. The appointment is a good one. Special evidence of ability to teach chemistry and mineralogy and the practical application of these sciences to agriculture and mining respectively are required from candidates.

MEDICAL SOCIETY OF LONDON.

THE Lettsomian Lectures for the next session will be delivered by Mr. F. G. Gant. The subject will be the Excisional Surgery of the Joints; the Conditions appropriate for Excision; the Operations, After-treatment, and Results. The lectures will be illustrated by a series of original specimens, drawings, and apparatus. They will be delivered on January 9th and 23rd, and February 6th, 1871.

ANOTHER TOBACCO CHAMPION.

No less a person than the President of the British Association comes forward in support of the use of tobacco. In the course of a discussion which followed a paper on this subject, read by Mr. R. Wilson at the meeting in Liverpool, Professor Huxley, after some years' experience, was able to offer the opinion that tobacco was "a sweetener and equaliser of the temper." Nothing, however, was worse than excessive smoking, excessive drinking of green tea, or any other article of diet.

PUFF-BALLS FOR THE WOUNDED.

A LADY correspondent calls attention to the value of dry puff-balls for dressing wounds in place of lint. They possess the advantage of adhering closely to the wounds—rather a merit, perhaps, when they cannot be frequently dressed. They are in great abundance at present in the country, and might be made useful. We should be glad to hear from any of our associates the real value of the puff-ball as a dressing. It is, we believe, frequently used in some country districts for staunching wounds.

FEVER HOSPITALS AND THEIR SITES.

AN important sanitary question has arisen at Colchester. The Board of Guardians of that town have resolved to erect new wards in connection with the Union, for the reception of cases of fever, small-pox, and other infectious diseases; and have determined on a site in the immediate vicinity of the Workhouse, and close to some populous parts of the town. Believing that the establishment of a fever hospital in such a situation to be highly dangerous, Dr. Bree, who is himself one of the Guardians, has protested strongly against proceeding with the building. At a meeting of the Colchester Town and Channel Commission on the 5th instant, he brought the matter forward; adducing, in support of his

arguments, the observations on the propagation of variola ovina made by Dr. W. Budd some years ago. The subject was fully discussed, and it was resolved, by a large majority, to request the Board of Guardians not to allow the building to be proceeded with; and, if this request should be unsuccessful, to apply to the Board of Health and to the Poor-law Board to take the necessary steps for preventing the anticipated nuisance. We learn, from a letter which Dr. Bree has published in a local paper, that the proposed site has been inspected by Dr. E. Smith and pronounced to be unobjectionable. Notwithstanding this opinion, and notwithstanding that it may be urged that the fever and small-pox hospitals of large towns, such as London and Liverpool, do not propagate disease to their immediate localities, Dr. Bree is, we think, quite right in the objections which he makes. In the face of what we now know concerning the diffusion of epidemic diseases, and the more extended use of ventilation in the treatment of those suffering from them, we think that to erect a fever-hospital in the midst of a town is an experiment which it is well to avoid if it be at all possible to do so.

PROPOSED REARRANGEMENT OF REGISTRATION DISTRICTS.

A PAPER on this subject, by Mr. Alfred Haviland, was read at the recent meeting of the British Association for the Advancement of Science. He had lately gone to considerable expense in correcting, in connexion with Mr. Keith Johnston, the map of the geographical distribution of disease in England; and, through the recommendations of the Registrar-General, the Treasury had approved of a grant being made to him in aid of his expenses. He urged that the country should be divided into districts regulated by the watershed and river systems; so that each might form a focus of scientific inquiry into rainfall, temperature, occupations, diseases, deaths, etc. He asked that a Committee should be formed to report on the subject to the Association, and then to Her Majesty's Government.

THE WINE-SUPPLY OF PARIS.

THE *Pall Mall Gazette* says that if all the fermented liquors that pay the octroi duty are consumed in Paris, the inhabitants manage to dispose in the course of the year of no less than 365,000 tuns of wine—equal to forty-four gallons per head of the population, or almost a pint a day for every man, woman, and child, in the French capital; and this, too, in addition to 225,000 barrels of beer, nearly a couple of million gallons of cider, and more than that quantity of spirits. The authorities in Paris state that the water-supply of the city cannot be stopped by the Prussians; and the two immense depôts which furnish France with wine are both within the line of the fortifications, and quite full. There appears, therefore, to be little fear of suffering from thirst, whatever prospect there may be of misery from starvation.

THE ROYAL ALBERT ASYLUM, LANCASTER.

THE sixth annual meeting of the subscribers and friends of the Royal Albert Asylum for Idiots at Lancaster was held in one of the large rooms of the institution on the 14th instant; His Grace the Duke of Devonshire in the chair. Among those present were the Bishop of Manchester, the Archdeacons of Lancaster and Durham, Sir J. Kay-Shuttleworth, Dr. De Vitre, etc. The report stated that it had been intended to have the asylum publicly opened this year; but that, on reconsideration, it had been determined to postpone the ceremony until the completion of the whole building. Fifty elected inmates, however, with as many paying cases as can be accommodated, are to be admitted in November. The whole building, when completed, will contain provision for about five hundred inmates. The donations had, according to the report, amounted to £54,437:19:3, of which Lancashire has contributed £31,824, and Yorkshire £15,731. The total amount of receipts from all sources, from December 1864 to July 1870, has been £74,632: of which £12,436 have been invested as a sustentation fund. Dr. Shuttleworth, late Assistant Medical Officer of the Earlswood Asylum, has been appointed superintendent; and Miss Bryan, submatron for nine years at Earlswood, has been elected matron. Very high satisfac-

tion was expressed at the progress made with the asylum; and a well deserved compliment was paid to Dr. De Vitre for the persevering zeal with which he has laboured to bring the undertaking to a successful issue. It is intended that the building shall be completed in 1871; and a hope was expressed at the meeting that Her Majesty the Queen, or some member of the Royal Family, will take the leading part in the ceremony. Dr. De Vitre and his coadjutors are to be congratulated on the success which has so far attended their humane labours.

THE WAR AND OUR ARMY MEDICAL SERVICE.

INSPECTOR-GENERAL H. K. INNES, C.B., and Staff-Surgeon Fitzgerald of the Army Medical Board, have left for the Continent to join the army of the Crown Prince of Prussia, for the purpose of reporting upon the medical arrangements of the field-hospitals of the German forces. These medical officers have been sent in place of Staff-Surgeon Dr. de Chaumont and Assistant-Surgeon Count Wollowicz, whose orders to proceed to the seat of war, as was mentioned in our issue of the 17th instant, were countermanded just as they were about to start on their mission. It appears Lord Granville, at the last moment, feared that the foreign names of the last-mentioned gentlemen might lead to some misunderstanding on the part of the German authorities. This seems to be something like over-sensitiveness at the Foreign Office. Dr. de Chaumont, who is well known by his contributions to science, who holds the position of Assistant-Professor of Hygiene at the Netley School, and has been nearly twenty years in the medical service of the army, is, we are informed, though of French extraction, a native of Edinburgh, and a graduate of the Edinburgh University; while Assistant-Surgeon Count Wollowicz, whose title is a German one, was partly educated at Berlin, and, of course, became a naturalised subject of Great Britain before he entered the army. In consequence of the service of these officers being dispensed with, the medical branch of the army loses the advantages that would have resulted through their intimate knowledge of the language of the people with whom they would have been brought into contact on the Continent. At the same time, we hear that the officers now sent are to have associated with them Surgeon Becher, a native of Germany, who will act as interpreter, and who, from having been occupied for some time past in one of the German ambulances, will be fully competent to point out all that is really of interest to be known to the army medical service of this country. We trust, therefore, that the vast amount of experience which has been afforded, at the expense of so many lives and so much suffering in the present war, may be turned to some profitable account as regards our own military service, and that it will be rendered a means of improving the administrative arrangements which would have to be put in force in case of this country being overtaken by a similar calamity.

THE HOUSEMAID'S KNEE.

MR. RICHARD DAVY communicates to us some useful observations which have for their object the relief of a very numerous and useful class of domestic servants from a painful and preventable affection, now largely incurred in the course of their daily work. He writes:

"During the past year, twenty-one cases of this affection have been registered as in-patients at the Westminster Hospital (one man and twenty girls), demonstrating that some mechanical improvements are needed in the common scrubber's necessities. I maintain that it is an unnecessary and quite a cruel custom that servants should subject their knees to the cold pavement or damp floor, and their bursæ to continued pressure, to ensure a clean doorstep, a bright hearth, or a polished floor. Flunkies, who, of course, have too much self-pride to knuckle down and clean their halls, use the American Squeegg brush, or a long-handled mop; the women in Holland clean their steps with an appliance combining the brush and wiper; the Parisian *garçon* waxes his floor with a foot-brush; etc. Let, therefore, our poor English girls be supplied with brushes and wipers that can be used in the erect posture. Then our housemaids will be eased of a frequent and painful, if not a dangerous, affection; our hospitals will be provided with more empty beds; and employers will be spared the inconvenience of sending their broken-kneed drudges into the wards of the nearest charitable institution."

WATERING THE SLUMS.

It is especially in the back streets and crowded courts of the poor quarters of our towns that the excellent plan of watering with a weak solution of carbolic acid should be adopted. In consequence of the offensive smells in some of the narrow and overcrowded streets, and to counteract the dirty habits of the people, who, instead of conveying the refuse matters of their houses to proper drains and receptacles, throw them into the roadways, the medical officer of Whitechapel has given directions to have such places watered with carbolic acid, and has intimated by public notice that all persons detected in throwing filth upon the public ways will be prosecuted. This example might well be widely followed. It is very well to water wide streets and large thoroughfares with chemical compounds; but it is still better to look after the back streets and dirty slums, where *habitans in sicco* has no powerful voice to command public attention to his wants.

MUSCULAR CONTRACTIONS.

WE take from *Nature* the following account of further investigations by Klünder, in the Arbeiten aus der Kiel Institut, into the time occupied in muscular contraction.—

His experiments have been conducted with a pendulum chronoscope constructed by Hensen. The contraction is traced on a reddened glass plate attached to the arm of a tuning-fork, with which it therefore vibrates when this is sounded. The curve described is consequently a sinuous line, its ascending and descending portion decussating. If a vertical median line be drawn on the plate when at rest, the measurements can be examined and compared. These give for the stage of latent excitation a value of $\frac{3}{400}$ ths of a second, which, when the muscle is weighted or exhausted, may rise to more than 0.01 sec. Antecedent extension diminishes the duration of this period, as Helmholtz had already remarked. The proper curve of contraction exhibits itself in its middle part as a curved line modified by the elasticity of the muscle. The muscle is quite inactive towards the end of the contraction, as shewn by the form of the extremities of the curve. The greatest increase in rapidity occurs in the ascending portion of the curve, which corresponds to the greatest development of force in the muscle which is between the 3rd and 4th 1-400 of a second, the absolute greatest rapidity of the ascent is in the 8th 1-400 sec. The form of the curve is considerably changed if a heavy weight is appended to the muscle, the period of elevation as well as the fall being both longer. The retardation occurs principally at the commencement of the elevation, at which period the rapidity only slowly increases, as compared with its usual rate.

SOIL AND DISEASE.

At the present meeting of the British Association in Liverpool, Dr. Moffat of Hawarden has read an interesting paper on "Geological Systems and Endemic Diseases", showing that the soil has an influence on the composition of the cereal plants grown upon it, and on the diseases to which the inhabitants are subject. The district in which he practises consists geologically of the carboniferous and new red sandstone or Cheshire sandstone systems. Anæmia with goitre is prevalent amongst those living on the carboniferous systems, whilst it is almost unknown among those living on the new red sandstone system; and consumption is also more prevalent amongst the inhabitants of the former. Dr. Moffat has found by analysis that the wheat grown on the soil of the Cheshire sandstone contains the largest quantity of ash, and that there is a larger quantity of phosphoric acid and of oxide of iron in it than in the soils of the carboniferous and millstone grit systems. He has calculated that each inhabitant on the Cheshire sandstone, if he consumes a pound of wheat daily, takes in nearly five grains per day of the sesquioxide of iron more than the inhabitant of the carboniferous system, who seems therefore to be subject to anæmia in consequence of the deficiency of iron and phosphoric acid in his food. It is not only in the wheat grown upon the carboniferous system that there is a deficiency in the quantity of oxide of iron and the phosphates, according to Dr. Moffat, but also in the blood of the animals reared upon it. He stated that sheep were liable to anæmia, which he attributed to sheep-walks being upon trap and limestone-hills, in the soil of which there is but little, if any, iron.

SCOTLAND.

It is proposed to erect in Glasgow a statue of the late Professor Graham. The pedestal is to be of Aberdeen granite, and the statue of bronze.

GLASGOW UNIVERSITY.

SIR WILLIAM STIRLING MAXWELL, Bart., has forwarded a subscription of £1000 to the New University Building Fund.

ABERDEEN ROYAL INFIRMARY.

IN consequence of his appointment as Junior Surgeon, Dr. Alexander Ogston has resigned the post of Ophthalmic Surgeon to the Infirmary. Dr. Alexander Davidson will, we believe, succeed Dr. Ogston.

EDINBURGH UNIVERSITY: MEDICAL SCHOLARSHIP FOR WOMEN.

LADY AMBERLEY has intimated her intention of opening a scholarship of the value of fifty pounds yearly, tenable for three years, to women desirous of pursuing the study of medicine. The competition will be held at Edinburgh in October, and the successful candidate will be required to proceed immediately with a full course of study in a recognised medical school.

NEW UNIVERSITY HOSPITAL, GLASGOW.

A BEGINNING does not yet seem to have been made in the building of this very necessary Institution. We are, however, perfectly satisfied that the last delay has produced a result quite equal to the time lost, it having resulted in a very advantageous change of site. The original proposal was to erect the hospital on a rather low-lying plot of ground, just across a filthy stream named the Kelvin. A much higher and better site has now been determined on, lying immediately to the west of the University grounds.

RELAPSING FEVER IN GLASGOW.

THIS city promises soon to rival Liverpool in the number of its cases of relapsing fever, but seems to stand considerably behind Liverpool in its means of treating them. We understand that the hospital accommodation available is already nearly, if not entirely, used up, and yet the epidemic still shows signs of rapid increase. The authorities have as yet only reached the stage of searching for a site on which to build a permanent fever hospital, and do not seem to have opened their eyes to the probability of an immediate necessity for increased accommodation.

NOTES OF THE WAR.

PROFESSOR FRERICHS has set out from Berlin on a tour of visitation of the Prussian field-hospitals.

NURSES FOR THE WAR.

EIGHT well-trained nurses, most of them Sisters of Mercy from the All Saints Home, St. Margaret's Street, left on Saturday for the seat of war in the service of the British Aid Society.

THE CHEMISTS AND THE WAR.

WE are glad to see by the *Pharmaceutical Journal* that the chemists throughout the country are continuing to send donations of drugs and other necessities to the British Society for the Relief of the Sick and Wounded. They have much in their power to do good in this way, and will, no doubt, continue throughout the war to assist in the good cause.

THE ANGLO-AMERICAN AMBULANCE AT SEDAN.

THE Anglo-American Hospital at Sedan, says a correspondent of the *Daily Telegraph*, was subjected to a severe fire during the battle. The surgeons stood their ground; Dr. Frank and Dr. MacCormac, with their staff of dressers, attending to the patients and operating under fire. The Staff there on September 16th consisted, among others, of Dr. Marion Sims, Dr. Pratt, Mr. Marcus Beck, Dr. May, etc.

THE BRITISH AID SOCIETY.

THE sum subscribed in aid of the funds of the British Society for the Relief of the Sick and Wounded in War now amounts to about £170,000; but even this sum must be increased daily, in order to allow the Society to supply the enormous demand on its resources likely to last for some time to come, peace or no peace. The Committee are in want of cast-off garments for the use of the convalescent sick and wounded, many of whom have insufficient clothing. Some are even without trousers.

THE GOVERNMENT AND THE BRITISH AID SOCIETY.

OUR Government has at last consented to afford some practical assistance to the British Aid Society, which has done, and is doing, so much to the credit of Great Britain in the relief of the wounded. Twelve waggons, completely equipped, have been placed at the disposal of the Committee by the War Office. These will facilitate in a very great degree the work of the Society at the seat of war.

AN AUSTRIAN AMBULANCE IN PARIS.

DR. MOSETIG, who has gone to Paris on behalf of the Austrian Aid Society, has written to Dr. Mundy in Vienna that he was about to establish an ambulance in Paris, to be entirely under the care of himself and staff. They were proceeding to erect a hospital-barrack, on Esmarch's system, for fifty beds. The choice of a site had been left to them; and the hospital would probably be located either in the gardens of the Tuileries, the park of Monceau, or the esplanade of the Invalides.

ALLEGED ABUSES OF THE RED CROSS.

A CORRESPONDENT of the *Daily News*, writing from Brieux on September 15th, says that every second person one meets with between Sedan and Brieux has the red cross; the privilege of which, he says very plainly, is abused by many of those who wear it. Of the thousands of young men who have left home to share in a work of self-denial, perhaps five-sixths lose the central impetus on coming into contact with real misery or camp discomforts; and, on the other hand, there are accusations that the "Johanniter" are chiefly occupied with taking care of themselves, and that the supplies sent by the German Aid Societies dwindle down very much before reaching those for whom they are intended. The correspondent says that he has seen enough to convince him that there is much ground for such complaints. At the same time, he allows that a great deal of good has been done; that the sick and wounded are better cared for in this war than in previous ones, and there is less of disease and fewer amputations and fewer deaths. The correspondent goes on to say, that the British and Luxembourg sanitary corps are in great measure relieved from the drawbacks mentioned; principally because the German sanitary service is under the control, both generally and in detail, of the Knights of St. John and of Malta; while in the British branch the surgeons have unhampered command of all the columns or detachments.

ARRANGEMENTS IN GERMANY FOR THE SICK AND WOUNDED IN WAR.

DR. GEISSÉ of Ems has furnished us with the following interesting information in continuation of his previous notes.

In order that the medical men and nurses may reach the battle-field without great difficulty, each person receives a personal ticket, signed and sealed by the President; and also a white band with a red cross, on which the crest of the Association is stamped. A second ticket is also given for travelling free by rail, steam, and post, and for receiving free quarters and food. The first is a very necessary precaution, for many persons wearing the Geneva band have been found robbing the dead and the wounded.

Hospitals of the Association.—The Council of the Association have decided to establish only small hospitals, but none with less than twenty beds. The bad results at Verona during the Italian war, when the distribution of the wounded was strictly forbidden, and the excellent ones in 1866, when the wounded were sent all over Prussia, are well known. Distribution of the wounded into small hospitals all over the country ensures a supply of medical attendance, plenty of room, and abundant fresh air, and prevents in a high degree the evil consequences of overcrowding. Besides this, the moral effect on the minds of the wounded deserves some consideration. The further they are from the horrors of war, the less they see of the wounded and dying, the more hope and confidence enters their heart, and the more speedy is their recovery. Further, the compassion and help of the population are awakened. After the battles of the present war, overcrowding near the battle-fields was for a time unavoidable; but the wounded were removed as fast as could be done. I have had under my own care some severely wounded,

who, thanks to a good plaster of Paris bandage, were not at all the worse for a five-days' journey.

As regards the number of beds, the Association has prepared in Prussia alone, partly in hospitals, partly in wooden barracks, I may fairly say, good accommodation for fifty thousand sick and wounded. As many at least are ready in the other States of the Northern Confederation—Hesse, Bavaria, Württemberg, and Baden. Medical attendance and nursing is all done voluntarily; and even servants have offered their aid, if they can get a bed and food. In connexion with each hospital a company of volunteer carriers is formed, who, under medical guidance, transport the wounded from the carriages or steamers into the hospitals. In all these hospitals the same rules are followed as in the military hospitals. A book for the purpose contains the names, numbers in and name of the regiment, kinds of wound or disease, treatment, and result.

It is not at all an easy task to transform a house into a hospital, particularly in Germany, where the fireplaces do not afford such good means of ventilation as in England. To improve ventilation, large holes have been cut in the chimneys at the level of the upper parts of the windows. One window at least is considered necessary for two beds. Rooms are left empty on the top floor, for patients suffering from offensive discharge, pyæmia, or hospital gangrene. The sick and wounded are most rigorously kept apart; the wounded on the lower, the sick on the higher floors of the hospitals. A space of 1,500 cubic feet is allowed for each bed. Carbolic acid powder is strewed on the floors of the rooms twice a week. Chloride of lime or sulphate of iron is used for the privies. Chloride of zinc in solution is added to the water used for washing the bandages, sheets, and shirts of the wounded. The compresses, lint, etc., are put into a solution of carbolic acid, and afterwards poured out into a hole dug in the ground, and covered with earth. Sponges are used only to wash the patients, each of whom has a sponge for himself. The wounds are syringed with warm water, to which hypermanganate of potash is added. The lint and the compresses are moistened before being placed on the wounds, sometimes with carbolic acid solution, or with a mixture of carbolic acid and olive-oil. The instrument for syringing the wounds mostly in favour now is the "irrigator" of Esmarch. This is a round tin pot a foot high and six inches in diameter, having near the bottom an India-rubber tube about two feet long, at the end of which a pointed tube can be screwed on.

A VISIT TO SEDAN.

OUR Special Correspondent at Berlin writes as follows.

Being obliged by private affairs to go to the theatre of war for a few days, I could not send you a letter last week. To-day I will avail myself of the opportunity thus given to me, and send you a description of what I saw and heard there.

My destination was Sedan and its environs. I left Berlin on September 7th, and took the way by Aix-la-Chapelle and Belgium. At the first place, as well as on several stations of the Belgian Luxemburg railway, at Libramont and Neufchâteau, *Etappe* stations were being arranged by Prussian military surgeons, and by Knights of the Order of St. John, for the transport of the sick and wounded, who began just then to pass this way. Until the events of Sedan, all the wounded had had to take the southern direction, and to pass Pont-à-Mousson. Even those wounded at Beaumont on August 30th were still carried by this way, which was very inconvenient and injurious, in consequence of the necessity of a long transport in waggons. The transport is now much shorter, as the distance from Sedan to the railway stations is not more than twenty or thirty English miles. Still it is bad enough; for good carriages are very rare, and the majority must go on open country carts, lying on straw, and very often wet thoroughly by the rain. Generally, before reaching the railway, the men have to pass a night in a small place, such as Bouillon or Florenville, where the accommodation for them is rather incomplete. Bouillon particularly is a narrow dirty place in the romantic valley of the Semoy. The barracks of the Belgian troops, the floors covered with straw, give a shelter to the wounded, not very inviting indeed, but now made a little comfortable by the voluntary aid societies, who do what they can in such a difficult situation. On arriving at Neufchâteau and Libramont, some go by Arlon and Luxemburg to Germany, others by Liège and Aix-la-Chapelle. At the latter place, they are examined, and, according to their wounds and their homes, are directed to the different hospitals in the country. On the way I took through Belgium I could not see anything of the malignancy shown somewhere towards the passing wounded. At Liège, on the contrary, both public companies and private individuals rivalled each other in providing refreshments. In the interest of the poor sick and wounded, it is earnestly to be wished that the Sedan railway will soon be opened. At the present moment, the fortresses of

Mezières, Givet, Montmédy, and Thionville, still occupied by the French, prevent direct communication by rail from Sedan to Germany. The principle of evacuation and dispersion of the patients is realised at Sedan and its environs as much as possible—it may be, sometimes even more than desirable for the state of the patients. It is evident, however, that in such a mass of labour errors of diagnosis are unavoidable, and that the surgeon very often has to choose the less of two evils—the injuries of transport to a few on one hand; and overcrowding, starving, pyæmia, and fever for all, on the other. For very good reasons, the hospitals at Sedan itself are evacuated the earliest, because the dirt left by the French garrison and the passing German troops would have the most offensive influence on the patients. The headquarters of the hospitals round Sedan is at Donchery, three miles distant from it; but, in addition, there is scarcely a village or a farm in the environs without hospitals. Particularly on the southern and eastern side, every church, every school and *mairie*, has sick and wounded for inhabitants. I say sick and wounded; for the number of the former is proportionally large, in consequence of the fatigues before, and the want of proper food, the first few days after the battle. Fever and dysentery are not at all uncommon; even among the healthy, a tendency to diarrhoea is quite general. Doubtless, the great number of dead horses all over the fields contaminate the air and water. A week after the battle, they could be found every where; for the horses of the French cavalry could not all be provided for, and many of them were killed by want and cold. At Donchery, at one of the bridges, as I was told by a surgeon, thirty dead horses were at one time accumulated in the river Maes. In the single hospitals, as much separation as possible was made between the French and Germans, when I visited them—a measure which, in spite of all that may be said about international aid and humanity, I think very judicious, as facilitating the administration and the communication between the patients and their attendants. According to an article of the capitulation, the French surgeons remained to take care of their wounded countrymen. With few exceptions, the German soldiers were treated by German medical men.

Besides the hospitals of the belligerent nations, there were also some established by international aid, and managed by Belgian and Dutch surgeons. At Balan, near Sedan, I found an Anglo-American hospital. It struck me that the Belgian and Dutch hospitals almost exclusively had French patients. I am not sure whether their better knowledge of the French language was the cause of their choice, or national sympathies, or the perception that the French were wanting their help most.

The Germans in the hospitals were mostly under the charge of military surgeons and nurses. The voluntary helpers had chiefly for their task the accompanying the transports of the wounded, the conducting transports of food, medicine, and bandages, and the distribution of them. At some places, hospitals were established by voluntary aid: for instance, in Stenay, where for some days the wounded had to rely on them only. At Donchery, there was an hospital established by surgeons and nurses of the Bavarian Aid Committee. This little corps was originally sent only for temporary relief after the battle of Woerth; but having been ordered by the Committee to follow the headquarters of the Crown Prince, they partook of all the events of his army, and finished their work at Sedan. On my return, I met in Belgium a part of them, who were forced by disease to go home.

The consulting-surgeons for the hospitals near Sedan are the general surgeons Wilms and Boeger of Berlin, who are stationed at Donchery. At Mouzon on the Maes, Professor Volkmann of Halle is consulting-surgeon, and he also visits the villages in the neighbourhood.

The total impression of my visit to the battle-field is this: that at that time (eight or ten days after the battle) medical help in general was sufficient; but that food, material, and general accommodation, were very often incomplete. It is very evident that the fulfilling of these wants is most difficult, often even impossible; and I think that only those who have witnessed the troubles can thoroughly understand the difficulty and appreciate the efforts made for relief.

As a curious example of self-aid in difficulties, I may mention what I saw at Douzy. A Saxon surgeon there used the railway carriages at the station (there being no traffic) as barracks for fever-patients. He said that they did very well.

To facilitate the transport of the wounded these last few weeks from Bavaria and Württemberg, complete sanitary trains have gone to the theatre of war, accompanied by surgeons, nurses, and sisters, and accommodated in every way with food, bandages, and beds, in order to have even severely wounded patients with them, and to avoid frequent stopping on their way.

As the field-post does not carry parcels, but forwards letters of seven ounces, it is a general custom with us to send to the soldiers letters containing tin-capsules with cognac, rum, extract of meat, coffee, etc., which are fabricated expressly for this purpose.

THE UNIVERSITY OF DUBLIN NEW QUALIFICATION IN STATE MEDICINE.

THE subjoined document issued by the Board of Trinity College is one of very great interest. It will be remembered that the proposal to establish qualifications in State Medicine has been discussed by the Medical Council, who have collected the opinions of the leading authorities on State Medicine in this country. To the Dublin University belongs the merit of first attempting to carry the plan into effect. The introductory note from Dr. Stokes explains the position which it is intended that the new qualification shall hold.

SIR,—In your Educational number of September 10th, you have, in detailing the arrangements of the University of Dublin, noticed the qualification in State or Preventive Medicine lately instituted by the Board of Trinity College. This qualification is intended to be one of a high order. It is to be conferred, after examination in subjects set forth in the accompanying document, on candidates who have already graduated in Arts and taken the highest degrees in Medicine. I beg to append the statement of the subjects of study recommended to such candidates, and approved of by the Board.

Dublin, September 13th, 1870. I am, etc., WM. STOKES,
Regius Professor of Physic in the University of Dublin.

Subjects of Study recommended to the Candidates for the Qualification in State Medicine.

I. LAW.—The Candidate should have an accurate knowledge of the legislation relative to sanitary measures, for several reasons:—1st. That he may direct his attention to their workings so as to be able, when his advice is required, to show how they may be improved, or how far they are an useless interference with individual liberty. 2nd. That he may be able to state (when consulted) whether they are duly observed, or whether they ought to be enforced by more stringent regulations, or by a more active police. 3rd. That knowledge will be important in directing him how to arrange and classify that statistical information which it may become his duty to collect, to digest, and to publish.—The Candidate should be acquainted with all the laws which relate to the conduct and duties of medical men, with reference to Vaccination, Inoculation, Insanity, Lunatic Asylums, and Certificates of Deaths and Births.

II. ENGINEERING.—1. The Candidate should be able clearly to understand the several Maps, Plans, and Sections of any building, without being dependent on the explanations of Engineers or Architects, and should be able to use the different Scales attached to them.—2. A knowledge should be required of the Regulations, etc., decided upon for the superficial and cubical space assigned to each individual—both at home and in the Tropics—in Churches, Barracks, Hospitals, Troop Ships, Emigrant Ships, Workhouses, Asylums, Prisons, by the several bodies of Commissioners, Inspectors, and Quartermasters.—3. It would be essential that the details of two or more completed Waterworks for large towns should be mastered, both by a study of the published accounts of such works, and also by frequent visits to every part of the same, from the gathering ground to the final distribution in the city.—4. In like manner, the Sewerage of Cities should be studied, with the Ventilation of Sewers, both by published statements and reports, and also by visits to works in progress.—5. A knowledge of effects of the application of the Sewage Matter to land, either by irrigation or otherwise, would seem to be essential.

III. PATHOLOGY.—Laws of Epidemics—*e.g.*, Typhus, Typhoid, Cholera, Small Pox. Endemic Disease.—Laws of Contagion and Infection.—Vaccination.—Influence of Hereditary Disposition; Age, Sex, Race, Locality, Occupation.—Destitution. Deficient Air, Water, Food; Abuse of Alcoholic Drinks. Want of Drainage.—Evidences of Insanity and Imbecility of Mind.

IV. VITAL AND SANITARY STATISTICS.—A. Science of Statistics as applied to Man:—Man to be regarded, not as an individual, but as a species. Influences to which Man is subject—*a*. Purely physical, or *natural*—*viz.*: 1, sex; 2, age; 3, locality; 4, periods; 5, seasons; 6, hours of the day. *b*. Moral or *disturbing*. Man is distinguished from the lower animals by the operation of this second group.—Determination of *typical* Man under a physical aspect, comprising—I. All that belongs to the *life* of Man: 1. *Reproduction* of Man—statistics of births, fecundity, and still-births, as influenced by *a* and *b*. 2. *Mortality* of Man—as influenced by *a* and *b*; Duration of Life; Population; Epidemics; Insurance of Lives.—II. All that concerns the development of man: 1. *Height*—growth, laws of—formulæ. 2. *Weight*—relations between height and weight—laws—conclusions. 3. *Strength*—dynamo-

meter—vital capacity—agility—respiration—rate of the heart.—B. Practical Application of Statistics to Medicine:—Calculation of Averages and Percentages.—Application to ratios of Births and Deaths in local populations. Principles of Registration of Disease and Mortality. Determination of annual and percentage ratios from actually observed registrations. Comparison of periods in localities as regards the birth-rate, marriage-rate, and death-rate. Framing of local statistics of food, vegetable and animal life. Observation and registration of epidemic and endemic diseases. Epizootics. Epiphytics. Registration of Meteorological Phenomena. Method of using all the above in the elucidation of the causes of disease. Application of Statistics to Therapeutical Questions. Effects of sanitary improvements.

V. CHEMISTRY.—*Air*. Atmospheric Air—its constitution, and how altered by respiration; sources of the Carbonic Anhydride of Atmospheric Air, its average amount, causes of its nearly equable diffusion, and reason why it is not on the increase.—Maximum amount of Carbonic Anhydride in air respired as often as possible. Quantity of it in the air of crowded rooms—how determined by experiment.—Means by which the Carbonic Anhydride in a room of given dimensions, and inhabited by a given number of persons, may be restrained within given limits.—Ammonia of the Atmosphere, whence derived, its uses in nature, and the best methods of ascertaining its amount by a gravimetric process, or by a colour-test. Ozone: How detected in the Air, and sanitary uses attributed to it.—Recent experiments which prove that ammonia, and azotised organic matters exist in the Pulmonary Halitus.—*Water*. Waters—*Hard* and *Soft*. Meaning of these terms. Rough means of judging of the hardness of a water. Precise degree of hardness, how determined. Some hard waters are softened by boiling, others not; cause of the difference. Nature and origin of deposits in boilers, and how to prevent their production. Hard and Soft Waters have not the same action on lead: In what does the difference consist, and how is it explained? Dissolved lead, how estimated? Different forms in which Nitrogen is found in waters, and modern methods of estimating its amount in each case. Nitrates and Nitrites of Water: Origin of, and how detected, and estimated. Constitution of air occurring entangled in ordinary water. Flood Water of Rivers—how decolorised in nature, and how by artificial means.—*Gaseous Poisons*. Positive and Negative Gaseous Poisons. Natural and Artificial Sources of Carbonic Anhydride. *Choke Damp*.—Where generally encountered, and how distinguished from Carbonic Oxide, Hydrogen, and Nitrogen. Products of the combustion of Charcoal, Wood, Peat, and Coal. *Sulphurous Anhydride*: How produced by the combustion of impure Coal: Tests for its presence, and method of ascertaining its amount. *Carbo-Hydrogens*: Marsh Gas; Olefiant Gas. Fire Damp—What? Injurious results of its explosion. Safety Lamp—its principle; caution to be observed in its use. Analysis of the mixture of Gases which compose Fire Damp. Sulphide of Hydrogen (Sulphuretted Hydrogen). Characters which distinguish it from other Gases. Amount of it in Air—how determined with accuracy; methods of decomposing it when it occurs in the air of an apartment. Noxious Gases and Vapours in the Air of Sewers and Privies. Probable origin of the Sulphide of Hydrogen of Sulphurous Waters. Experiments of Thénard and Dupuytren, and of Parent Duchatelet on the poisonous action of Sulphide of Hydrogen.—*Leading Deodorising and Disinfecting Agents*. 1. Chlorine and Chloride of Lime. 2. Nitric Acid in the vaporous state. 3. Carbolic Acid. 4. Nitrate of Lead; Chloride of Zinc. 5. Condy's Liquid (Permanganate of Potassium). Constitution of those different Agents; different ways in which they act, and how they are applied.

VI.—METEOROLOGY.—Meanings of the phrase *mean temperature*; when applied to a day, a year, and a place. Thermometers employed for showing the maximum and the minimum temperature of each day, and manner of dealing with such observations so as to deduce from them the true mean temperature. Circumstances which influence the mean temperature of a place. *Climates*—division of. Not determined exclusively by mean temperature. Isothermal lines.—*Barometer*—how made. Purpose to which it is applied. Barometer with moveable scale. Barometer with fixed scale. Two varieties of the latter, according as the level of the mercury in the cistern varies, or is made the same at each observation.—Dew-point, what? Force of vapour at Dew-point—how determined by a wet and dry thermometer. How directly by Daniell's Hygrometer? Amount of vapour in air not a measure of its humidity. Fracture of saturation—what it means.—Rain-fall—how measured; construction and use of Rain-Gauge. Probable supply of water within a given area—how inferred from Rain-fall.—Electrical condition of air—how determined? Electrical state of the atmosphere in steady weather, and at different heights. Electrical state of the Air in broken weather; Origin of Atmospheric Electricity. *Paratonnerres*: How erected, and theory of their action. *Returning Shock*: How explained.

VII. MEDICAL JURISPRUDENCE includes all the applications of Medical Science to legislative, administrative, or judicial proceedings. The one great division constituting Hygiene and Medical Police; the other, Forensic Medicine, to which belongs Toxicology, which itself forms a connection between the two.—*Hygiene*, as it regards the individual, is part of the Practice of Medicine; but it forms the basis of that which concerns the community, and is more properly the subject of Law. Besides the assistance which it may contribute towards obtaining the abatement of *Nuisance*, injurious to health, this involves the consideration of—*a.* Water supply to towns; Contamination of Water; Drainage. *b.* Contaminations of Air: as by the exhalations of organic decomposition—*e.g.*, from *cemeteries*, and the noxious vapours discharged from certain manufactures. *c.* Capacity of Dwellings, Hospitals, Lunatic Asylums, etc.; their supply of solar light, and their ventilation; adaptation of interiors to the healthy accommodation of the largest number of inmates they are to receive. *d.* Local circumstances favourable to the development of disease: *Malaria*; Impure Water supply; Foul Air; Overcrowded Habitations; Diseases incidental to trades and professions; and the means by which it is proposed to arrest such development, or to restrict the spread of zymotic, contagious, or infectious diseases; Mediæval and recent laws on these subjects. *e.* Geographical distribution of diseases. *f.* Endemic diseases. Epidemics. Quarantine, and other preventive measures. *g.* Diseases arising from vitiated food. Diseases communicated to man from the inferior animals. *h.* Vital statistics; Insurance of lives; Probability of Survivorship; Presumption of Survivorship.—2. *Forensic Medicine*: *a.* *Medical Evidence*, either oral or written. *b.* *Thanatology*: Signs of Death; Modes of Death; Sudden Death; Causes of Death; Investigation of Wounds, and of Blood-stains. *c.* Determination of the period that has intervened between the death and the inspection; Judicial Exhumations. *d.* Whether the death was suicidal, altericidal, accidental, or designed. *e.* Criminal Abortion; Infanticide. *f.* *Asphyxia* neonatorum, suspensorum, submersorum, etc. *g.* *Pregnancy*, and questions connected with the generative function and its aberrations. *h.* *Toxicology*. Morbid Poisons; Dissecting wounds. *i.* *Unsoundness of Mind*: Idiocy congenital, or the result of arrested brain growth; Softening of the Brain; Epilepsy; Ebriety; Delirium Tremens; Monomania, and the plea of Insanity in criminal cases; Testamentary incapacity.

NOTE.—In the allotment of these subjects to different Professors, it is to be remembered that, excluding Law and Engineering, there are several in relation to one another. For example, Analytic Chemistry and Toxicology, Morbid Anatomy and Medical Jurisprudence, Meteorology and Chemistry, Meteorology and Medicine, Medicine and Hygiene, Hygiene and Medical Jurisprudence.

It seems then desirable, as so many of these subjects, so to say, run into one another, that, while the general line of Examination is indicated, the Examiners should not be strictly confined to the subjects presumed to belong to their respective Chairs.

CORRESPONDENCE.

THE INFLUENCE OF MILK IN THE PROPAGATION OF CONTAGIOUS DISEASES.

SIR,—A note in your last issue, on the spread of scarlet fever by milk, leads me to hasten the publication of an observation and some experiments which I made in April last on this subject; and I do so partly that I may have some credit for an original observation, and partly to lead others to observe what I have scarcely time now to work out.

In the month of April last I was engaged with my friend Mr. M. E. Naylor, veterinary surgeon, in examining the conditions attending the spread of the foot-and-mouth disease in the West Riding; and, amongst other stations of suffering, we visited the farm attached to the West Riding Lunatic Asylum, under the superintendence of my distinguished friend Dr. Crichton Browne. I had a long conversation with the intelligent farm-bailiff, Mr. Turner; and, amongst other experiences, I tasted the diseased milk. I found that this had a peculiarly disagreeable smoky taste, and at first I rashly set this down as due to the disease of the cows. I found, however, that this smoky taint was by no means confined to the milk yielded by the affected animals; and Dr. Browne told me that he had sometimes occasion to send away milk and cream from his table, which was unfit to use on account of this smoky taste. A little examination further showed us that this flavouring was due to the recent asphalting which had been done in and near the milk-house. It at once flashed across my mind that, if milk acquired this tarry flavour from the absorption of the exhalations of asphalting, it was

just possible that it might also acquire other things which were not so innocuous; and I at once set going a series of experiments which have led me to the belief that milk is an extremely dangerous agent for the spread of contagion. I need not say that I did not try any experiments, as they were all personal, with contagious matter; but by enclosing fresh milk under bell-jars with tar, turpentine, assafoetida, fæces, urine, etc., I found that in most instances the milk became impregnated with the smell, and sometimes with that intensely disagreeable sensation which we know as the "taste like the smell" of the substances employed. The degree to which this was acquired seemed not so much to be in proportion to the amount employed either of milk or of infectant substance, but to the amount and quality of the cream which rose to the surface of the milk; the oleaginous molecules seeming to act as the menstruum of contagion. This is not unlikely, when we remember that the best solvent for nearly all odoriferous principles is oil. Clinically, this question will be most difficult and dangerous to work out. For one, I shall not attempt it. But, if we bethink ourselves of any instances of diseases which might in certain instances be communicated by milk, typhoid fever stands out with fearful probability. Enteric fever is nowhere more common nor more fatal than in country farm-houses, where means for the removal of the dejections are not sufficiently well adapted for security, and much too convenient for safety. Endemics of typhoid fever break out in towns, limited sometimes to a house or particular family, in such way as to defy any explanation by deficiencies of drainage or water-supply. I am certain that I have seen cases that might bear the explanation of milk-poisoning, although I have not had the opportunity of working out the facts—facts which, even if worked out, might be capable of other explanations. The question is a difficult one, but worthy of consideration; and the letter in the *Times* of Thursday last, to which you have alluded as describing the possibility of the spread of the contagion of scarlet fever by means of milk, strengthens the view I am inclined to hold—that such communication is rather common. I am, etc.,

Waterloo Street, Birmingham, Sept. 17th. LAWSON TAIT.

POOR-LAW MEDICAL REFORM.

SIR,—Will you permit me, through your columns, to remind my professional brethren interested in this important question, that Dr. Brady has resolved, aided by a distinguished member of the House of Lords, to introduce a Bill in the next Session of Parliament, having for its object a very considerable reform in the administration of medical relief to the poor, and largely affecting the status of Poor-law medical officers.

In order to strengthen his hands in every possible way, I would appeal to all my brethren, who are in a position so to do, to forward me a statement of any facts which they may consider useful for the demonstration of the inefficiency of the present system, whereby vast sums of money are yearly squandered in dealing with the consequences of sickness, which, applied to its prevention, would result in an enormous saving to the ratepayers. In using any such information, the names of the contributors will be in every case withheld, unless distinct permission to publish them be given.

As it is most desirable to collate any such information without delay, I would urge such gentlemen as are willing to assist, to communicate with me as early as possible. I am, etc.,

33, Dean Street, Soho Square, London. JOSEPH ROGERS.

DOUBLE AORTIC DISEASE.

SIR,—In your JOURNAL for September 3rd, Dr. Hyde Salter has submitted to an elaborate criticism a letter of mine, in which I impugned the accuracy of his reasoning in regard to a case of double aortic disease related by him in your JOURNAL for July 23rd. I have little time and less inclination for controversy; but, as a clinical teacher, I could not allow such an extraordinary case to pass unchallenged, especially when emanating from one so widely known as Dr. Salter; and if in my zeal for truth I have unwittingly offended him, I hope he will accept my apology as heartily as it is given. I do not intend to follow Dr. Salter into all the minutiae of his criticism; partly because I believe it to be unnecessary, but chiefly because data, sufficiently accurate to be made the subject of profitable criticism, are wholly wanting in regard to many of these minutiae. For instance, Dr. Salter objects to that part of my former letter in which I cursorily described what I conceived to be the true relations of the murmurs to each other and to the cardiac systole; viz., that the loud rough systolic bruit was followed by a faint diastolic one, into which it ran; adding, "Any one who looks at my paper will see that this is precisely what it did not

do; it was separated from it by the entire cardiac pause. It was the soft murmur that ran into the rough one, and not the rough one into the soft one; and that makes all the difference." Now, besides that I have great difficulty in conceiving a diastolic murmur that could be separated from its succeeding systolic one by an entire cardiac pause, the words I have italicised are not to be found in the original report of the case. It is true that Dr. Salter calls the one murmur first and the other second; but, as he *nowhere* in the original report states them to be separated by any portion of a cardiac pause, I felt myself quite entitled to reverse his decision and make his first my second, when I found that doing so would explain the case more readily; and this all the more that, with a pulse at 96, it is extremely difficult to make out any difference in the length of the two pauses, especially when both are occupied by murmurs; and a mistake between what is first and what is second is readily made, and is quite excusable.

Again, as to the conduction of murmurs, I have in the course of my experience met with so many exceptions to the ordinary rules that I decline to be bound by them in any exceptional case; especially when, as in Dr. Salter's case, no special means have been adopted carefully to localise their exact position of maximum intensity. I have heard, and that very recently, an aortic systolic murmur of greatest intensity at the left edge of the sternum; and I do know enough about murmurs to make me aware that, without due regard to the position of maximum intensity—sufficient attention to which has not been paid in this case—and without proper attention to their rhythm—that is, to their relation to the different physiological acts which constitute a complete cardiac pulsation, in which I conceive Dr. Salter is in this case completely at fault—no value whatever can be assigned to them.

The one point of importance in this case is to determine what was systole and what diastole. Dr. Salter charges me with being incredulous as to the existence of a diastolic impulse in certain cases; but what I have written bears no such interpretation; I only expressed my incredulity as to the existence of "a diastole with a ventricular impulse, and a systole without one": and both Walshe and Hope, the two authorities quoted by Dr. Salter, support me in this incredulity. Walshe says: "In certain states of disease, the shock (that is the heart's impulse) becomes *double*, the *added* impulse being systolic or diastolic" (3rd ed., p. 32); and Hope tells us that the sinking back of a hypertrophied heart terminates occasionally in a jog or shock, to which he called attention in his first edition under the name of back stroke, but which he subsequently termed a diastolic impulse (3rd ed., p. 67); and that there may be no mistake as to his meaning, he adds (p. 272), "a strong, slowly heaving impulse, then, is the principal sign of simple hypertrophy; and the affection may be known to be greater when the [systolic] impulse is followed by a diastolic impulse". I have inserted the word systolic to make the obvious meaning still more plain. Dr. Salter is the only man, so far as I know, who has attributed the diastolic character to a *single* impulse occurring but once during a cardiac pulsation; and he has done so solely because this single, slow, heaving impulse alternated with the radial pulse—"no one watching it, or feeling it, or listening to it, unchecked by the pulse, would resist the conviction that it was systolic. . . . No case could better illustrate the importance of checking the cardiac movements by the arterial movements". Dr. Salter is aware that the radial pulse is retarded in cases of aortic regurgitation, once in fifteen times, he says; in every case, says Henderson, if properly sought for; and I agree with him: yet in this momentous case, which, if true, would revolutionise our ideas of cardiac physiology, no pains were taken to ascertain whether the radial pulse was retarded or not; no comparison was instituted between the relations of the cardiac pulse to the cardiac impulse on the one hand, and to the radial pulse on the other; but Dr. Salter prefers to consider this single heaving impulse as diastolic *solely* because it alternated with the radial pulse. Dr. Salter believes that the systole of a dilated, hypertrophied heart, more than double the weight of a healthy one, may be imperceptible; and yet that the same heart may, by its diastole, give an impulse so forcible, and in every other respect so undistinguishable from a systolic impulse, that it can only be recognised to be diastolic by its relation to the radial pulse—a relation which even he acknowledges to be occasionally vitiated in cases of disease similar to the one under consideration, yet which in this particular (and most important) case he has taken no pains to ascertain and verify. Is this reasonable? or is it not more consistent with correct ratiocination to conclude that his reasoning—whatever his belief may be—leads to the assumption that a ventricular contraction may be systolic or diastolic according to its relation to the pulse, and that, therefore, on his own showing, his interpretation of the case is absurd?

I am, etc.,

GEORGE W. BALFOUR.

21, Alva Street, Edinburgh, September 8th, 1870.

ASSOCIATION INTELLIGENCE.

EAST YORK AND NORTH LINCOLN BRANCH.

THE half-yearly meeting of the above Branch will be held at the Angel Hotel, Brigg, on Wednesday, September 28th, 1870, at half-past three o'clock precisely: KELBURNE KING, M.D., President, in the Chair.

Members of the profession are invited to attend both the meeting and the dinner. Dinner at 5 o'clock. Tickets, 5s. 6d.

ROBERT H. B. NICHOLSON, *Honorary Secretary*.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE September meeting of the members of the above District will be held at the Royal Sea-bathing Infirmary, Margate, on Thursday, September 29th, 1870, at 2 P.M.

Dinner will be provided at the Cliftonville Hotel at a quarter to five punctually. Charge, 5s., exclusive of wine.

CHARLES PARSONS, M.D., *Honorary Secretary*.

2, St. James's Street, Dover, September 20th, 1870.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Royal Clarence Hotel, Bridgwater, on Thursday, October 13th, at 5 P.M.; J. CORNWALL, Esq., of Ashcott, President, will be in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, September 13th, 1870.

SOUTH MIDLAND BRANCH.

THE fourteenth autumnal meeting of the above Branch will be held at Stony Stratford, Bucks, on Tuesday, October 18th.

Gentlemen who intend reading papers or cases, are requested to furnish the names or titles, as early as possible, to

J. M. BRYAN, M.D., *Honorary Secretary*.

Northampton, September 20th, 1870.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE first meeting for 1870-71 was held at Rochester on September 13th; WILLIAM BELL, Esq., in the Chair.

The next Meeting was appointed for Maidstone, on November 8th, with Mr. Matthew Adams for Chairman. Dr. Frederick J. Brown was elected Acting Honorary Secretary until May.

New Member.—James Lodge Wilson, Esq., was elected a Member of the Association and of the Branch, subject to the rule respecting confirmation at the Branch Annual Meeting.

Communications.—1. Dr. WHITE, of Snodland, exhibited a Photograph of a Fœtus born without extremities. A discussion took place relative to the circumstance of this being a case of arrest, some maintaining that it was intrauterine amputation.

2. Dr. MONCKTON exhibited specimens from the femur, ilium, and cranium of a case of Mollities Ossium, which had been under the care of Dr. Owens, of East Farleigh. The patient was a female, aged 23, of dissolute life till 19. She then married, and was confined prematurely four times; the children were all dead. The last confinement took place in November 1868, at seven months, with twins. She was then ailing; six weeks afterwards, she fell and fractured the left thigh about two inches below the trochanter. She remained in bed five months, then moved about imperfectly, with crutches and assistance, for two months. After this, she fell again, and broke the other thigh, keeping her bed thenceforth till death in July 1870. As is usual in this disease, the sufferer was a female; but her age was only twenty-three, which is younger than usual. She died apparently of simple exhaustion. All the bones were softened; the femur was cut through easily with a scalpel, which could also be plunged deeply into the vertebrae, ilium, and parietal bones. The clavicle was cut asunder, but less easily. Angular curvature of the spine existed, and the thorax was flattened on each side, the sternal cartilages being carried upwards to a point. The shape of the pelvis was not changed, nor was its diameter intruded on. One humerus broke in the surgeon's hand on the application of a very

slight force. The ilium could be bent like stiff brown cardboard. Where the fracture of the femur had occurred, eighteen months before, a false joint had been formed, wholly by fibrous growth around the bone; the ends of the latter had not even been rounded off, nor any attempt made at a callus or osseous repair. The medullary canal was very large, and the bone-substance thin; the medulla itself was diffuent, but reddened only in the neighbourhood of the injury; that within the shaft elsewhere being of natural colour. The cranial bones appeared thickened by a slight loosening of their textures. No scrofulous or syphilitic cicatrices could be found; the teeth were well formed and sound. The muscles, though wasted, were firm and of good colour; and the viscera generally healthy. Constipation had been a great trouble during life, and the whole colon was, after death, found crammed with scybala.

3. Mr. CHURTON, of Erith, read a case of Jaundice arising from anxiety, which was cured by bromide of potassium.

4. Dr. J. BRAXTON HICKS exhibited specimens and detailed cases of Extrauterine Pregnancy and of Ovarian Tumour.

Dinner.—The members and visitors dined at the Bull Hotel.

OBITUARY.

WILLIAM D. CHOWNE, M.D.

Dr. W. D. CHOWNE died on Saturday last at Withern, in Lancashire, at the age of 79. He was for many years connected with the Charing Cross Hospital—we believe nearly from its commencement—holding the posts of Physician and Lecturer on Medicine and on Midwifery. He was also a Fellow of the Royal College of Physicians, a Member of the Royal Medical and Chirurgical Society, a Vice-President of the Epidemiological Society, and a Fellow of the Medical Society of London, in the management of the affairs of which he took an active part, and of which he was President some years ago.

RICHARD WELBANK, Esq.

Mr. RICHARD WELBANK, who had long retired from the active practice of the profession, died on August 21st, at Kilburn, where he had resided for several years. He was born in 1796 in the Tower, where his father, who held an appointment under Government, had a residence in connection with his duties in the Ordnance Office. He received his general education at the Charterhouse, and there acquired the taste for classical reading, which he retained through life. He was articled at the College of Surgeons as a student under his uncle—one of a former class of surgeons who, being members of the College, dispensed their own medicines and surgical appliances, yet excluded themselves from what is now known as general practice, by not attending in cases of midwifery. His professional education was received at St. Bartholomew's Hospital, under the superintendence of Mr. Abernethy.

After acting as dresser under Mr. Abernethy, he became House-Surgeon on the nomination of Mr. Vincent. During the time he held the office, he pointed out, as the result of his reading and observation, that the sloughing phagedæna of the civil hospitals, which prevailed severely in the foul wards among young and otherwise healthy subjects, was the same disease as the hospital gangrene of the military hospitals, attacking the wounds and operations in the soldiers after a battle. He suggested that the treatment which had been found successful in the army should be adopted at home—namely, the complete destruction of the diseased parts by the free application of caustic—the potential rather than the actual cautery; and that nitric acid, from its greater affinity for animal matter, was the best agent. Mr. Vincent at first refused to allow its use; but he was at length induced, in a case which seemed hopeless, to allow the application of an equal part of the acid with water. Happily the sloughing was checked, and the patient recovered. In subsequent cases, the pure acid was used. The application of the pure acid was found to be less painful than when diluted; the disease was cured, and sloughing phagedæna ceased to be a cause of terror in the hospital. Before the introduction of this treatment, Mr. Abernethy had been known, in going round the wards, to clasp his hands

and to mutter, as he passed on to the next bed, "I don't know what to do". Constitutional treatment had failed.

Mr. Welbank entered on a private practice in Chancery Lane, highly respectable in its character, and sufficiently remunerative for the wants of a man who, by natural disposition as well as by choice, was a recluse and a scholar. At that time, public appointments in the profession were neither numerous nor easily obtained; they were confined to the few who possessed either wealth or influence. None were open to Mr. Welbank. Unhappily for his own reputation and advancement, his engagements with his uncle hindered him from accepting an offer by Mr. Abernethy, who, finding that his health began to fail, was desirous of obtaining the services of Mr. Welbank as his general assistant in private practice.

He took an active part in the affairs of the Medical and Chirurgical Society, which then held its meetings in Lincoln's Inn Fields; and he contributed two papers to the *Transactions*: one, a Report of the cases of Sloughing Phagedæna, which had been treated with nitric acid, according to his plan; the other, suggestions for investigating the different forms of Venereal Diseases. Adopting the distinctions by Evans and Carmichael, of simple and phagedænic ulcers, he proposed to restrict the term syphilis to the sore which is invariably followed in its secondary effects by a squamous eruption. This suggestion he afterwards brought under notice in a separate volume. These, and an English edition of Frick's work on the Eye, were the only contributions which he made in his own name to the literature of the profession.

When the Council of the College of Surgeons, in the interest of the medical officers of the large hospitals in London, refused to acknowledge the instruction given at the county hospitals or by private lecturers, as part of the recognised curriculum of education, Mr. Welbank joined with others of his standing in supporting Sir William Lawrence in the attempt to obtain from the Council a revision of their regulations, and his name was one of those attached to the public notice calling a meeting of members of the College to consider the question.

His name was placed in the first list of Fellows of the College under the Charter of 1843; and the following year he was elected into the Council—being the first member chosen by the Fellows. However honourable as a mark of the approbation of his professional compeers, this latest honour came too late in life to be of any value as an object of personal ambition; "but", said he to the Council, after taking his seat, "I do value it extremely, as it may be the means of enabling me to extend to the younger members of the profession that encouragement of which, for thirty years of my professional life, I have so much felt the disheartening want myself." He was re-elected on the expiration of his term of office, but did not retain his seat long. Under a consciousness of failing health, he soon afterwards retired from practice.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received his certificate to practise, on Thursday, September 15th, 1870.

Ringer, Beverley Stewart, Metropolitan Free Hospital, City

As an Assistant in compounding and dispensing medicines.

Butterworth, Albert, Halifax, Yorkshire

The following gentlemen also on the same day passed their first professional examination.

Lee, Alfred Robert, University College

Popham, Francis W. H., University College

Shaw, Josephus, Guy's Hospital

Wacher, Frank, St. Bartholomew's Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

CHELTENHAM UNION—Medical Officer for District No. 4: applications, 28th; election, 29th.

CLONMEL UNION, co. Tipperary—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the St. Mary's Dispensary District: Oct. 4th.

DREADNOUGHT INFIRMARY, Greenwich—Surgeon.

ENNISKILLEN UNION, co. Fermanagh—Medical Officer for the Lisbellaw Dispensary District: 30th.

HOLYWELL UNION, Flintshire—Medical Officer for the Whitford No. 2 District.

KELLS UNION, co. Meath—Medical Officer for the Nobber Dispensary District: October 7th.

KIDDERMINSTER INFIRMARY—House-Surgeon and Secretary: applications, Oct. 5th; election, 12th; duties, early in November.

KILMUIR, Parish of, Isle of Skey—Medical Officer.

KINGSBRIDGE UNION, Devon—Medical Officer for District No. 2; applications, 30th; election, Oct. 1st.

LEICESTER UNION—Medical Officer for District No. 3.

LEICESTER PROVIDENT DISPENSARY—Medical Officer: applications, Oct. 17th; election, 20th.

LIVERPOOL DISPENSARIES—Honorary Medical Officer, North Dispensary: applications, 28th; election, Oct. 6th. Two Assistant Resident House-Surgeons: applications, 28th; Medical Board, 29th.

MIDDLETON UNION, co. Cork—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Cloyne Dispensary District: 29th.

MORVEN, Argyleshire—Parochial Medical Officer: applications, Oct. 1st.

NARBERTH UNION, Pembrokeshire—Medical Officer for District No. 2: applications, 24th; election, 26th; duties, 29th.

NORTHALLERTON, Yorkshire—Surgeon to the Gaol: applications, Oct. 8th; election, 18th.

NORTHUMBERLAND COUNTY LUNATIC ASYLUM, Morpeth—Medical Officer: applications, Oct. 3rd.

RETFORD GENERAL DISPENSARY—House-Surgeon and Apothecary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester—Assistant-Surgeon: Oct. 13th.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Medical Officer for Out-Patients: applications, 30th.

SLEAFORD UNION, Lincolnshire—Medical Officer for the Blankney District.

STOURBRIDGE DISPENSARY—Surgeon and Secretary: applications, 26th.

SURREY DISPENSARY, Great Dover Road—House-Surgeon: applications, 26th; Committee, 27th; election, Oct. 6th.

UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine: applications, Oct. 1st.

WATERFORD UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Tramore Dispensary District: 26th.

WESTMINSTER HOSPITAL—House-Physician: applications, Oct. 1st; election, 11th.

WORCESTER AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION—Medical Officer: applications, Oct. 11th; vacancy, Christmas.

YELL and FETLAR, Islands of, Shetland—Parochial Medical Officer: applications, Oct. 1st.

WEST RIDING LUNATIC ASYLUM, Wakefield—Clinical Clerk: applications before 30th inst.

MEDICAL APPOINTMENT.

Names marked with an asterisk are those of Members of the Association.

FUSSELL, E. F., M.B., appointed Assistant-Physician to the Sussex County Hospital.

BIRTHS.

GRAHAM.—On September 20th, at Weybridge, the wife of *A. R. Graham, M.B., of a daughter.

HARRISON.—On September 8th, at Ambleside, the wife of *R. Harrison, Esq., Surgeon, of a son.

HAYWARD.—On September 7th, at Cambridge House, Ealing, the wife of *H. Howard Hayward, Esq., of Harley Street, of a son.

LOWE.—On September 15th, at Lincoln, the wife of *G. M. Lowe, M.D., of a son.

MARRIAGES.

ALLEN, William, Esq., Surgeon Bengal Army, to Mary Frances, daughter of C. F. THURSTON, Esq., of Machynlleth, at Pennal, on September 15th.

BOWERMAN, R. J., Esq., of Uffculme, Devon, to Alice Margaret, daughter of C. LINGEN, M.D., of Hereford, on September 15th.

LAWRANCE, E. A., Esq., Surgeon Indian Army, to Margaret Drysdale, daughter of J. DUNCAN, Esq., of Aberdeen, at St. George's, Hanover Square, on Sept. 15.

*LONG, Mark, M.D., of Barking Road, Essex, to Sophia Amelia, eldest daughter of *James Cooper, Esq., Surgeon, of Cromer, on September 15th.

DEATHS.

CHOWNE, William D., M.D., of Hyde Park Place, at Withern, Lancashire, aged 79, on September 17th.

PEARSON.—On September 9th, at Shotley Bridge, Durham, aged 5 months, Thomas Darrel Oakes, second son of T. R. Pearson, L.R.C.P.Ed., of Stowmarket, Suffolk.

ROOKE, Henry T. L., M.D., aged 46, for twenty-two years on the Medical Staff of the Seamen's Hospital Society, at the Seamen's Hospital, Greenwich, aged 46, on September 17th.

PHYSIOLOGY AND VIVISECTION.—At a meeting of the General Committee of the British Association on Tuesday, the following resolution was proposed by Mr. Samuelson, seconded by Dr. Rolleston, and carried: "That the Committee of Section D be requested to draw up a statement of their views upon physiology and experiments in their various bearings, and that this document be circulated among the members of the Association; that the said Committee be further requested to consider from time to time whether any steps can be taken by them or by the Association which will tend to reduce to its minimum the suffering entailed by legitimate physiological inquiries, or any which will have the effect of employing the influence of this Association in the discouragement of experiments which are not clearly legitimate on live animals."

BRITISH PHARMACEUTICAL CONFERENCE.—The seventh annual meeting of the British Pharmaceutical Conference was held last week, in the Royal Institution, Liverpool, under the presidency of Mr. W. W. Stoddart. A large number of new members—about 920—were elected. The report of the Executive Committee announced the donation of fifty guineas by Mr. T. H. Hills, with the suggestion that it should be employed in stimulating pharmaceutical education. The President delivered an address, which was principally devoted to a review of the progress of chemistry during the year. He believed that the Pharmacy Act, obtained two years ago, had worked well, and that benefit was to be expected from it in the future.

THE BABY-FARMING CASE.

THE trial of the two women, Waters and Ellis, on charges of causing the death of children under the baby-farming system, commenced at the Central Criminal Court on Wednesday. One case only was gone into at first. The trial lasted over Wednesday and Thursday. On the latter day, a verdict of "Not guilty" was returned as regarded the prisoner Ellis, the trial of the other woman not being completed. The woman Ellis was retained in custody, as there were other charges against her.

EDUCATIONAL VACCINATING-STATIONS.

IN order to provide for the granting of those Special Certificates of Proficiency in Vaccination, which, under the Regulations of the Privy Council, are required to be part of the Medical Qualification for entering into contracts for the performance of Public Vaccination, or for acting as Deputy to a Contractor, the following arrangements are made.

1. The Vaccinating-Stations, enumerated in the subjoined list, are open, under conditions appointed by the Privy Council, for the purposes of teaching and examination.

2. The Public Vaccinators officiating at these Stations are authorised by the Privy Council to give the required Certificates of Proficiency in Vaccination to persons whom they have sufficiently instructed therein.

3. The Public Vaccinators, whose names in the subjoined list are printed in *italic letters*, are also authorised to give such Certificates, after satisfactory examination, to persons whom they have not themselves instructed.

Cities and Towns.	Places used as Educational Vaccinating-Stations.	Public Vaccinators authorised to give Certificates of Proficiency.	Days and Hours of attendance.
London	PRINCIPAL STATION: Surrey Chapel, Blackfriars Road.	<i>Mr. J. F. Marson.</i>	Tuesday, Thursday; 1.
—	NORTH-W. STATION: 7, Grove Place, Lisson Grove.	<i>Mr. J. G. Gerrans.</i>	Monday; 2.
—	WEST STATION: 9, St. George's Road, Pimlico, S.W.	<i>Dr. E. L. Webb.</i>	Monday; 10.
—	EAST STATION: 1, Well Street, Well-close Square.	<i>Mr. W. J. Lewis.</i>	Tuesday; 10.
—	NORTH STATION: Tottenham Court Chapel, Tottenham Court Road.	<i>Mr. W. E. G. Pearse.</i>	Monday, Wednesday; 1.
—	SOUTH-W. STATION: 2, Regent Place, Horseferry Road.	<i>Mr. W. E. G. Pearse.</i>	Tuesday; 2.
—	STRAND STATION: Charing Cross Hospital.	<i>Mr. R. W. Dunn.</i>	Monday; 10.
Birmingham	STATION 1: School Rooms, 27, Old Meeting Street.	<i>Dr. E. Robinson.</i>	Monday; 11.
—	STATION 2: Working Men's Mutual Improvement Society, Barr Street.	<i>Dr. E. Robinson.</i>	Tuesday; 11.
—	STATION 3: St. Mark's School Rooms, St. Mark St.	<i>Dr. E. Robinson.</i>	Wednesday; 11.
—	STATION 4: Islington Assembly Rooms, 42, Broad St.	<i>Dr. E. Robinson.</i>	Thursday; 11.
Bristol	The Public Vaccination Station, Peter St.	<i>Dr. H. A. P. Robertson.</i>	Wednesday; 10.
Exeter	Odd Fellows' Hall, Bamfylde Street.	<i>Mr. C. H. Roper.</i>	Thursday; 3.
Leeds	23, Burmantofts Street.	<i>Mr. F. Holmes.</i>	Tuesday; 3.
Liverpool	4, Oldham Street.	<i>Mr. A. B. Steele.</i>	Thursday; 2.
Manchester	159, Rochdale Road.	<i>Mr. E. S. Guest.</i>	Monday; 2.
Newcastle-upon-Tyne	11, Pilgrim Street.	<i>Mr. G. C. Gilchrist.</i>	Tuesday; 2.
Edinburgh	The Royal Dispensary.	<i>Dr. W. Husband.</i>	Wednesday, Saturday; 12.
Glasgow	The Hall of the Faculty of Physicians and Surgeons.	<i>Dr. J. Dunlop.</i>	Monday; 12.
—	The Royal Infirmary.	<i>Dr. R. D. Tannahill.</i>	Monday, Thursday; 12.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

To PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE CONTAGIOUS DISEASES ACTS.

SIR,—I notice in your issue of last week some remarks made by Dr. Rumsey relative to the Contagious Diseases Acts; as they are calculated to mislead your readers, I shall feel obliged if you will allow me to contradict them. Dr. Rumsey says that the English system differs from the French because in this favoured isle there is no registration of the women brought under the operation of the Act. This is one of the false facts which have been industriously circulated, and no doubt Dr. Rumsey, like many more, has been misled. The truth is, that the essence of the system consists in the registration and periodical examination of the women, in proof of which permit me to refer to a document which is at present held in *terrorem* over unfortunate women in subjected districts, in order to force them on to the register. The ordinance to which I allude emanates from the Secretary of State for War, and provides "That a complete register shall be kept by the police, in all the districts to which the act applies, of all the women that come under its provisions." They are further to be told of the *penal consequences* of not submitting voluntarily to be registered and periodically examined. Dr. Rumsey further remarks that the women are not licensed under this Act. Now, they are permitted, nay, encouraged to practise under certain conditions. The Government women are called good girls, they give no trouble to the police, and set a good example to recalcitrants; like licensed hawkers, they regard with great jealousy girls practising illegally, that is, without being registered; and in common with brothel-keepers, are valuable allies to the police in bringing outsiders under the regulations. Now, what is this but licensing? If I am permitted to practise as a physician, provided I submit to examination and pass satisfactorily, and am deprived of all privileges if I do not, am I not licensed? Exactly the same remark applies to the women, and it is simply an insult to common sense to pretend otherwise.

Dr. Rumsey says, moreover, that no clean bill of health is given to the women here as in France. Now, according to the original English Act, the surgeon was obliged to do this, saying that the woman was free from contagious disease. At present, exactly the same document is supplied to the women on both sides of the Channel, and the surgeon is bound by the Act to supply it, namely, a piece of paper stating the date of the last examination and the time of the next. This is, of course, a clean bill of health for the intermediate period, and I should like to know why the women are not to have it. Surely it is very inconsistent of Government to disinfect prostitutes for the use of soldiers, and then deprive the soldiers of all evidence as to what women have undergone the process.

In fact, sir, the French and English Acts are essentially the same, and alike infamous. The only difference that I can discover is, that the English law is infinitely more atrocious than the French, inasmuch as it sanctions the registration as common prostitutes of girls under age and little children, notwithstanding their parents' reclamations, wives in spite of their husbands, kept women in spite of their keepers, none of which things have ever been tolerated by the French administration. As to the indecent discussion, it has been rendered necessary by the one-sided conduct of the press and the meddlesome *doctrinaires* who, in originating this obscene law, are, in my opinion, guilty of far greater indecency than those who merely proclaim their indignation in order to be rid of it.

I am, etc.

CHARLES BELL TAYLOR, M.D., F.R.C.S.E.

Nottingham, August 1870.

P.S.—As a sanitary measure, I am prepared to prove that the measure is utterly futile.

*** Mr. R. Craister Bramley, Leeds, wishes it to be known that he has received, for the second time, a document asking him to state that he records his solemn protest, etc., against the extension of the Contagious Diseases Acts, and that he has returned it, stating that, on the contrary, he considers the measure fraught with a large amount of benefit, and calculated to do much good. He adds that, on returning the document as requested, with the necessary alterations to express his opinion, he has not felt bound to pay the postage.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

THE CARBOLIC ACID TREATMENT.—Mr. H. M. Morgan (Lichfield) asks: "Whether there is any published account, in the form of a pamphlet or otherwise, of Mr. Lister's usual hospital treatment by carbolic acid, as such would be very acceptable to many who cannot go to see his treatment for themselves. Where can his plasters and dressings be obtained?"

STUDENS (Middlesex Hospital).—Yes.

MEDICAL ETIQUETTE.

IN forwarding the subjoined correspondence, Dr. Lownds states that the case which gave rise to it was a simple wound of the arm from the horn of a bull. After having been cleansed with a carbolic acid lotion, it was united by three wire sutures, and dressed with lint soaked in carbolic acid lotion. This was again applied next day through the dressings by the patient. On the third day, or two clear days after the accident, Dr. Lownds again dressed it, and nothing could appear more satisfactory. No pus at all exuded, nor was there pain. The correspondence has relation to the Saturday; on the morning of which day the patient was seen by Dr. Lownds's assistant, Dr. Jackson, who saw no tumour, nor was pain complained of.

Egham Hill, Monday Evening.

My dear Sir,—I am told that, on Saturday last, you visited one of my patients, and, at his request, undid the dressings on Leggett's arm, and prescribed a different treatment to what I had ordered. I trust you will favour me with an explanation of this, as I believe that the only way in which medical men can work together is by scrupulously observing the rules of medical etiquette.

Yours faithfully,

T. M. LOWNDS.

G. P. Heyward, Esq., Charnhill Hurst.

Charnhill Hurst, Englefield Green, Staines, August 31st, 1870.

Dear Sir,—It is true that, after a second urgent application from Mr. Geo. Leggett, I visited him on Saturday last; and it is also true that, finding him to be suffering severe pain from a fluctuating tumour in the upper arm, I removed, at his request, the overtight bandage, and gave exit to about half a teacupful of fetid pus, to his astounding relief. I directed warm fomentations, and the application of a poultice; and I desired him to communicate the fact to you at your next visit. I took this course from motives of humanity; and if any further justification be necessary, I may plead that I have attended Leggett and his family for twenty-five years. He pressed me strongly to take charge of the case; but, feeling perhaps less solicitous about practice than in past times, I advised that the future treatment should be confided to you; and I am bound in truth to add, that Leggett unwillingly accepted my advice. If, when called to the case, you had bestowed a thought upon the matter, it might have occurred to you that some one or other practitioner had previously attended Leggett (an old resident in the parish); but I am apprehensive that an overweening self-confidence may have led you to infer that you were deliberately preferred, and not summoned in a most serious emergency. I can recall three instances where you have attended patients of mine under the like circumstances, without complaint from me. You retained two of these cases until their deaths relieved you from further attendance; and you relinquished the third not without reluctance. This conduct may or may not be scrupulously correct; it discloses, however, a warm regard for your own interests, real or imaginary. I may supplement these details by stating that, about three weeks since, I was requested by ... of ..., to visit her mother, Mrs.; and I declined, upon the ground that you had already been consulted by Mrs. and other branches of the family. If you had been equally forbearing and less sensitive, there would have arisen no occasion for crimination and recrimination upon the question of what you infelicitously term medical etiquette.

I am, yours faithfully,

G. P. HEYWARD.

Dr. Lownds, Egham Hill.

Egham Hill, Thursday, 1st September, 1870.

Dear Sir,—I regret that you should have looked upon my note of Monday as a personal rather than one due solely to professional grounds. I avoid replying to any of your personal remarks. What I consider objectionable was in your attending Leggett and opening his arm, as dressed, without being prepared to take over the case, or communicating to me or my assistant, Dr. Jackson, on the subject. The distance to my house was so short, that no delay could have taken place. Until I got your note, I was quite unaware that before Saturday last ... had ever been attended by you. Some of his family sent for medical attendance to me as early as January last.

As far as I know, I have only attended at two places where you were in attendance, or had been so lately: one at Thorpe, about which I saw you next day; and one in the Sand-pits, where I was called in, and not told that the child had been under medical treatment, until I had examined it, and asked who had been attending lately, or if they had medical advice. The reply was, that you had been, and that you had not seen the child for some days, and that they wished to make a change. I attended for some days (three, I think); and after the first day, they did not send for medicine, and on the third day they told me that they had decided on continuing under you. I went away; and, after the child's death, I spoke to you about the medical features of it, and you expressed no dissatisfaction.

My only wish has been to work comfortably with my brother practitioners here; and I have ever given them what assistance I could. If you think I have complained unreasonably, I shall be glad to submit this correspondence to any of the medical journals, or to the British Medical Association. I only wish points settled that may otherwise produce unpleasantness.

Yours faithfully,

George P. Heyward, Esq., Charnhill Hurst.

T. M. LOWNDS.

Charnhill Hurst, Englefield Green, Sept. 1st, 1870.

Dear Sir,—I have to acknowledge the receipt of your letter of this day's date. I demur to the assumption of "Dr." which you claim for your assistant (as at present advised); albeit, I attach no importance to the designation which is often obtained without real merit; however, the unreasoning may be influenced by the tinkling cymbal. I conclude that the profession, amid their senseless jealousies and heart-burnings, will soon come to dictate to the public whom they may and may not employ; and therefore I can have no objection to your submitting our correspondence to the public and medical journals, or to the British Medical Association, in order that the laity, as contra-distinguished from the profession, may fairly judge the matter at issue.

I am, yours faithfully,

Dr. Lownds, Egham Hill.

G. P. HEYWARD.

NOTICE.—It is requested that all Letters, etc., intended for the Editor or the Publisher of the BRITISH MEDICAL JOURNAL be addressed solely to the Office, 37, Great Queen Street, London, W.C.

R. B.—The subject is noticed in another page.

THE TREATMENT OF DIARRHŒA.

SIR,—I have read, with much surprise, the statement contained in the opening paragraph of Dr. Johnson's letter in your issue of the 20th instant; and I cannot but think that some explanation of "the very unusual course adopted by the Registrar-General" is due, not only to the profession, but to the public at large.

While fully recognising the therapeutical value of sulphuric acid in certain cases of chronic or passive diarrhœa, and other discharges depending on a relaxed and debilitated condition of the intestinal mucous membrane, I believe that the indiscriminate use of it, or any other astringent, *ab initio*, in the treatment of our common summer or autumn diarrhœa, cannot be too strongly deprecated. There is probably no other disorder to which we can so stringently apply the rule, "treat causes rather than symptoms"; and it is this point that not only the public in general, but many members of the profession, appear to misapprehend. Thus, a man gets an attack of the "bowel complaint", and naturally thinks he had better have it cured. He applies to a surgeon, who gives him, perhaps, chalk mixture, with catechu and opium; while another, perhaps, would give him sulphuric acid and opium—diametrically opposite treatment, and therefore irrational; for if the chalk will do good, the acid must necessarily do harm, and *vice versa*. Now, in most cases, both will do harm if given *ab initio*. They defeat nature's indications; the one by shutting up offending matter, the other by causing additional irritation. The apparent good often produced by the latter (sulphuric acid) results from the large doses of opium given, which by their anodyne effect mask the irritation existing, just as in the case of acute tropical dysentery, where opium was formerly largely given, producing apparent ease and amendment, while inflammation, ulceration, and perhaps sloughing, were going on unchecked.

In practice, we recognise at least six forms of diarrhœa, each having its special causes, symptoms, and treatment; and in only two of these are we justified in using astringents *ab initio*, viz., colliquative diarrhœa from bowel ulceration, and the purely passive diarrhœa of old people, where the shock and drain will prove rapidly fatal if not checked; and it is in this form especially that sulphuric acid and opium often act admirably, the sulphuric acid as a tonic and astringent, the opium (in half-grain doses) as a stimulant and astringent.

The form most rife this season is either simple diarrhœa from irritant ingesta, or bilious, choleraic or autumnal diarrhœa (plum cholera), and both of these are to be regarded as efforts of nature to get rid of irritant matter in the small intestine, whether that be indigestible food, or redundant and vitiated bile, or "acescent" fruit. Here, by giving astringents, we simply thwart nature, and shut up in the intestines what she is trying to expel, if we will only let her, while we run the additional risk of setting up muco-enteritis. On the contrary, if we give castor-oil, followed by warm rhubarb draughts, we not only assist and guide nature's efforts, but also promote a secondary astringent effect by the tannic acid in the rhubarb, thereby preventing the mucous membrane from being left in a relaxed and debilitated condition, and so obviating the supervention of the chronic or passive form.

I have used the following formula extensively in India. R. Olei ricini 3i-iv; spiritus chloroformi (Ph. B.) 3i; liquoris opii sedativi M. x; olei cinnamomi M. iii; spiritus vini gallici 3ii; aquæ ad 3iss. M. Fiat haustus, to be taken at once, and repeated in an hour or two, if required. In cases of disordered bowels and diarrhœa, but especially those associated with cholera malaise, when that disease was prevailing, as it generally did, endemically, I found it act literally like a charm, marked relief being usually given to the urgent symptoms by the first dose, and more than a second being seldom required; the subsequent treatment being as indicated by the progress of the case, as warm rhubarb draughts or salines if febrile reaction supervened; or the various mineral or vegetable astringents if a tendency to the chronic or passive form was established.

I can personally speak as to the relief given by the above formula, having more than once experienced it myself; and I remember particularly an outbreak of choleraic diarrhœa on board the steamship *Candia* in the Hooghly, when I had recourse to it, for the first time, with most favourable results.

I do not, of course, mean to extol castor-oil as an universal specific in all cases of diarrhœa, though I believe that even such would be an error on the safer side. I simply give the result of my experience, limited though it may have been; but somewhat similar testimony is given by Surgeon-Major Farquhar (*Medical Times and Gazette*, July 30th, 1870); and I may add that the same opinion has been more than once expressed to me by the distinguished First Physician of Medical College Hospital, Calcutta, to whose friendly precepts I principally owe the acquirement of what little knowledge I possess on the subject.

I am, etc.,

C. STENNETT REDMOND,

Formerly Surgeon Peninsular and Oriental Steamship *Candia*.
Shrewsbury, August 23rd, 1870.

WEAK INTELLECTS.

SIR,—Will you be good enough to inform me, through the medium of your JOURNAL, if there is any establishment in London or elsewhere for the training of boys of weak or deficient intellect. I have a son, about 18, to whom I have given a good education; but, up to this time, he exhibits not the least capacity for business. He has a very good memory, but cannot count money; is very fond of music, and is a tolerable executant, but is totally destitute of will or determination; and cannot resist boys of half his age, but submits to anything they tell him to do. He is of very good temper, and is willing to do anything that lies in his power. I may just say, that we attribute this deficiency to an injury he received from a severe fall down the cellar-steps when about eighteen months old.

September 1870.

I am, etc.,

J. H.

DR. M. (Edinburgh) will see by last week's number, that steps are being taken to procure some organisation of the Volunteer Medical Staff.

ENEMA APPARATUS.

SIR,—I can confirm what Dr. Robertson says, as to the convenience of the form of enema apparatus which he recommends; but it has been long in use in many of the Hydropathic establishments. As, however, economy is its chief recommendation, it ought to be put up for half-a-crown or three shillings by any tinman; using, of course, plain materials—a simple can, an elastic tube, gas cock, and ordinary enema-tube. If Dr. Robertson would attach to it a moveable tube, with a very small rose made of the finest perforated zinc, he would have one of the most powerful apparatus I know of, to treat local inflammation, ulcers of the leg, abscess about the rectum, hæmorrhoids, ophthalmia, etc.

I am, etc.,

JAMES MARTIN.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

X.—The letter was too personal to appear.

THE SANITARY STATE OF JERSEY.

THE notice in the JOURNAL of September 3rd, in reference to Dr. Lankester's opinion of the defective sanitary state of St. Helier, has, we regret to find, caused offence to a local paper (the *Jersey Express*), which, in an article headed "Slander and Slanderers", quotes our article, and accuses this JOURNAL of reproducing a slander of some years' standing on the sanitary state of St. Helier. The writer asserts that Dr. Lankester's estimate of the death-rate is wrong, and denies that the water-supply is scanty and defiled. As to the mortality, the following is the argument adduced to show that it is not so high as represented by Dr. Lankester.

"Very many die here of diseases contracted in other parts, who are sent to this island, *en dernier ressort*, by medical men who feel their inability to do anything more for their patients. We think we may safely set these down as one per cent., or 10 per 1,000 of those who die here, which would reduce the *real* death-rate at St. Helier to 10, and in the island generally to 12, per 1,000. To these may be added those who die of 'fast living', that is, from causes over which no sanitary arrangements, however well-devised or efficiently carried into effect, can have the slightest control; and this will have the effect of further reducing the death-rate figure by a considerable amount."

We confess that we cannot follow the arithmetical computation in the second sentence of this paragraph; and we have much difficulty in imagining that deaths from "fast living" can preponderate so greatly in Jersey over those in other places as to make a considerable disturbance of the mortality returns. The *Express* alleges that the sanitary condition of the town has been represented as bad, for the purpose of injuring the island. With this motive, we have nothing whatever to do. We assure our contemporary that we have no other desire in regard to Jersey than to see it healthy and prosperous; but, if unfavourable statements regarding the health of a place come before us on the strength of such an authority as Dr. Lankester is allowed to be, it is our duty to call attention to them, in the hope of contributing towards the bringing about amendment. If what has been said about Jersey be wrong, let it be met by facts, which shall put aside at once and for good all unfavourable statements.

DISINFECTION AFTER SCARLET FEVER.—Mr. H. M. Morgan wishes for information as to the most effectual means of disinfecting wearing apparel, bedding, and drapery, after scarlet fever, so as to make them perfectly safe for use again. Unfortunately, he says, it is a subject of great interest in the neighbourhood of Lichfield at the present time.

UNIVERSITY OF EDINBURGH.—Mr. Spence will give a course of Operative Surgery in the summer, at 4 P.M., on Mondays, Wednesdays, and Fridays. The fee is £2:2. In the table, at page 316 of last week's number, the letter W. should be inserted after the name of Mr. Turner in the column headed "Edinburgh University": and W. and S. after the names of the Professors of Clinical Medicine.

THE SPREAD OF SCARLET FEVER.—M.R.C.S., 1826, has not understood our meaning. We have not intended—for the present, at least—to say anything about the medicinal treatment of scarlet fever. What we want to point out, as forcibly as we may consistently with facts, is that much of the mortality of scarlet fever arises from the spread of the disease through ignorance and want of care, and might be prevented.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, August 22nd; The New York Medical Gazette, Sept. 3rd; The Parochial Critic, Sept. 22nd; The New York Medical Record, Sept. 8th; The Boston Medical and Surgical Journal, Sept. 8th; The Madras Mail, July 11th; The Shield, Sept. 17th; The Chemists' and Druggists' Advocate, Sept. 10th; The Jersey Express; The Lancashire Guardian, Sept. 17th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. J. Croft, London; Mr. J. W. Langmore, London; Dr. Jelly, Madrid; Dr. P. W. Latham, Cambridge; Dr. A. White, Tunbridge Wells; J. N. P.; Dr. H. W. Jackson, Egham; M. Eugène Parisot, London; Dr. M. Long, Barking Road; Dr. W. Fergus, Marlborough; Mr. T. Gilbert, Edinburgh; Dr. J. M. Bryan, Northampton; Dr. Bodington, Sutton Coldfield; Dr. J. C. Browne, Wakefield; Mr. T. R. Pearson, Stowmarket; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. T. Clifford Allbutt, Leeds; Dr. J. Rogers, London; Dr. C. C. Hayman, Eastbourne; Mr. W. Dixon, Morpeth; Mr. J. Fox, Bath; Mr. C. Griffith, Ilfracombe; Messrs. G. W. Fox & Co., Manchester; Mr. R. H. B. Nicholson, Hull; Dr. A. E. Sansom, London; Dr. C. Parsons, Dover; Dr. W. V. Pettigrew, Worthing; Mr. C. Steele, Clifton, Bristol; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Mr. T. Greene, Bristol; Dr. G. E. Shuttleworth, Lancaster; Dr. J. Turnbull, Liverpool; Dr. Gibson, Newcastle-upon-Tyne; Dr. S. M. Hewitt, Dublin; Dr. W. C. Arnison, Newcastle-upon-Tyne; Mr. F. J. Gant, London; Dr. J. Hughes Bennett, Edinburgh; Dr. F. J. Brown, Rochester; Mr. Miles A. Wood, Ledbury; Dr. Russell, Liverpool; etc.

BOOKS, ETC., RECEIVED.

A Sketch of the late Epidemic of Small-Pox in Bhurtpoor. By Robert Harvey, M.D. Calcutta: 1870.
The Scottish Poor-Laws. By Scotus. Edinburgh: 1870.
A Retrospect and Balance-Sheet of the Medical Reform Union. London: 1870.
An Elementary Course of Botany: Structural, Physiological, and Systematic. By Professor Henfrey, F.R.S., L.S., etc. London: 1870.
Transactions of the New York Academy of Medicine. Part ix. Vol. iii.

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REMARKS

ON

FUNCTIONAL HEMIPLEGIA IN CHILD-BEARING WOMEN.*

By T. CLIFFORD ALLBUTT, M.A., M.D., F.L.S.,
Physician to the Infirmary, Leeds.

A NUMBER of cases, which may be included under some one name like the above, have occurred in my practice of late. As they seem to constitute an uniform clinical group, to have a serious aspect and yet to be curable by appropriate means, I have thought it well to bring these cases together for the consideration of this meeting. I shall best introduce the subject by reading a few brief notes of one of the cases, in order that the group of symptoms of which they consist may be distinctly set forth.

Mrs. G. E., aged about 25, came first under my care on the 12th of November, 1869. She was a patient of Mr. Cumberbatch, of Cadogan Place, and had been confined under his care in the previous June. It was, I believe, her first confinement, but was in every way normal, and, as Mr. Cumberbatch informed me, was followed by no ill consequences. A short time after her recovery, she came into Yorkshire, supposing herself to be in good health. Almost unperceived by herself, however, some weakness began to appear in the left arm and leg, and became slowly worse. This weakness or weight she preferred to call numbness, and it was associated with much tingling; there did not seem, however, to be any decided loss of tactile sensibility. The tingling was severe and annoying, and frequently was associated with neuralgic pains or shocks, which were very sharp. These pains were chiefly confined to the left arm and leg, but were sometimes felt also in the left inframammary region. She could walk perhaps a mile, or even more, but this exertion is followed by a "dead aching" in the arm and leg. The arm was always decidedly weak, and she avoided the use of it.

There were no other nervous symptoms, unless it were that she confesses to a good deal of "nervous irritability." Her aspect and manner were, however, cheerful, and there was no emotional peculiarity. Her general health did not seem satisfactory; she ate badly, and there was some loss of weight. The tongue was pale, flabby, and rather tremulous; there was a good deal of "distension", and the bowels were confined. There were no symptoms of local disease in the lungs, nor was there any hectic.

As this was not by any means the first case of the kind I had seen, I was able to assure Mrs. E. and her friends that there was no cause for alarm, and that I fully hoped to relieve her symptoms in a few weeks. The baby had, I think, been weaned a short time previously. I ordered a liberal diet, with pepsine, mineral acids, and strychnine, and a frequent pill of aloes, belladonna, and capsicum. Under this treatment, with little variation, she completely recovered in the course of a few weeks.

The principal features, then, of this case, which is a good instance of the class, were left hemiplegia, neuralgia and other disorders of the sensation in the same parts and in the inframammary region, general debility, flatulence, and constipation.

The worst case of the kind which I have seen was that of Mrs. S., who was under the care of Dr. Bronner, of Bradford, when I saw her early in 1869. To relate the whole of her history in detail would be tedious and unnecessary. Suffice it to say that symptoms of the same kind—left hemiplegia with disordered sensation, disordered bowels, inframammary pain, and general debility—were present, with absence of any symptoms directly referable to the head. These had followed a previous confinement, and had shown themselves most rebellious to treatment. She was now some six or seven months advanced again in pregnancy, and since its commencement the symptoms had become worse. When I saw her, walking was a labour and sorrow, and her gait was quite unsteady. She complained much of the "numbness and weight" in the limbs, and was much depressed in spirits. On reviewing the whole circumstances, I informed her that, although her state was one to give rise to much anxiety and apprehension, nevertheless I was prepared to take the responsibility of assuming that there was no organic disease, and of hoping that, her confinement once over, she might be restored to health. Some weeks afterwards, a very eminent physician saw Mrs. S., with Dr. Bronner. I was unfortunately unable to be present

at the consultation, and to explain to him my views of these cases. He took a graver view of it, and expressed his opinion that there was organic disease of the spinal cord. On farther consideration, however, and after comparing this case with the others I had seen, I still expressed my conviction that such was not the case, and believed that Mrs. S. would finally recover. She passed well through her confinement, and the treatment determined upon by Dr. Bronner and myself was carried out. In a letter which I subsequently received from Dr. Bronner, he informed me that his endeavours had met with perfect success, and that Mrs. S. was restored to health.

Some cases of this functional hemiplegia seem to me to point to a connection between it and inframammary neuralgia. A few days ago, a young woman came to me at the Infirmary complaining of "tingling numbness and weight" in the left arm, and of similar symptoms to a less degree in the left leg. She had great inframammary pain on the left side also, and the pain radiated distinctly from this point over the brachial plexus, involving the intercosto-humeral branch and all the large nerves of the plexus. She had been confined a few weeks before, and was at the time of consultation suffering from the exhaustion of lactation. Her bowels were not confined, as in the previous cases, but were loose and irregular, a condition which for the practical physician often has the significance of constipation, and depends upon the irritation of the colon by scybalous masses. A few mild carminative purges improved the state of the bowels, the child was weaned, and recovery speedily took place upon cod-liver oil, steel, and strychnia. Faradisation in this case, and in one other like case, did no good, but rather harm. The continuous current was tried in one case only, that of Mrs. S. above mentioned; it had no beneficial effect.

I have notes of five more cases very closely resembling those which I have described. The patients in all the cases were women, and in all but one the complaint followed parturition, or shortly preceded it. In the one other case it occurred with a menorrhagic condition. The symptoms in all were curiously alike. Hemiplegia, on the left side, was the prominent symptom in each, hemiplegia in which weakness was always present and was often considerable. The patients speak of it, however, rather as "numbness", by which they do not mean so much loss of tactile sensibility in any precise sense, as rather a sense of dragging and heaviness in the limbs, attended with more or less constant tingling. This tingling, again, is commonly associated with some neuralgia, sometimes with severe neuralgia, and the well known inframammary pain often forms part of it. Some general debility is usually present, and some apprehension; the former being perhaps an essential part of the state of things, the latter being due to alarm at the anticipated palsy. The tongue may be coated, or it may be red and irritable; usually, however, it is clean and flabby, clean with the smoothness of diminished activity. The stomach is feeble; it calls for no food, and digests that which is taken with difficulty, and with flatulent distension. The bowels likewise are sluggish or morbidly irritable.

Such are the main features of an affection which cannot be rare, as I have notes of eight well-marked cases of it which have occurred in my own practice during the last three years. I do not find, however, that this well-marked functional disorder, which is also so uniform in its phenomena and causation, has obtained recognition from medical authors. At the same time, it is a grave and alarming affection, one which must give great anxiety to the patient, and lead many physicians to give a graver prognosis than necessary. Dr. Handfield Jones, in his excellent work on *Functional Nervous Diseases*, lately republished, gives two cases of transient hemiplegia in men, where the hemiplegia depended upon functional derangement, and was cured. He also alludes to some cases of a similar kind occurring in women during pregnancy, as was the case with mine. He includes amaurosis as one of the symptoms. In one of my cases, a Mrs. M. G., whom I attended with Mr. Mann, of Leeds, a very obstinate left hemiplegia coincided with periodic amaurosis. The hemiplegia came on in connection with the exhaustion of pregnancies, and had recurred more than once with increasing severity, either during gestation or after delivery. The late Dr. Hobson, of Leeds, had diagnosed organic disease of the brain, and I was much disposed at first to agree in his opinion. On a careful review of all the symptoms, however, I came to the conclusion that no organic disease was present, and my opinion was a little strengthened by the facts of the ophthalmoscope, which revealed no organic affection of the optic nerve or retina. This patient recovered completely on the nutritious and tonic plan of treatment, which I shall presently describe, carried out with decision and perseverance. Recovery in these cases is forwarded by assuring the patient of the possibility of it, and of the absence of organic disease. This case of Mrs. M. G. was the first of the kind which I saw, or at any rate the first which attracted my attention in any serious way. It was a severe case, but not quite so severe as

* Read in the Medical Section before the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

Dr. Bronner's case, which I saw about two years later. My other cases resemble the foregoing so closely that I do not feel it necessary to describe them.

The pathology of this functional hemiplegia is obscure. It has in my experience always affected child-bearing women; but I suppose only because this is the commonest exhausting condition in women.* It is perhaps most common after parturition, when the exhaustion of suckling is added to the effects of gestation. Dr. Handfield Jones seems, however, to have seen it in men; and I think I have seen something like it in women not bearing children, but liable to uterine discharges of a sanguineous or leucorrhœal kind. The left side alone has been affected in my cases, but probably we shall find that the right side is likewise subject to the affection, but less frequently and in less degree.

I have reserved for this part of my paper the fact that in three of my cases I found the axillary temperature lower by an average of $.8^{\circ}$ to 1° (C.) on the affected side. In one case I found no marked difference in the two sides, and in the remaining cases the temperature was not noted. This fact points to some diminution in the blood-supply of the parts, a diminution which can scarcely be accounted for by the loss of exercise and which is probably due to vaso-motor irritation. It is farther to be noted that the numbness of the limbs is often attended with neuralgia, and not only with neuralgia of the same parts, but also with neuralgia in the inframammary region. We know that intercostal neuralgia is often associated with vaso-motor disturbances, with strange visceral sensations, with flushings, "heats and chills", and the like; and this, I believe, is to be explained by the close association of the dorsal nerves with the sympathetic nerves. That beautiful arrangement in the joints first demonstrated by Schroeder van der Kolk and admirably illustrated by Mr. Hilton, which we see in the mutual distribution of the sensory and motor nerves in these parts, seems to have a parallel in the mutual distribution of the sympathetic and the dorsal nerves, the former being distributed to the viscera, and the latter to the muscles of the trunk. During pregnancy or lactation the sympathetic nerve-system falls into a state of erethism, and its irritability is propagated to the associated intercostal nerves, causing inframammary and lumbar neuralgia. The precise relation between the intercostal nerves and the first dorsal and lower cervical nerves on the one hand, and to the lumbar plexus on the other, is not clear, but would seem to be indirect, and may be by intermediation of the spinal centres. The coexistence of motor and sensory disturbances on the one side would rather lead us, however, to suppose that the hemiplegia was of mesocephalic rather than of spinal origin. For my own part, I am disposed to regard the affection entirely as one of the visceral and vasal nerves, the lower cervical and upper dorsal branches receiving irritation from the visceral branches, and the nerves of motion and sensation being indirectly affected by the want of due blood-supply. Be this as it may, my purpose is fulfilled if I have drawn attention to a common clinical group of symptoms, and have shown that the affection is a less serious one than it appears. At the same time, it tends to relapse, and a long continuance of the affection with times of increased severity may really bring the patient into the state of a paralytic if a thorough system of treatment be not adopted. The treatment must be as follows. If the tongue be coated and the bowels irregular, an alkali with tincture of nux vomica and tincture of rhubarb, and a light bitter, must be given three times a day, with a nightly pill of aloes, belladonna, and capsicum; but if the tongue be clean and flabby, the mineral acids must replace the alkali. As soon as the tongue is improved in appearance and the bowels are regulated, steel in combination with ammonia or ether must be given with meals, or immediately after them, and a draught containing liquor strychniæ must be given between meals. This distribution of the medicine is important, for the prescription is thus more efficacious than when the steel and strychnia are given together. Pepsine must be liberally prescribed with the flesh-food, to ensure its complete digestion, and the meals must be small, light, and numerous. It will probably be needful to order some light nutriment at four or five o'clock in the morning, or before rising from bed. No alcohol is necessary, and I prefer to avoid it unless a little bitter ale or sherry decidedly improve the appetite at dinner. The pills will probably need repetition either nightly or at short intervals. As soon as these remedies are well established, that is in two or three days or so, cod-liver oil must be added, but it must be given once a day only, and in small quantities, say from two to four teaspoonfuls. If cod-liver oil be ill borne, rum and milk may replace it. All exercise should be short of fatigue, driving in the open air is best. Galvanism

may be an useful adjunct, but I doubt it; faradisation is actually injurious.

In this way the disease may be cured; and if my means of cure seem to be tedious and to partake too much of drugging, I have only to answer that the cure of such cases depends upon minute care in prescribing, and that a casual and careless prescription of tonics would not attain the end desired.

NOTES ON THE EPIDEMIC OF RELAPSING FEVER IN LIVERPOOL.

BY ROBERT GEE, M.D., M.R.C.P.,
Physician to the Liverpool Fever Hospital, etc.

SOME account of the hospital accommodation provided by the Select Vestry may not prove uninteresting. In the last week of June, the number in hospital amounted to 140; in the first week of July, there were 172 patients, so that further provision was urgently required, as the hospital proper is calculated to hold only 160 cases. This hospital was erected a few years ago on the site of the previous one, built about 1780. It is constructed on the T principle, having lofty well-ventilated wards, with cross-lights. Near to it are three large one-storied brick-buildings or sheds, erected during the fever epidemic of 1847, and subsequently appropriated to various purposes as circumstances demanded. Two of these sheds were emptied of their occupants and assigned to their original use, that of receiving-wards for fever. The third was converted into dormitories for the increased staff of paid and pauper nurses. The accommodation was then increased to nearly 400 beds. In the week ending July 16th, there were 233 cases in the wards; and, as the daily admissions were steadily increasing in number, it was thought desirable to take steps to secure further provision. The Committee directed their attention to a large wooden shed which had been hastily put up in Ashfield Street during the cholera visitation of 1866, and I was requested to inspect and report on its suitability for the treatment of fever-cases. A few changes were suggested, subject to which it was recommended as suitable. It was renovated, furnished, fully occupied in the course of a few days, and placed under the medical charge of Dr. Robertson. In the beginning of August, as nearly every bed was occupied, it became necessary to extend the fever-accommodation still further. This was a difficulty. Several modes of compassing it were proposed, such as fitting up a disused church which is about to be taken down; the adapting of large cotton warehouses for the purpose; that application should be made to Government for the loan of field-hospital tents, to be placed in an open locality in the town or some suburban fields; and that a large building erected for infants in connection with the parochial industrial schools in Kirkdale should be converted into a hospital. The former propositions were abandoned, as the church, on examination, was found to be unsuitable; the tents could not be had, for the Government could not dispense with any they had in store. The appropriation of the new wing of the school was decided upon, and it was occupied on the 8th of August. This hospital is situated in the extreme north of the town, in an open, elevated situation; has a clear space of fifty yards between it and the main buildings of the school; is completely isolated, and contains above 500 beds. Previous to its occupation, it was inspected by Mr. Cane, Poor-law Inspector, on whose report the Poor-law Board consented to its being used as a temporary fever hospital. Drs. Kirkpatrick and Packman have been placed in medical charge of the place. To show the energy and despatch manifested by the Governors of the workhouse and industrial schools, it may be mentioned that, within twenty-four hours of the order for occupancy having been given, the children were transferred and this large building prepared for the reception of fever-cases.

As the result of the meeting of the Committee and parochial medical officers held on August 30th, and referred to in my last notes, a large wooden shed has been erected on vacant ground near this hospital, capable of holding about eighty cases. All this provision has been found to be inadequate; and it has, therefore, become necessary to remove the inmates from detached portions of the workhouse, and to appropriate these rooms to fever and convalescent cases. Our present hospital accommodation is as follows: the Workhouse Fever Hospital, sheds, and other isolated buildings, 528 beds; Kirkdale temporary fever hospital and shed, 594 beds; Ashfield Street shed, 86 beds; total, 1,208 beds. As the epidemic is still on the increase, it is feared that further provision will have to be made.

There is a large proportion—say from 10 to 15 per cent.—who decline going into hospital. They cannot be compelled without enforcing the Sanitary Act of 1866, which, in an epidemic, is practically a dead

* Mr. Horsfall of Leeds tells me of a similar case of left hemiplegia, apparently functional only, and which was completely cured. The patient, however, was a maiden lady of advanced years, and the condition may have been some other than that which I have attempted to describe.

letter. It would be impossible to remove by main force persons suffering from fever; and the idea could not be entertained when such means would have to be resorted to in the case of the large numbers now electing to remain in their own dwellings. Many of these cases are reported to be in a pitiable condition, devoid of medical comforts, and, moreover, with very little nursing attention. This want is supplied in some measure by the District Nursing Institution, an admirable organisation founded by Mr. Rathbone, M.P. for Liverpool, who has taken the deepest interest in every measure calculated to benefit his fellow-townsmen of all classes. He wrote to report that the district nurses were overtaxed; and suggested that assistants should be provided at the expense of the Vestry, as the funds of their institution would not bear the strain. The Special Fever Committee agreed to recommend that a staff of assistants be placed under the superintendence of the district nurses, and this has been confirmed by the Vestry.

[To be continued.]

ON THE CONNECTION BETWEEN INFLAMMATORY CONDITIONS OF THE UTERUS AND ITS DISPLACEMENTS.*

By J. HENRY BENNET, M.D.

My intention in reading the present paper is, principally, to introduce an interesting and important subject for discussion to the Midwifery Section of the British Medical Association, the one embodied in the title which I have taken. I have nothing new to advance: my opinions are well known, and have been before the medical profession for more than a quarter of a century; at the same time, I am anxious to state that more extended experience, as years advance, has confirmed their correctness. Nor does it seem to me a work of supererogation to reproduce these opinions here, for antagonistic doctrines—erroneous doctrines, I firmly believe—are very rife, if I may judge by what I see in practice.

I have no intention in this paper to attempt even a sketch of the history of uterine displacements. It would take many times the fifteen minutes allowed me. I purpose to confine myself entirely to the consideration of the influence of inflammation in their production, laying down as a guide certain anatomical, physiological, and pathological data, which to me appear undeniable, and which, if conceded, must decide the question in the sense in which I decide it.

Anatomically, the uterus is not a fixed organ, like the liver or kidneys, bound down by ligaments, as is the former of these organs, and destined to spend its organic life *in situ*. On the contrary, it is a very moveable organ, of small size and light weight. In the healthy female who has had no children, it only weighs one ounce, or one ounce and a quarter; in the healthy female who has had children, it returns to an ounce and a quarter or an ounce and a half, after each confinement. Its means of sustentation are its ligaments—principally the lateral ligaments, the vagina, and the pressure of the surrounding organs. The support thus anatomically given admits of considerable mobility, especially in an antero-posterior and in a vertical sense, as may be ascertained by a digital examination. The healthy juvenile womb may be pressed by the finger, with ease, into all but any part of the pelvic cavity; indeed, the uterus swings in the pelvic cavity like the body in a hammock, suspended between the lateral ligaments. The healthiest uterus in the healthiest woman is lower at night—probably half an inch—than it was when she gets up in the morning, through mere gravity.

Physiologically, this extreme anatomical mobility of the uterus is an absolute necessity. When the bladder is full the uterus must give way, be pushed back posteriorly, sometimes to an extreme extent. The digital examination of a woman whose bladder is full of urine demonstrates this fact. On the other hand, when the rectum is loaded, the uterus must give way anteriorly, be pushed forwards: the laxity of the lateral ligaments and their stretching capacity render this possible. Thus physiological retroversion and anteversion of the uterus constantly take place under these influences. In pregnancy, the enlarged uterus rises and leaves the pelvic cavity, showing how elastic and ductile the uterine ligaments are to physiological changes. The slight descent or lowering of the entire uterus in the vagina, after the day's walking or standing, may be said to be an illustration of physiological prolapsus.

Pathologically, the uterus presents a peculiarity which pertains to it individually, or which is at least more marked in it than in any other organ of the body. It enlarges more rapidly and more permanently under the influence of inflammation, or indeed of any morbid stimulus,

than any other organ. This morbid peculiarity is connected with its physiological duties and power. Twenty times or more in a woman's life the uterus may enlarge, under the physiological stimulus of pregnancy, from an ounce and a half to thirty ounces or more in the course of nine months; and then, in four or six weeks, go down again to an ounce and a quarter or an ounce and a half. A very slight amount of inflammatory mischief in the entire uterus, or in a limited region, may enlarge it, increasing its weight in the non-pregnant woman, or may prevent entire reduction after delivery. I long weighed the uterus of all women examined in the dead-room, and never found the weight anatomical when there was any inflammatory lesion, or indeed any morbid condition, fibrous tumour, mucous polypus, or cancerous deposit. The uterus responds to the slightest stimulus, increasing gradually; or after pregnancy it refuses, under morbid stimulus, to descend to the normal size and weight, stopping at eight, six, four, three, two, ounces.

This pathological enlargement is often the result of localised inflammatory conditions, and may be then limited to one region of the uterus. Thus the fundus may be the seat of enlargement, and, less frequently the anterior region, or the cervix alone.

In all these cases the enlargement and increased weight of a physiologically moveable organ like the uterus is followed, inevitably, by displacements. The direction in which the displacement takes place depends on the region of the uterus enlarged. If the entire uterus be uniformly enlarged, the displacement is generally vertical; the uterus falls in prolapsus. If it be, as often happens, the fundus that is enlarged, we have retroversion; if the anterior region, anteversion. I would remark, however, that in my opinion anteversion of the body of the uterus is, generally, in married women, the result of coitus, which drives the cervix into the sacrum, and, acting as a lever on the entire organ, throws the body forward. In unmarried women, and in women generally who have had no children, anteversion is often the result of general inflammatory enlargement of the uterus, and of the exaggeration of the normal and congenital crescent curvature of the uterus, which I was the first to discover and point out. An American pathologist has recently made a beautiful experiment illustrating this congenital curvature. He froze the pelvis of several young females, and, on making a section, found the virgin uterus curved with anterior concavity, as I described it many years ago.

If the above facts are admitted, the therapeutical deductions are obvious and undeniable. In any case of uterine displacement, the first thing to do is to ascertain whether the uterus is enlarged, and whether there is any inflammatory or other lesion present which can have produced the enlargement, or which can have prevented the normal reduction after delivery. If such morbid condition exist, it should first be treated, and cured, if possible, whether it be general, localised, or internal metritis, laceration of the cervix, mucous membrane disease, or polypus. That accomplished, Nature alone, under favourable circumstances, with a due allowance of time, will do the rest, fining down the uterus to its natural size; and that attained, the organ will, generally, regain its natural position of itself, like a letter-weight from which the weight is removed. If it does not, moderate pressure from an uninflamed organ seldom positively requires treatment, as it seldom gives pain or annoyance. I know hundreds of women whose uteri are not physiologically *in situ*, but who know it not, and have no uneasiness. If, however, the displacement persists, from other causes which I have not enumerated, and is a source of discomfort or prejudice, it may then be judiciously treated by mechanical agents, pessaries, etc. Such, however, is not the course usually followed. Other doctrines prevail—doctrines which, although clearly erroneous, are sanctioned by great names both at home and abroad. Uterine displacements are too much studied *per se*, independently of the inflammatory lesions which so often produce them. The uterus seems to be considered, like the elbow or knee-joint, as capable of being dislocated backwards or forwards to one side or the other, and as thus capable of mechanical replacement, a doctrine utterly at variance with the anatomical and physiological facts that I have brought forward. As a practitioner, ever since I have been in practice, I have constantly had to take pessaries out of the vaginas of women with more or less severe inflammatory lesions of the uterus, in whom they ought never to have been inserted, at least not until they were cured of these lesions.

Nor is this surprising. In my youth, in 1837, thirty-three years ago, I was clinical clerk for a year to Velpeau at La Charité in Paris. He then paid great attention to uterine diseases, and had his female-ward half-full of women thus suffering. During that year, I consider that I learnt nothing tangible or useful about uterine pathology from my valued master and friend. It was all anteversion, retroversion, and prolapsus. We never studied and fathomed the cases, and did no real good. Later, at La Pitié, under Lisfranc and Gendrin, I had to unlearn what Velpeau

* Read in the Midwifery Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.]

had taught me, and then I began to see that in most instances that displacement is merely a symptom. I continued the friend of Velpeau to the day of his death, but he never got much further in uterine pathology; and, when I broached the subject, used to shake his head, and say in his amiable, jocose way, "Don't let us talk about it; you are a deserter from my flag; you have gone over to the enemy, and deserve punishment". Velpeau's influence, however, in this question, has been great and pernicious on the Continent.

At home, in 1843 I believe, our lamented colleague and friend, Sir James Simpson, published in the *Dublin Medical Journal* a paper on uterine displacements, in which he adopted pretty nearly the same views as Velpeau—those of what I call "the mechanical school". A year or two later, in 1845, he called on me in London, and said that he had procured my recently published work on uterine inflammation, had read it twice through carefully, on his way to town, and, on his return home, would examine into all the questions I raised. I subsequently heard from him that he had found my descriptions of disease clinically correct. The influence, however, of former views remained powerful in his mind throughout his life; and I found his practice uncertain in this respect. Sometimes he had cleared up those of his cases which I subsequently saw, as regards inflammatory conditions, and sometimes he had not, seeing nothing but the displacement, even when decided lesions existed. I have never before alluded to the opinions of my departed friends: I now do so with all esteem and affection; but they are gone from us; the doctrines which they held are become a part of the history of the profession, and as such they may be alluded to and criticised without disrespect to their memory.

In conclusion, I would recapitulate the views I have endeavoured to express in the following terms.

1. I consider that, under the influence of mechanical doctrines pushed to an extreme, uterine displacements are by many too much studied *per se*, independently of the inflammatory and other lesions that complicate and often occasion them.

2. That the examinations made to ascertain the existence of inflammatory complications are often not made with sufficient care and minuteness, as evidenced by the fact that I constantly see cases in practice in which inflammatory lesions have been neglected entirely, and in which the secondary displacements have been alone studied and treated.

3. That inflammatory lesions are often the principal cause of uterine displacement through the enlargement and increased weight of the uterus or of a portion of its tissues which it occasions.

4. That when such inflammatory conditions do exist, as a rule they should be treated and cured, and then time should be given to Nature to absorb and reduce hypertrophied and engorged tissues before mechanical means of treatment are resorted to.

5. That the relief from the sensation of bearing down which pessaries and bandages give is no real criterion of their being the proper means to use, such relief being often felt when there are inflammatory lesions present, which their presence aggravates.

6. The above statements must not be considered in any way to imply that I do not recognise other causes of displacement of a non-inflammatory nature, such as laxity of ligaments and soft parts, wide pelvis, laceration of perinæum, severe shocks, etc.

ON INTERMITTENT TETANY.

By C. CURRIE RITCHIE, M.D.,

Physician to the Hulme Dispensary, Manchester.

It is remarkable that this affection should have so long escaped recognition by the English profession, especially as it must be by no means uncommon. No mention is made of it in any English treatise on systematic medicine that I have seen, nor does it appear in the *Nomenclature of Diseases* issued by the Royal College of Physicians.

It is probable that spasmodic contractions of muscles have long been observed and classed with other affections of a convulsive character, but it was not till Dance published his "Observations on a form of Intermittent Tetanus", in 1831, that special attention was directed to the well-marked group of phenomena constituting the disease now known as intermittent tetany. Trousseau, in his *Lectures on Clinical Medicine* (New Sydenham Society's translation, Lecture xiii), gives a most admirable account, historical and clinical, of this affection, which first received the name "tetany" from Dr. Lucien Corvisart, in 1852.

As professional interest in the subject has been revived by the publication of a case with clinical remarks by Dr. Wilks (*BRITISH MEDICAL JOURNAL*, 11th June, 1870), I have ventured to record the following cases which have come under my observation within the last two years.

CASE I.—Mrs. M., aged 28, sent for me on 28th August, 1868. She had three children, and was about the seventh month of her fourth pregnancy. She had suckled her youngest child for sixteen months, during the latter five of which she had suffered from profuse menorrhagia. Four months ago, she began to have severe headaches and pain darting down the back, accompanied by painful contractions of the hands and feet, which prevented her from attending to her household work. These attacks came on at first every three or four days, each lasting about two hours; latterly, the attacks had become more frequent. Ten days ago, the weather being very cold and wet, diarrhoea came on, which had weakened her very much. On receiving some unpleasant news, the morning I saw her (28th August), she had "fainted"; immediately afterwards, however, on regaining consciousness, she found her "whole body twitching" so that she was unable to sit quietly, or to use her limbs. She had to be undressed and put to bed. When I saw her about 11 A.M., she was sitting propped up in bed, her expression evincing great anxiety. There was twitching of the muscles of the face, and drawing together of the lips, interfering with articulation; the fingers were rigidly fixed in a semiflexed position, with the thumb forcibly drawn across the palm; the wrists were semiflexed. The toes were also incurved, the dorsum of the foot being highly arched, and the muscles of the calf hard and tense. The fingers and toes could not be straightened; she had a feeling of numbness in them. Her mental powers were unimpaired; pulse 108, temperature 99.2° Fahr. I put her under the influence of chloroform, and was then able to straighten the fingers and toes; they again became rigidly contracted when the anæsthetic was withdrawn. She was ordered ten grains of bromide of potassium, to be taken every half hour; and at my evening visit (7 P.M.), I found the contractions less marked, and the pain diminished. I ordered the bromide to be taken three times a day. The contractions gradually ceased; the patient remained free from them after the evening of the 31st August. She was confined on November 2nd. As she felt weak, I recommended her not to nurse her child, and ordered her citrate of quinine and iron, with cod-liver oil. When I last saw her (August 1869), she told me that she had had no return of the contractions, and now enjoyed perfect health.

CASE II.—Mrs. A., aged 34, was delivered of her sixth child on March 27th, 1870; the labour was natural, with the exception of slight atony of the uterus. She made a good recovery, and remained well till the end of April, when she began to suffer from severe headache after each act of suckling her child. A few weeks afterwards, she began to have "flickering" feelings all over her body, which amounted to a kind of numbness in her hands. Her sense of touch became impaired, so that she felt as if she constantly wore a pair of thick woollen gloves. She stated that "she had let several articles of crockery slip out of her fingers" from this cause. I saw her on June 3rd. For several days she had been suffering from painful contractions of the hands and feet immediately on getting out of bed every morning. At 4 A.M. on June 3rd, she was seized with severe pain in the back, and cramps of the limbs; the feet were arched. I saw her at 10 A.M.; her condition was as follows. She had a sallow, cachectic appearance; there was slight muscular twitching of the face and eyelids; speech not affected; mind clear. The fingers were semiflexed and perfectly rigid; the thumbs drawn across the palms, abduction and extension causing great pain; muscles of the forearm hard and tense; upper arm natural, with the exception of slight contraction of the biceps. The muscles of the calf were so tense that they felt to the touch like pieces of wood. The heel was drawn up and the toes incurved. The pain in the legs and feet was very great, and was accompanied by a tingling sensation. Previously to my seeing the patient, continuous friction of the legs and feet had been kept up for about three-quarters of an hour, without any intermission of the contractions. Immersion of the limbs in cold water had no effect; cold water bandages were then applied, which somewhat relaxed the spasms, and afforded relief to the patient. She sent for me again, however, about 2 P.M., as the contractions were as bad as ever. Ether spray was then applied to the feet, which almost immediately stopped the contractions; they were readily reinduced on compressing the limb below the knee with both hands, but ceased on reapplying the spray. At 8 P.M., there had been no return of the cramps; half a drachm of chloral hydrate was then administered. She had a good night's rest, but had two slight attacks next morning, June 4th; to continue the chloral three times a day. On June 8th, she was quite free from the contractions and pain; a mixture containing the ammonio-citrate of iron with infusion of calumba was substituted for the chloral. I saw her on July 15th, previously to her leaving Manchester; she was much improved in appearance, and felt perfectly well.

CASE III.—M. C., a strumous-looking boy of 13, used to have "working fits", according to his mother's statement, when he was about three or four years old; his face and mouth were drawn to one side;

his hands twitched and were sometimes so firmly set that it was very difficult to separate the fingers. His mother does not remember whether his feet twitched, but on several occasions he asked her to take off his boots and rub his feet. These attacks lasted over three or four months, each attack lasting from a few minutes to two or three hours. Some months after this, he had scarlatina, followed by general dropsy, from which he recovered very slowly. His mother only remembers his having had one recurrence of the "cramps" shortly after his recovery from scarlatina. After this, he remained perfectly free from them, till a year ago, when he fainted on seeing his father evacuate the fluid from a blister on his foot with a darning needle; on regaining consciousness, he had one of his attacks of twitching. He came under my care as an out-patient at the Hulme Dispensary, on 21st June, 1870, suffering from severe coronal headache, worst in the morning. His appetite was good; his bowels had acted regularly twice a day for a month. He was ordered quinine, and was improving slowly under it, till the morning of the 19th July, when he came to see me at the Dispensary. His headache, he said, was worse than ever, and he complained of severe pain at the epigastric region. He seemed to be suffering so much, that I was proposing to his mother to give him a subcutaneous injection of morphia, when he fainted. He remained unconscious for about a minute; he then had painful contractions of the fingers which he said "felt numb and dead". The thumbs were firmly drawn across the palms, and the fingers were rigid and semiflexed. There was slight twitching of the muscles of the face. Speech was thicker than natural, but there was no great compression of the lips. He had feelings of cramp in the legs, and there was twitching of the feet. The twitchings were relieved by immersion in cold water. I put him on twenty-grain doses of bromide of potassium three times a day. He has had no return of these attacks up till to-day (August 1st), and his headache is much better than it has been for three months. He is still under treatment.

I have met with other two cases of this affection, but unfortunately have no notes of them taken at the time. One was the case of a boy four years of age, who came under my care as a dispensary patient. His symptoms corresponded closely to the *history* of the attacks in M. C. (Case III), about the same age, and yielded readily to small frequently repeated doses of bromide of potassium. The other case was that of a young woman of nineteen, who had suffered from menorrhagia for several months previous to her being attacked with painful contractions of the fingers and toes. In this case, the symptoms though distinct, were not severe; the treatment was, therefore, mainly directed to the regulation of the menstrual flow, and the spasms gradually passed off.

This affection is so rarely fatal, that opportunities of inquiring into its pathology and morbid anatomy are extremely few; indeed, in all Trousseau's experience, he met with only one fatal case. There can be little doubt from the nature of the disease, however, that it is essentially a disorder of function. Trousseau states that the alleged predisposing causes of this curious affection are nursing, menstruation, pregnancy, and the puerperal state—with perhaps the pathological conditions complicating dentition. Cold he considered not only an "exciting cause, but sufficient by itself to bring on" this disease; and so frequently did it occur, under the observation of Trousseau, in nursing women, and as apparently the immediate result of cold, that he at one time called it "rheumatic contraction of nurses." He also states that chronic diarrhoea is the most active exciting cause, and that after the first attack of these contractions, they may be reinduced by emotion, or by "compressing the affected parts, either in the direction of their principal nerve-trunks, or over their blood-vessels, so as to impede the venous or arterial circulation." This last observation I was able to verify in Case II; but in most of the English cases, not only has there been no diarrhoea, but in several cases the bowels have been confined for some time before the attacks. The diagnosis depends chiefly on the intermittent character of the tonic spasms, with the peculiar contraction of the hand and foot, and incurvation of the thumbs and toes.

I was much interested in the parallel drawn by Dr. Moxon in his valuable paper on this subject (*Guy's Hospital Reports*, Series III, Vol. XV), between the symptoms of this affection, and those produced by the use of ergoted rye; and in the two cases I met with after reading his observations, I directed inquiries to this point, but could not elicit that rye-bread had been at any time eaten by either patient.

With regard to treatment, Trousseau recommends blood-letting, and afterwards quinine, with small doses of opium and belladonna as adjuncts. Dr. Broadbent adopted the belladonna treatment in two cases (*BRITISH MEDICAL JOURNAL*, August 6th) in February of this year, with the result of the immediate cessation of the attack, which returned several times on the drug being withheld. In another of his

eases, the attacks ceased after the administration of the ammoniated tincture of valerian.

Dr. Moxon's case, and also three cases reported by Dr. Haddon (*Edinburgh Medical Journal*, August 1870), as well as three of my own cases, were treated with the bromide of potassium, and the contractions disappeared in all. But, as Dr. Wilks very justly remarks, the disease has a spontaneous tendency to subside; and in one of my cases this was amply verified. It is probable, therefore, that no specific effects can be attributed to any of these remedies; and that more is to be hoped for from the regulation of disorders of function, when such are present, and a generally tonic system of treatment.

During the paroxysms, chloroform inhalations are of great service, but, unfortunately, the contractions usually return when the inhalation is stopped. Trousseau pointed out the fact that cold sometimes stops the contractions, when applied to the affected parts, even although it has a powerful influence on the production of the affection. I tried this in the three cases which I have reported in full. The hands and feet were immersed in cold water without effect in two cases—in one instance, the application of cold water bandages relieved for a time. Having determined to try the effect of ether-spray in my next case, I did so in Case II, with the result of a complete cessation of the attacks. Whether the effect was physical or psychical, I cannot tell; I would venture to suggest, however, that it might be worth a trial in such cases in future.

CASE OF PARACENTESIS VESICÆ.

By W. DRAPER, M.R.C.S., York.

THE comparative infrequency with which we are called upon to tap the bladder, and the peculiar circumstances indicating the performance of the operation in the present case, may make the following notes of interest.

The subject of the operation was a married man, of rather robust constitution, aged about 65. Some years since he consulted my partner, Dr. Procter, in consequence of difficulty in passing his urine. On examination, it was found that a large-sized catheter could be freely passed into the urethra for about an inch and a half, but beyond that point not even could a No. 1 be introduced.

As the obstruction was not of a spasmodic character, and as there was no history of stricture from disease, a diagnosis of malformation of the urethra was made: this opinion was strengthened by the patient's statement, "that he had *never* been able to pass his water in a full stream". As the dysuria was only slight, no further notice was then taken of the case. Gradually, however, as the patient advanced in years, his urination became more difficult; and at the time to which the present report refers, another examination discovered a considerable enlargement of the prostate gland. Catheterism was again attempted, but with precisely the same results as formerly: the smallest instrument could not be introduced beyond the point before mentioned. The prostatic enlargement continued until micturition was entirely obstructed. With the view of overcoming the malformation, I passed a small director down the urethra as far as the obstruction, and attempted to dilate the parts by means of a long narrow knife, but the operation was ineffectual. The symptoms and consequences of retention rapidly became more urgent, and the most available means of relief seemed to be paracentesis of the bladder. The opinion of another experienced surgeon (Mr. Keyworth) was taken, which fully concurred with that already formed. I accordingly operated by making a small primary incision just above the symphysis pubis, and then introducing a long curved trocar and cannula into the distended bladder. A large quantity of highly ammoniacal urine was drawn off, to the intense relief of the patient, and an elastic catheter passed through the cannula and retained in the bladder, the cannula being withdrawn. From this time up to that of the patient's death, which occurred *purely from exhaustion* a week after the tapping, he continued in comparative comfort, not a sign of peritonitis or of any other evil consequence of the operation being evidenced. Thus the operation as a palliative measure—the only one for which it was performed—may be considered as eminently successful; and the results would quite justify its repetition in a similar case. The pubic region was selected as the *locus operandi* in preference to the rectum, in consequence of the highly infiltrated state of the tissues surrounding that part, and the difficulty there would have been in acquiring and maintaining the necessary position in a highly sensitive, ponderous, and helpless man. The operation of perineal section was inadmissible for the same reasons; and lastly, as the chances of cure were just as remote in one case as in another, the operation least irksome to the patient was adopted.

THIRTY-EIGHTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in NEWCASTLE, August 9th, 10th, 11th, and 12th, 1870.

SECTION C.—PHYSIOLOGY.

On General Anæsthesia and Anæsthetics. By B. W. RICHARDSON, M.D., F.R.S.—A paper on this subject was read, in the absence of Dr. Richardson, by Dr. A. P. Stewart. The author arranged his remarks under the following heads: 1. Enumeration of anæsthetic substances; 2. Their mode of action; 3. The best anæsthetics, with a review of their comparative advantages and disadvantages; 4. Methods of administration; 5. Methods of promoting recovery in accidents attending administration. The substances known to produce anæsthesia when inhaled were placed together in a table, showing, with regard to each, the chemical composition, vapour-density, fluid-density, boiling point, physical and anæsthetic qualities, and the name of the first experimenter. With regard to the mode of action of anæsthetics, the chemical composition of a vapour cannot be taken to determine its narcotic property. Bodies of very different composition—*e. g.*, nitrous oxide and benzol—act as anæsthetics. Many good anæsthetics are simple hydrocarbons; but so also are combinations of hydrogen and carbon with chlorine (chloroform), of carbon with chlorine (tetrachloride of carbon); of carbon with oxygen (carbonic oxide); etc. Snow's theory, that anæsthetics act by arresting oxidation, is not absolutely tenable; because some of the anæsthetic vapour or gases support combustion, while others arrest it. Dr. Richardson had been unable to devise any satisfactory explanation of the mode in which anæsthetics act on the sensorium. He thought it probable, however, that there were two modes; that some directly interfered with the chemical changes in the blood, while others interrupted function by immediate contact with the sensorial organs. The first class he called negative, the second active substances. Of the numerous anæsthetics which have been tried, and which were enumerated in the table, the following only were of practical use: nitrous oxide, methylic ether, methyl-ethyl-ether, ethylic ether, bichloride of methylene, chloroform, tetrachloride of carbon, methylal, bichloride of ethylene, chloroethylidene, bromide of ethyl, and amylene. The relative advantages and disadvantages of each of these were noticed. In accidents arising from the administration of anæsthetics, Dr. Richardson said that there was but one known practice that could be depended on; viz., artificial respiration without moving or disturbing the body. The double-acting bellows is the best instrument for the purpose. Galvanism both exhausts the muscular respiratory power and interrupts the action of the heart.

The CHAIRMAN (Dr. Hughes Bennett) said that the paper was one of great value, not only as embracing a general view of the subject, but from the excellent way in which it had gone over a number of important facts. A great deal might be said upon the paper. In the first place, if he might venture to make a remark as to the theory of anæsthetics, he had always considered that the effect was due to the pressure on the brain caused by an alteration in the circulation—for instance, congestion of the capillaries. No doubt it was by the same kind of mechanism that sleep was produced. The regular or irregular action producing sleep was a kind of congestion in the brain. Dr. Richardson gave the preference to bichloride of methylene, of which there was not yet much general experience. It was asserted by the American surgeons that there had never been a death caused by sulphuric ether; but how far that was correct he did not know. Dr. Richardson had stated the proportion of deaths from chloroform to be 1 in 2,500. But there were many deaths from chloroform that were never published. As was well stated in the paper, death from chloroform was one of the most dreadful things that could occur. He (Dr. Bennett) knew of one very sad case that happened in Edinburgh. A young and beautiful lady, daughter of a barrister, in perfect health, went to a dentist's house one morning and had a tooth extracted. Five minutes afterwards, she was dead. That was only one of many similar cases that had occurred, but had never been published. If a safe—positively safe—anæsthetic were to be discovered, which, though perhaps not so agreeable, would have the great advantage of safety, he thought that a very great blessing would have been obtained. The question was, Did sulphuric ether or bichloride of methylene give that safety? On that point he would not express his opinion. The Chairman proceeded to speak of nitrous oxide, from which, as far as he knew, no fatal cases had occurred. When he attended the meeting held at Norwich some years

since, he had an opportunity of witnessing some experiments with nitrous oxide; and the results were most alarming. But, at a meeting of the Medico-Chirurgical Society in Edinburgh, an improved method of administering it was tried, and the results were more satisfactory.—Dr. ELLIOT (Carlisle) thought a small plea might be put in in favour of chloroform. It might be that some fatal cases had been concealed; but he could not see why that remark should apply to chloroform alone. Respecting ether, the experience of it was not so extensive as that of chloroform, as it had not come into general use. But he thought that there was no reason to suppose that ether caused death as often as chloroform. One objection, however, that he had to it was, that it was too easily vaporised. It could not be used with such freedom as chloroform. Dr. Elliot concluded by remarking that he had much pleasure in bearing testimony to the great value of the paper.—Mr. STOCKS (Salford) said that in his own practice he was in the habit of using a mixture of chloroform and ether, which he had not heard mentioned that day. As Dr. Richardson said, deaths from chloroform originated more in the heart; or, in other words, if the heart could be kept going, it was much safer for the patient. A mixture of ether was a great advantage. He remembered one case in particular, where he had a woman under the effects of the mixture for three-quarters of an hour, and there was no loss of pulsation, nor any vomiting. In the Salford Hospital, the surgeons had been in the habit also of administering a few drops of brandy with the chloroform, which had the effect of preventing vomiting. Mr. Stocks agreed with the Chairman that it was unfair to the members that the business should be stopped by excursions, which could take place after the meeting was over; and he hoped that in future some different arrangement should be made.—Dr. MACLACHLAN (Newcastle) remarked that, after he had taken chloroform regularly for some time, he had found his heart becoming very weak; and he had been obliged to give it up. Respecting the amount of chloroform to be given to patients, he had given a pound to one individual under his care without producing vomiting. He thought Dr. Richardson's paper deserving of all the encomiums which had been passed on it.

Interim Report on the Antagonism of Medicine. By J. HUGHES BENNETT, M.D., Convener of the Association's Committee.—The Committee consists of Drs. Hughes Bennett, McKendrick, McAdam, J. Rogers, and Mr. Smith of Edinburgh. A large number of experiments on animals had been performed, and three lines of inquiry worked out; viz., the antagonism between—1, atropia and the Calabar bean; 2, chloral and the Calabar bean; and 3, chloral and strychnine. Dr. Bennett gave a summary of these researches, but stated that the full report would be presented at the next meeting of the Association at Plymouth. He announced the perfect antagonism between the poisonous properties of chloral and strychnine, of which he gave experimental proof. Two small rabbits received hypodermically each the one-hundred-and-fiftieth part of a grain of strychnine dissolved in water. In one, immediately afterwards, twelve grains of chloral, also dissolved in water, were injected. The first rabbit was seized with a powerful tetanic spasm in twelve minutes, and was dead in fifteen minutes. The other, in which chloral had been injected, fell into a profound sleep, had no spasm, and in two hours and a half had completely recovered, and was perfectly well.

Dr. HAYDEN (Dublin) said that any observations that he might make upon the address given by Dr. Bennett would be entirely of approval and admiration at the labours which the Committee must have bestowed upon the subject to produce such results as had been detailed to them. Dr. Bennett and his coadjutors deserved very great credit indeed for the way in which they had conducted the investigations. He moved the following resolutions: "That the Physiological Section, having heard the interim report of Professor Bennett, the Chairman of the Committee appointed at the Leeds meeting of the British Medical Association in 1869 to investigate the antagonism of remedies, etc., and recognising the importance of the results which have been obtained both to science and practical medicine, wish strongly to urge on the Council of the Association the desirability of aiding in every way in its power the prosecution of these investigations."—Dr. GIBB (Newcastle) seconded the resolution, which was carried unanimously.

Some Principles in Respiratory Mechanics. By D. C. MCVAIL, L.R.C.P. Ed.—The following are the conclusions at which the author arrived. The paper was illustrated by diagrams. 1. But for the angular position at which the costal cartilages articulate with their respective ribs, from the third or fourth downwards, thoracic movement would have been altogether impossible, as the natural curvature of the spine is a mechanical difficulty in the way of inspiration, which is only obviated by lengthening of the lower conjoined ribs and cartilages, by each angle of union becoming less and less acute as the chest-wall is

raised. 2. Thoracic enlargement does not, as hitherto supposed, reach its maximum when the ribs attain to the angle of ninety degrees to the spinal column. Were this true, the range of thoracic enlargement would be extremely limited, as some of the ribs, even at complete expiration, are almost, if not altogether, at right angles to the spine already. The chest does not reach its greatest volume until the lines of costal action are at right angles to the sternum; a line of costal action being—as regards the sternum—a straight line drawn from the fulcrum of the rib to the insertion of its cartilage in the sternum. Those lines, in the case of the lower ribs, do not coincide in their respective ribs, and the angular distance between each rib and its line of action increases from the fourth rib downwards. 3. The diagram proving the above also explained the cause of the reverse action of the lower end of the sternum in far advanced cases of emphysema. 4. Reasoning from mechanical theory, it might at first sight be expected that in inspiration the upward movement of the sternum ought to exceed considerably its movement forwards; but experiment has shown that such is not the case, the forward movement being much greater than the upward. The method of conducting those experiments was explained, and the causes of the apparent discordance given.

SECTION D.—MIDWIFERY.

A Case of Retro-Uterine Hæmatocele. By R. BARNES, M.D.—Dr. Barnes described a case of retro-uterine hæmatocele, and illustrated it by a diagram constructed from the parts obtained by *post mortem* examination. The case was remarkable by the blood-effusion having arisen from the rupture probably of a diseased ovary, and by its becoming completely encysted. The mass was of considerable size; it descended low into the pelvis, carrying the uterus forwards and upwards, so that the fundus was felt during life projecting over the symphysis pubis. The mass had caused great local distress, and symptoms of blood-infection arose. This induced resort to puncture of the cyst by the vagina. No improvement followed, and the patient sank. In reply to Dr. Tilt, the President said that the circulation of the blood was circumscribed as the consequence of pelvic inflammation.—Dr. TILT said that, with regard to the treatment, the history of hæmatocele might be divided into two parts. The first part was that in which it was thought necessary to puncture with a large trocar, or make an incision, and take away as much of the blood as possible. The first pathologist who recognised these cases was Récamier, who did not describe them as hæmatocele, but as sanguineous pelvic tumours. His plan of treatment was to open them by incision, and to extract as much as possible. As a result, pyæmia and inflammation set in. He then made an injection, and the results were very favourable. A little later, the history of these cases were better gone into by Nélaton and Bernutz. Although they thought it was wrong to make any incision, they generally punctured. The mortality remained so considerable that they resolved to leave the cases to themselves—not to puncture, and sometimes to apply leeches either to the womb or the vagina.—Dr. GIBSON asked could there be pyæmia if there were no exposure.—The PRESIDENT said that the blood was retained, and would sometimes undergo a change: the watery part of the blood might be absorbed, and so produce signs of pyæmia.

New Operation of Embryotomy by the Wire-Écraseur. By R. BARNES, M.D.—Dr. Barnes demonstrated his new operation of embryotomy by the wire-écraseur, using a rachitic pelvis measuring about two inches in conjugate diameter, and an ordinary-sized foetus. The head being perforated, he twisted off a portion of the parietal bones by his craniotomy-forceps, the object of which proceeding is to destroy the arch of the cranium and the sphericity of the head. This makes the throwing the loop of the wire over the head more easy, and obviates its riding off when the screw is worked. It was seen that the wire-loop could be passed through the smallest chink, and, when it had seized the head either over the lower jaw or occiput, that it was instantly buried in the skull when the screw was worked. In this lay one great superiority over all other methods of embryotomy, there being no contusion of the mother's structures, all force being expended upon the foetal head. The wire went through the base of the skull without difficulty, making a clean bisection of it. The free section being taken away by the craniotomy-forceps, the portion remaining attached to the spine was then seized by the craniotomy-forceps and extracted without the least resistance. Dr. Barnes said it would be quite as easy to operate in a pelvis much smaller, and, if necessary, to make two or more sections of the head. The extraction of the shoulders and trunk was effected by taking off each arm at the shoulder by hook or scissors, cutting through the ribs with scissors, so as to make the trunk collapse, and then extracting by craniotomy-forceps. The whole operation was completed in less than half an hour. Dr. Barnes expressed his conviction that, provided

there were room at the outlet of the cavity of the pelvis to allow of manipulation, there was hardly any degree of contraction at the brim that would baffle this operation.—Dr. KEILLER (Edinburgh) asked Dr. Barnes if he had performed the operation frequently?—The PRESIDENT had never done it at the bedside. He had performed it before his classes; but he was confident that it was feasible.—Dr. KEILLER saw a very great difficulty in performing the operation at the bedside. He could not imagine that the head of the child could be broken by the operation which Dr. Barnes had described. He knew the difficulty of extracting a child from a narrow pelvis; and he said that the operation of the *écraseur* could not possibly deliver a child from a narrow pelvis, on account of the pressure of the soft parts and the condition of the mother. Generally, in cases of narrow pelvis, they had to contend against a contracted uterus; and the great difficulty was to get a sufficient quantity of bone extracted. The objection to the wire *écraseur* was, that it was very apt to displace the head. He did not think the operation would be safe. The great difficulty was the base of the skull; and with a small pelvis it was difficult to keep the soft parts in the least possible diameter. He would have been glad if Dr. Barnes had told the members of a case successfully performed by the *écraseur*.—Dr. GIBSON said that, in an operation such as Dr. Barnes had performed, he would suggest that it was peculiarly necessary that the chin be brought a little down, in order that the base of the cranium might be readily brought through. In removing the head, they would get a better slice by first breaking through the occiput.—The PRESIDENT was persuaded that the operation was easy. One recommendation was, that it entirely saved the mother's parts. When the wire was brought over the child's head, the mother's parts were not injured. He thought it strange that an experienced operator should think it necessary to bring down the occiput. When once the base was perforated there was nothing to resist extraction.

A New Instrument for Securing the Pedicle in the Operation of Ovariectomy. By GRAILY HEWITT, M.D.—Adopting the conclusion that the best method of treating the pedicle in ovariectomy is to bring it to the surface of the wound, the author suggested a new method of securing it in that position. A framework of steel, shaped somewhat like a shoe-buckle, measuring two inches and a half by one inch and three-quarters, the steel band being two-eighths of an inch wide and one-eighth of an inch thick, is provided with studs, eight in number, fixed on the framework. These studs project three-eighths of an inch. The pedicle is to be tied in two or three segments, according to its size, by double twine ligatures, and the ends fixed to the studs of the framework, the ligatures acting much as the tongue of a buckle. Thus the pedicle can be easily maintained at the surface of the wound, easily treated, and the healing materially expedited.

Dr. KEILLER asked whether the clamp answered the purpose of pressing the abdominal wall when there was distension? The clamp sometimes disappeared altogether.—Dr. HEWITT said that was one of the objections which it was intended to obviate.

On Strangulation of the Uterus. By GRAILY HEWITT, M.D.—“Strangulation of the uterus” is that condition of the organ in which the circulation is mechanically and forcibly interfered with, the result being acute congestion of the body of the uterus and various secondary effects. This strangulation is present when the uterus is forcibly bent upon itself, most markedly when it is bent backwards. It is a marked feature in most cases of flexion; and it is acute or chronic according to circumstances. It occurs as a necessary result of acute flexion, the arteries, but more particularly the veins, being partially occluded by the bending of the uterus. The acute pain and tenderness of the body of the uterus in such cases are due to it. The nerves are also pressed upon at the seat of the flexion. It was the opinion of the author that this strangulation of the uterus is a principal pathological element in all cases where hysterical convulsive attacks are observed: the acute congestion of the uterus determining directly, as well as indirectly, the occurrence of the convulsive seizures. Strangulation of the uterus and chronic inflammation of the uterus are intimately related and mutually co-operative in giving rise to the various sufferings present in many cases of uterine disease.

Dr. REEVES asked if Dr. Hewitt had met with such cases in virgins?—Dr. HEWITT said they had occurred unquestionably in virgins. He instanced the case of a young lady who had received a severe strain and was confined to her couch for eight years, and unable to move without assistance. The conditions were precisely those which he had described in his paper.—Dr. AVELING remembered having seen, in the works of several Latin authors of the seventeenth century, chapters entitled *Strangulatio Uteri*. Might he ask by what pathological conditions the disease was supposed to be caused?—Dr. HEWITT said the subject was to him one of great interest. Dr. Aveling's erudition on subjects of this kind was well known, and he (Dr. Hewitt) must

plead great ignorance on the subject. The term simply expressed, in a definite manner, the condition which he had clinically met with. It was said there was nothing new under the sun; and possibly what he had said might be so described.—The PRESIDENT said he thought the disease was cured by restoring the uterus to its position.

The Diet of Parturient Women. By HUGH MILLER, M.D.—The author, after referring to the increased attention paid to the study of dietetics in disease, called attention to the very vague instructions still given by obstetric writers on this subject. Particulars of a case were given, in which careful nourishing diet given during utero-gestation enabled the patient in her last confinement to escape suffering from uterine inertia. From an examination into the physiology of the changes in the uterus and breast, Dr. Miller believed that the fat-cells existing in abundance in the milk during the first few weeks were due to the changes in the womb after parturition; that the disintegrating uterus was broken up into fat-cells, which were absorbed by the blood, and through the circulation were secreted by the mammary glands. Hence a heat-forming diet was neither necessary nor was indicated, and at times might be positively injurious; whereas a flesh-forming diet, by maintaining the strength, enabled the woman to make up for the waste of tissue during labour, gave her support, and maintained the vigour of her body while the further changes were going on. The author had found great benefit through selecting the parturient woman's diet from as nearly as possible the kind of food which she was in the daily habit of taking, giving it in a liquid form and in diminished quantity. The advantages in adopting a nourishing diet to the mother he believed to be; 1. Maintaining her muscular strength; 2. Avoiding irritation to the mammary glands and enabling her to suckle sooner; 3. Securing a quicker and better recovery.

Dr. PROTHEROE SMITH quite endorsed the opinions expressed in Dr. Miller's paper. For a long series of years he had been in the habit of treating parturient women, in consequence of the extra exertion required from them, with a very generous diet; and he was certain that was the system of a great many other practitioners.—Dr. KEILLER (Edinburgh) agreed with what Dr. Miller had stated with regard to the propriety of giving a nourishing diet to women immediately, or soon after, parturition. He was quite satisfied that it was the proper course, independently altogether of any theoretical explanations of the treatment. He was, indeed, in the habit of leaving the treatment of his patients very much in the hands of good, sensible, feeding nurses. He told them to fix a rule, according, as Dr. Miller had said, to their usual mode of living, and to be guided by it. He considered it a great mistake to place a parturient woman who had been in the habit of living well on a low diet and making her a rigid teetotaller. Dr. Miller had mentioned a case in which his patient was able to leave her bed under three days. Dr. Keiller had seen a woman up and at the washing-tub a day after her confinement; and it was well known that a number of women who had illegitimate children must, to escape detection, resume their ordinary duties soon after parturition. One night he was called to a young woman whom he found in a cab. She told him she had given birth to a child, and that it was still attached; and she begged him to come with her. He took her to an hospital, separated the child, and the young woman insisted on going home within one hour after confinement. She went home within that time, and none of her friends knew that she had had a child. He mentioned also that a short time ago a young woman came to him carrying a full-grown child with the placenta still attached. He could mention still more important cases.—Dr. RENFREW (Glasgow) said his practice had been to give a nourishing diet from the first. He saw no reason why he should not do so. A day or two before he left home, he called upon a midwifery practitioner who was always successful, and was informed by him that he had asked another practitioner, who complained of want of success, how he fed his patients, and and received the reply, "I give diet according to the authorities." What he (Dr. Renfrew) did, was first to allow his patients to get what they had been in the habit of having. This was, perhaps, an extreme view of the matter; but it was of importance to give a nitrogenous diet. In dieting, pathological changes should be attended to.—Dr. GIBSON (Newcastle) said that a woman who was to undergo labour ought, if possible, to be placed in a suitable state of health to enable her to perform that process; and, labour having been accomplished, it was necessary that she should be placed in a state of repose. When the processes of change were abundantly sufficient for the sustenance of the individual, he laid it down as a principle to give food only when absolutely required. Farinaceous food and stimulants were not necessary; and in the large proportion of cases nutritious food was the thing required.—The PRESIDENT said the subject was one of great importance, and there had been great fluctuations regarding it. As a consulting-physician, he had seen the consequences of errors in treatment; and he had noticed great mischief brought about by giving nutritious diet too soon

after parturition. He did not say that such diet was not necessary; but there was a prevalent tendency to go too far, and to load the stomach before the patient was able to bear it. He was struck with what Dr. Gibson said—that the system after parturition required repose, and that in consequence of the changes that took place little food was at first required. It was not desirable to give stimulants at all, and certainly not solid food.—Mr. DUNN (London) said his opinions perfectly coincided with those expressed by the President. For the first two or three days after parturition, he always gave his patients a mild diet—not beyond beef-tea.—Dr. KEILLER wished it to be understood that he did not say his practice was to give stimulants, although they might be given with advantage in some cases. He endorsed the opinion that for the first few days much food ought not to be given.—Dr. MILLER had brought forward his paper because of frequently meeting with the remark from nurses and students that this and that was not in the books. He had examined the present obstetric authorities, and found that they still continued to recommend the starving of the patient. He thought it well to bring the paper forward in order that he might see how far his fellow-practitioners agreed with him; and he was glad to hear that they agreed with him so far, that women after parturition should not be starved.

Embryotomy and other Instruments: with Illustrations.—By A. KEILLER, M.D., Edinburgh.—Dr. Keiller commenced by stating that, although he had not formally announced his intention of offering any special communication to the meeting, he was induced to bring the subject of embryotomy before the Section, partly from what had occurred on a previous day, but principally in consequence of having brought several embryotomy-instruments and casts taken from cases in which the diminution of the head was required. He would be glad if the members present would bear with him while he as briefly and practically as possible offered a few remarks on the very important subject of embryotomy appliances, and, if time and patience permitted, referred to and exhibited one or two other instruments which were on the table. He had had frequent occasion to test the various forms of craniotomy-instruments. He formerly reduced and extracted the child's head by the ordinary means of perforation and subsequent extraction—namely, the perforator, crochet, lions, and various other kinds of craniotomy-forceps (several improved forms of which he exhibited); but more recently he had preferred and adopted the operation of cephalotripsy in such cases, as he found it to have advantages which craniotomy did not possess. The casts now exhibited were three in number; each was illustrative of a special case, which he briefly described. On one of the casts the actual cephalotribe used was still attached to the head in the position and direction as applied during the operation. The cast of the head and cephalotribe was taken so as to be permanently useful for teaching purposes. In the case referred to, turning was first had recourse to, under the impression that the head might afterwards be safely extracted; but, this failing, it was found necessary to perforate the head in the ordinary way through the occiput. The force subsequently employed, with the view of bringing the head through the contracted brim, led to the separation of the body from the head, which was left *in utero*, and was afterwards removed by means of the cephalotribe. He had in several other instances occasion to remove the foetal head, left *in utero*, by forcible detraction; and he considered it one of the most difficult operations in obstetric practice, from the extreme mobility of the detached head, and the difficulty of grasping it and contracting it in the proper diameter; which was done, however, in the present case, by the cephalotribe. The second cast exhibited the cephalotribe applied over the compressed head in the most efficient direction. The third cast was that of a still more recent case; and it would be observed that the blades of the applied cephalotribe were considerably twisted, their edges being turned up and projecting in an unusual manner beyond the surface of the crushed head, demanding the greatest care during the stage of extraction, which Dr. Keiller, as a rule, always followed up immediately after crushing the head. Notwithstanding the twisting of the instrument, the crushing of the head was fully accomplished. In this case, a different form of instrument from the others exhibited was employed, it being constructed and jointed so as to admit of the direct apposition of the two blades, as in the more ordinary cephalotribe, or of one blade being applied and locked shorter than the other, which was the mode of using it in the present case. The object in view was to diminish the head to the greatest extent, by bringing the unequal extremity of the instrument closer; and the curved point of the shorter blade was received in the curve of the longer. The advantage presumed to be derivable from this arrangement of the blades was the diminution of the bulk of the instrument, as well as that of the head. This result was not obtained, however, in the present case, as it was found that this construction of the instrument allowed the blades to pass each other so as to produce

the twisting observed. He was induced to test this instrument by the request of the late Sir James Y. Simpson, who had suggested this alteration of its construction and mode of application. In the first case, the mother made a speedy recovery. In the second case, although an inflammatory attack occurred, followed by pelvic abscess, perfect recovery took place. The third case, which occurred only a week or two ago, was also followed by inflammatory symptoms, from which the patient was slowly recovering. In all the three cases, the continued and forcible use of the long forceps had been tried previously to cephalotripsy being had recourse to, which may account for the inflammatory symptoms referred to. Dr. Keiller exhibited various instruments along with the cephalotribe which he was in the habit of using. It was the so-called *Edinburgh instrument*, introduced by the late Sir J. Y. Simpson, whose name must remain deservedly associated with many other useful obstetrical appliances. It is of simple construction, readily applied like an ordinary pair of long forceps, which it somewhat resembles; and its ample crushing power renders it well adapted for such cases as usually occur requiring operation. Dr. Keiller, in again referring to the method recommended by Dr. Barnes, consisting of the application of a wire-*écraseur* in diminishing the foetal head, expressed his intention of giving it a fair trial on the first fitting occasion, although he had considerable doubts of being able to apply it in any degree so speedily and so dexterously on the living body as Dr. Barnes had done in his experiments on the dead foetus in the dry pelvis.

Instrument for facilitating the Application of a Tractor in Breech-Cases.—Dr. KEILLER, after referring to the tedious character of breech-presentations and the means of expediting the progress of such cases, said that a pupil of his (Dr. Ritchie, now of Broughty Ferry) had suggested a very simple means of applying a soft ligature or thin napkin around the presenting groin, so as to facilitate the birth by a safe degree of traction. It consisted of a foot of ordinary vulcanised India-rubber gas-tubing, closed at one end, into which blind extremity a short piece of clock-spring was inserted, leaving the other end of the tube open, and into which the ligature or folded napkin was pushed so as only to be slightly fixed. When used, the spring end of the instrument was inserted in the direction of the child's groin, and gradually directed so as to pass between the limbs, and withdrawn so as to leave the napkin around the groin ready for traction.

New Form of Inflatable Pessary for Retroversion of the Uterus.—Dr. KEILLER exhibited a pessary made of vulcanised India-rubber, which he had found useful in retroversion and other displacements of the uterus. It was of pyriform shape, and only partially inflatable at its upper extremity; its lower and narrow end being uninflatable, so as to give the required support, especially in cases of defective state of the perineum. Dr. Keiller also exhibited an instrument which had been introduced and recommended to the profession by his friend Dr. Charles Bell as presenting advantages which other forms of pessaries had not. It is composed of a steel band an inch broad, covered with leather, which encircles the pelvis and buckles behind, and having a heart-shaped plate of the same materials in front, corresponding to the mons Veneris. To this plate the second part, which consists of a globe-shaped wooden pessary an inch in diameter, is appended by means of a narrow piece of German silver nine inches in length, which is rounded at one end and screwed into the pessary, while the other end is flattened and screwed in a socket by a screw-nail. By this arrangement it can be lengthened or shortened according to circumstances; and, the stem being pliable, it is easily bent so as to place the pessary in the axis of the pelvis. At the same time, it is of sufficient strength to give firm and uniform support to the uterus; and when it is properly adapted to the pelvis, it gives no uneasiness, and does not interfere with the due performance of the functions of the pelvic organs. It never alters its position when properly fitted, and it is easily introduced and removed by the patient herself; and it ought to be removed every night.

Dr. BEATTY (Dublin) had been greatly gratified with what Dr. Keiller had shown and described, particularly as he gave a confirmatory statement that the cephalotribe was suitable in certain cases, and also confessed the fact that it was not so dangerous to life as the old practice of smashing up. In fact the immunity of the patients on whom the cephalotribe was used was very great. All the instruments exhibited by Dr. Keiller were, however, inferior to Dr. Kidd's, shown at the meeting at Leeds.—Dr. PROTHEROE SMITH remarked as to Dr. Bell's pessary support, shown by Dr. Keiller, that it was almost precisely similar to that which he described in his paper last year, and which was illustrated in the *Lancet*.—Dr. DILL (Belfast) was very much pleased with the introduction of the subjects brought forward by Dr. Keiller. He was disposed to confirm the statement made by Dr. Beatty; he preferred a straight to a curved cephalotribe. He had used the straight one with considerable ease, and when he had failed in the use of the for-

ceps. He preferred it when the pelvis was narrow. He had felt great difficulty when there was a narrow pelvis in bringing the head through with the crotchet. He was in favour of Dr. Kidd's instrument. He had performed the operation by perforation, and put in the cephalotribe, but could not make it to take hold. The head had not material enough to grasp in the centre, and hence the instrument slid. However, he overcame the difficulty by unscrewing the instrument and passing it further up. He found that, in two cases where perforation was not used, the instrument seized hold of the head and brought it away with very great ease.—Dr. GRAILY HEWITT felt very much obliged to Dr. Keiller for having brought the subjects referred to before the meeting. There could be no question that the use of the cephalotribe was likely to be attended with most beneficial results, and it was therefore very important that a proper instrument should be selected and judiciously applied. So far as the shape of the instrument was concerned, he believed that the straight instrument was preferable; and, moreover, as in most cases the pelvis was not only narrow, but shallow, the necessity for a curved instrument was very much done away with. Certainly the straight instrument did the work in a ready manner. He did not say that Dr. Braxton Hicks's instrument was superior to Dr. Kidd's; but he had great confidence in it; it was portable and short. It seemed to him that the omission of the perforation referred to by Dr. Dill involved a theory in the use of the cephalotribe that could not be accepted. The object of the cephalotribe was to crush the head; and if it were possible to relieve the head without perforation, what was the use of the cephalotribe? They might as well employ the long forceps. An undue prominence seemed to have been attached to the tractile force given by the cephalotribe. He believed that the best results were obtained by the cephalotribe when used as a crushing instrument. He did not look upon it as a tractile instrument, but when employed in the manner indicated it was certainly likely to be attended with beneficial results. As to another instrument shown by Dr. Keiller—the instrument for supporting the uterus—he had been led to reject external methods of supporting the uterus when it was possible to do so. When the perineum was not destroyed, it was advisable, in his opinion, to support the uterus by means of an internal instrument. When the perineum was gone, and there was nothing to support the internal instrument, an appliance such as that shown would be necessary. But in such a case there would be an argument for an operation on the vagina. It was possible to support the uterus most completely and most satisfactorily to the patient by various internal appliances; much more so than by a complicated instrument.—The PRESIDENT commented upon several of the instruments shown by Dr. Keiller, and expressed his gratitude to that gentleman for the subjects he had introduced, and the observations which he had made.—Dr. KEILLER thought that, if there were any objections to the straight forceps, there must be a greater objection to the straight cephalotribe; because the blades must be introduced above the rim, as in the case of the straight forceps. The straight instrument was not so useful in getting above the head. The great difficulty in using the cephalotribe even as a curved instrument, was the bringing of it properly over the head. The head must be seized with a grip like that of the long forceps, not a transverse grip, but in the oblique diameter. His objection to the straight forceps was, it was necessary to study the axis of the inlet of the pelvis, and of the soft parts. The remarks made by Dr. Dill corroborated what he stated regarding the usefulness of the curved instrument. As to perforation, in one case he applied the instrument over the head, before beginning to screw up the instrument he perforated; and the consequence was that the head bulged out. There was no doubt in his opinion of the necessity of perforating before extraction. With regard to crushing the head or leaving it alone, he thought it advisable to look to those who had tried it and found the results.—Dr. HEWITT did not wish it to be inferred that the head should be left in the uterus.—Dr. KEILLER did not say that Dr. Hewitt had said so. As to the argument merely to crush the head and leave it alone, he objected to it. He had seen Sir James Simpson use the instrument for destroying the head—merely breaking it up; and he used to say, "leave the head alone." Afterwards, it would become necessary to extract the head. He did not agree with Dr. Hewitt that the difficulty was decreased in these cases in consequence of a shallow pelvis. If a case of this kind were examined, the child would be found very high up; and a condition was present which was in reality increased by the depth of the pelvis. In regard to the pessary support, he had frequently, where the perineum was gone and the pessary consequently had no support, made a new perineum; and in such cases the instrument by Dr. Bell answered very well. The advantages, however, for making a new perineum did not seem to him so great as they did ten or fifteen years ago. He expressed the pleasure which he had received from the meetings of the sections, and the gratification he had

in receiving hints which might afterwards be useful. He was obliged, also, for the reception which his observations had met with.

The PRESIDENT, in closing the Section, said he need not comment upon the success of the meetings. Although there had been excursions on each day, the meetings had been very well attended. Numerous interesting and important subjects had been brought forward, and much instruction had been derived; and they would be able to study the various papers and the observations they had elicited when the transactions of the meeting were published.

Dr. GRAILY HEWITT said they could not separate without expressing their sentiments as to the conduct of the Chairman during the sittings of the sections. It was a somewhat onerous duty to undertake, especially with the rather difficult circumstances under which the meetings of the Society were conducted. Great credit was due to Dr. Barnes for having given his time and attention so completely to the duties which devolved upon him. [*Applause.*]

The PRESIDENT thanked them for their recognition of his services.

REVIEWS AND NOTICES.

NOTES OF A COURSE OF SEVEN LECTURES ON ELECTRICAL PHENOMENA AND THEORIES, delivered at the Royal Institution, 1870. By JOHN TYNDALL, LL.D., F.R.S. Pp. 40. London: Longmans; 1870.

THESE notes have been published by Professor TYNDALL for the same reason that he some time ago published his *Notes on Light*: that they are wanted for educational purposes. As to their fitness for use in instruction there can, we think, be no question. The main facts relating to electrical phenomena are described in numbered paragraphs, containing just as much as is necessary for imparting a clear idea of the subjects treated of, and nothing superfluous. Interspersed also are some historical data regarding the electric telegraph and other matters. Any one who uses this book for study can scarcely fail to be instructed; the more so, if he have an opportunity of testing by experiment the statements which it contains.

REPORT OF THE CITY OF GLASGOW FEVER HOSPITAL, FROM 1ST MAY, 1869, TO 30TH APRIL, 1870. By Dr. JAMES B. RUSSELL, Physician Superintendent.

THIS is an instructive Report, containing not merely the statistics of the Hospital for the year, but comments on some important matters in relation to the management of fever-patients. The first part of the pamphlet is occupied with an account of the means taken to provide increased accommodation in Glasgow for cases of fever. Dr. RUSSELL says that the wooden pavilions in use there have, after a trial of five years, been found perfectly comfortable in all weathers, and promise to continue so. He then makes some remarks on what he terms the "unification of the interests which deal with fever". He believes that it will become evident that, for the sanitary officers to carry out their instructions fully, they will have to undertake the entire hospital treatment of infectious diseases.

"The *prevention* of disease is the special province of the local authority. Its *treatment* may devolve on various public bodies and institutions, according to accidental or special circumstances. These public bodies and institutions receive and treat a person suffering from fever just as they would the same person had he any surgical injury or ordinary disease: they do so for the *individual good* solely. On the other hand, when the local authority treats a person suffering from fever, it is because the person has a 'contagious' disease, and indeed comes within the meaning, if not the definition, of the term 'nuisance'; they do so for the *public good* solely. It is quite possible to treat contagious disease in the most perfect way, so far as the sick individual is concerned, and yet to fall short of perfect precautionary measures for the prevention of its spread. The Public Health Act makes it imperative, under penalty, for 'any person suffering from any infectious disorder', for 'any person in charge of a person so suffering', and in respect of clothing, lodgings, etc., for 'any person' absolutely, that they should adopt preventive measures. But still in respect of hospital patients, the local authority can hardly insure the fullest exercise of the preventive power which is possible, unless they are under their own care from beginning to end of the disease."

Dr. Russell points out that, when a patient is retained in hospital for a longer time than is necessary for his own health's sake, there is an expenditure of money; and asks whether, as this is for the public good, it ought not to be borne by the local authority rather than by the hospital. Of relapsing fever, at the date of the Report, there had been

only 19 cases; but a note on page 25, dated 25th July, states that the disease had steadily increased, there being at that date in hospital 60 cases of relapsing fever and 30 of typhus, which had become much rarer. Dr. Russell believes, however, that relapsing fever will not assume any alarming proportions in Glasgow. There is, he says, less poverty in the city than there was last year. The Report contains much other instructive matter, which we must, however, pass over, merely thanking, Dr. Russell for the information which he has furnished, and the valuable comments and suggestions which he has made.

NOTES ON BOOKS.

A Catechism of Health, adapted for Primary Schools, by Dr. J. H. BRIDGES, is a little pamphlet of twelve pages, which will, we hope, have a very extensive circulation. It contains, in the form of question and answer, and in simple language, such elementary matter relating to the preservation of health as every one ought to know. Its very moderate price—twopence—places it within the reach of all classes.

An Oration delivered before the Medical Society of London on May 2, 1870. By FRANCIS MASON, F.R.C.S. Churchill and Sons.—Mr. Mason has carefully examined the records of the Medical Society from its foundation in 1773 to the present time, and has given in this oration a number of extracts. They are interesting, inasmuch as they shew the modern practitioner some of the manners and customs of the profession of past generations. For instance, in the year 1797, we find the following note of some remarks in a discussion on hernia. "Glysters of tobacco, both in infusion and in fume, and large quantities of warm water, to the amount of three quarts or a gallon, were thrown into the bowel with an appropriate apparatus. Calomel, cathartic extract, neutral salts, senna, and other purgatives; bleedings, fomentations, warm bathing, and large clisters, had been employed without producing stools. Washhand-basins full of feculent matter had been vomited up; but yet the patient died!"

The Report of the Northampton General Lunatic Asylum for 1869.—The Annual Report of the York Lunatic Asylum for the Year ending May 31, 1870.—Fortieth Report of the Resident Physician of the Belfast District Hospital for the Insane, 1869.—The general tenor of these Reports is to show the satisfactory condition of the several asylums, and the progress made in the treatment of the insane. The Superintendent of the York Asylum, Dr. Needham, discusses a question of some importance; viz., the means of reducing the gradual accumulation of patients in pauper asylums. He is of opinion that the public would in the end gain by the erection of two smaller asylums in place of one large one; and he believes, further, that certain very carefully selected cases might with advantage be treated at their own homes or in private dwellings, under strict and constant official inspection. "In every asylum," he says, "are to be found many patients whose lives would be more happy, their safety and that of the public as well secured, and their maintenance much less costly, if they were drafted off to the care of friends, where their home affections might have a fair chance of development, and the cheerful intercourse of family life succeed the necessary monotony of the asylum."

Medical College, Calcutta, Session 1870. The Introductory Lecture by Dr. S. GOODEVE CHUCKERBUTTY. Calcutta: 1870.—This address commences with some excellent advice to the students as to their manner of study. Dr. Chuckerbutty recommends, *inter alia*, the translation of at least all the good English professional manuals into the vernacular languages. Something has, he says, already been done in this way, but it is a mere drop in the ocean. A considerable part of the lecture is occupied with some interesting remarks on national education in India, under the heads of Oriental classical education; viz., in Sanskrit and Arabic; vernacular education—in the numerous languages spoken in the country; and English education. He sums up his remarks as follows. "In conclusion, I think I may be allowed to sum up that all the three kinds of education I have described are necessary to a complete scheme of national education for India, and deserving of the patronage of Government: the *Oriental Classical* as a complement to the vernacular languages for their refinement and improvement; the *Vernacular*, for the largest diffusion of knowledge; and the *English*, for the highest intellectual and moral development, the most successful cultivation of the physical sciences, the political education and consolidation of the nation, and as the best preparation for filling all responsible positions in the country." The pamphlet is an interesting one, as shewing the opinions of a native gentleman who has received an English education, and who has, by his talent and industry, risen to a high professional and social position in his own country.

An Elementary Course of Hydrostatics and Sound. By RICHARD WORMELL, M.A., B.Sc. Pp. 146. London: Groombridge and Sons. 1870.—This book is one of a series of "Science Manuals" published by Messrs. Groombridge, and of one of which—Mr. Orme's work on Heat—we had occasion to speak favourably some time ago. The book now before us contains, the author says, all that is required on the subjects of hydrostatics and Sound for the B.A. and B.Sc. degrees of the University of London. For such a purpose, or indeed for instruction in the sciences mentioned in any circumstances, the book appears to be very well fitted. The explanations and directions are clearly given, and there is a sufficiency of drawings and diagrams. A number of exercises are given at the end of each chapter, which the student will find useful in ascertaining whether he has thoroughly understood and mastered that which he has read.

The Celtic Origin of a great part of the Greek and Latin Languages. By THOMAS STRATTON, M.D. Edin. Second Edition. Edinburgh: 1870.—This is a little book on a subject which scarcely comes within the range of a medical periodical; and therefore we must sum up in a few words as possible our criticism of it. Dr. Stratton, who is a Deputy Inspector-General in the Royal Navy, is the author of a number of articles of merit in the *Edinburgh Medical Journal*. He has also applied himself to the study of the Scotch Gaelic language; and this study has led him to believe that very many words in the Greek and Latin languages are of Celtic origin. In proof of this, he gives tables of Greek and Latin words, with the Gaelic words from which he believes them to have been derived. While in a certain number of cases—to wit, especially, proper names of places in Britain—he is no doubt right, his derivations are in many instances very far-fetched. For instance, we find the word "interrex", derived from *eadar*, betwixt, and *rioh*, a king; and "Constantinopolis" from *comh*, together, *stad*, stop, and *baile*, a town. The author has apparently overlooked the fact that there are other languages besides the Celtic and Greek and Latin belonging to the same family, and having words in common with them; and that community of appearance does not always denote descent one from another, but points often to derivation from some common origin. Dr. Stratton has spent much labour in his task, and has collected a quantity of material which will interest philologists; but we do not think that they will be inclined to accept all the conclusions which he has drawn.

Relaxation of the Pelvic Symphyses during Pregnancy and Parturition. By FREDERICK G. SNELLING, M.D. New York: 1870.—In this pamphlet, the author calls attention to a condition which, although described by continental accoucheurs, has not been generally recognised in America or in England. The condition referred to is relaxation of the pelvic articulations, becoming apparent during pregnancy or after parturition, and allowing a degree of mobility of the pelvic bones which hinders locomotion, and produces distressing and alarming sensations. He refers to cases described by Duplain, Trousseau, Hodge, Pigeolet, Putegnat, and Courot. He discusses the pathology of the affection, which he is disposed to regard as an exaggeration of a physiological relaxation which occurs in very many cases of pregnancy. The treatment consists in rest and the wearing of a pelvic girdle. A more severe affection is also described and illustrated with cases, in which suppuration or rupture of the symphyses takes place.

St. Andrew's Medical Graduates' Association. Transactions, 1869. Edited by LEONARD W. SEDGWICK, M.D. London: 1870.—This is the third volume of *Transactions* issued by the St. Andrew's Medical Graduates' Association. It contains, besides official matter, an address on the Science of Cure, by the President, Dr. B. W. Richardson; and papers on the Clinical Examination of the Urine, by Dr. C. Black; Haschisch, by Dr. Polli of Milan, and Dr. Richardson; the Therapeutic Value of Chloride of Ammonium, by Dr. Cholmeley; Therapeutics, by Dr. Procter; Aphasia, by Dr. S. Lawrence; Gastric Neuralgia, by Dr. W. H. Day; Melanosis, by Dr. Norris; a Study of Convulsions, by Dr. Hughlings Jackson; Ovariectomy, by Dr. Lloyd Roberts; Prurigo and Pediculosis, by Dr. Tilbury Fox; and Intermittent Pulse, by Dr. Richardson. The volume contains a variety of material of great merit. The papers of Dr. Hughlings Jackson on Convulsions and of Dr. Richardson on Intermittent Pulse may be mentioned as especially elaborate and instructive.

THE Birmingham Board of Guardians have decided to try the experiment of boarding out pauper children.

POISONING BY INFUSION OF YEW-LEAVES.—*L'Imparziale* of September 16th relates a case in which a young girl, aged 19, suffering from suppressed catamenia, took, by the advice of an old woman, some decoction of the leaves of the yew (*taxus baccata*). Death followed in eight hours, in spite of medical treatment.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 1ST, 1870.

THE PUBLIC HEALTH PROBLEM.

THE address delivered in the Public Health Department of the Social Science Association by Mr. Rawlinson, of which an abstract is given on another page of this week's JOURNAL, contains evidence that its author has made the improvement of the sanitary condition of the people an object of careful study. It is, indeed, one of the benefits which the medical profession derives from such a mixed body as the Social Science Association, that an opportunity is given for full exposition of the opinions of the leading men in other pursuits, on questions in the solution of which men of all classes and all professions are not only interested but must bear an active part. Foremost among such questions stands that of the improvement of the sanitary condition of the people.

Mr. Rawlinson has dealt with his subject on a very comprehensive basis, and has taken ground on which he may readily be met, either for agreement with or disapproval of his opinions, by all who have an interest in it. Who is there, that has had opportunities of observation, who will not agree with the proposition laid down by him, that not only physical health but moral health is closely bound up with and affected by sanitary conditions? To members of the medical profession it must be well known, how intimately overcrowding, dirt, and a low moral condition, are connected. This subject, however, is one in which the interest taken by the sanitary physician is the same as, and no greater or less than, that taken by the clergyman or the legislator, or by every member of the community who desires the advancement of the moral integrity of the people.

The connection between the state of the habitations of the poor and their moral state, as pointed out by Mr. Rawlinson, is, then, one which it is not necessary to discuss further here. But, when he states that an improvement of habits and habitations would lead to the diminution of disease and the improvement of general health, he touches on a matter in which all medical men who practise among the poor must feel a direct interest. Medical officers of health, and indeed all who are engaged in the treatment and prevention of disease, meet with great hindrance through the ignorance or carelessness of those with whom they have to deal. This impediment, however, it is in a great measure within their power, aided by willing and efficient coadjutors, to overcome. They may succeed in enlightening the people as to the evil of this or that habit, and the necessity of this or that precaution; and may thus make some advance towards obtaining improvement. But the great impediment which interferes with their efforts, is the defective house-accommodation of the poor, and the indifference shown by too many of the providers of that accommodation to any interest save that of their own pecuniary profit—an indifference which, far from fulfilling, only defeats the object which they have in view. We need only refer, for

evidence that there are those among us who agree on this point with Mr. Rawlinson, to the excellent paper on the Fever-dens of Glasgow, read by Dr. Gairdner at the meeting of the British Medical Association three years ago, and published in the JOURNAL for Oct. 19, 1867; as well as to the discussion which followed the reading of the paper. In Glasgow, said Dr. Gairdner, every measure that need be taken for the prevention of the spread of disease and the improvement of the house-accommodation of the poor was in force, so far as law would permit. But still there were evils which were beyond reach, the impediment resting with the owners of the property of which complaint was made. Mr. Rawlinson would have the State to interfere for the removal of the evils arising from defective house-accommodation. He says: "That which is necessary to the well-being of society, and which individuals cannot provide, but which States can provide, must be the bounden duty of the State to furnish. It does not follow that States must build and own cottage tenements; but it may be inferred that States ought to frame laws and provide means and machinery for enforcing such laws and regulations as are necessary to bring about the required improvements." This suggestion agrees closely with some remarks made by Dr. Acland in the discussion on Dr. Gairdner's paper to which we have above referred. "I have no hesitation," he said, "in saying that no Government, be its politics what it may, deserves the name of a Government, that, in a country like ours, at the present time of day, does not bestir itself at once to enforce the rule that no house shall be built unfit for people to live in." The choice of a remedy, indeed, lies between compulsory action on the part of Government and the convincing of the owners of house-property of the truth of such arguments as are stated by Mr. Rawlinson as to the real value to them of improving the house-accommodation which they provide for the poorer classes. In whichever way the necessary improvement can be first made, and permanently secured, the work of the medical sanitarian will be lightened, and its results for good increased; but until something be done to bring about the improvements, the necessity of which has been so ably insisted on by Mr. Rawlinson, we fear that we shall still have to hear of "fever-dens" and similar nuisances, with which not the most active sanitary officer, with the most efficient staff of assistants and the most ample supply of disinfectants which can be placed at his disposal, can effectually deal.

There is one further point, among others, in Mr. Rawlinson's address, which deserves attention; viz., the fallacy attending registration statistics. As he well shows, to speak of 25 per 1,000, for instance, as the average mortality of London, does not show the amount of misery and disease which exists in some parts of it. If we study the returns correctly, we shall learn, he says, "that there are districts in which the mortality ranges from 50 up to 100 or more per 1,000—human dens of wretchedness, crime, and pauperism; the owners of property in such districts having no regard to sanitary improvement but to avoid and retard it." This statistical fallacy is one to which allusion has already been occasionally made; and Mr. Rawlinson is quite correct in saying that it both injures localities and misleads the public. We are glad to find, from his observations, that there is a probability of an early amendment of the defect.

The Social Science Association is to be congratulated on having had delivered to it such an address as that of Mr. Rawlinson. We hope that many besides those who had the advantage of hearing it will have the opportunity of reading and reflecting on it, and of acting on its suggestions.

THE NOMENCLATURE OF MENTAL DISEASE.

DR. J. BATTY TUKE complains that, whereas the official nomenclature of diseases adopted by the College of Physicians, and forwarded to every member of the profession in Great Britain and Ireland by the Government, contains a list of some nine hundred diseases, a large assortment of poisons, and fifty-seven pages of accidents and malformations, under which the British public is authorised to suffer or die, the

mind of the Briton is authorised to suffer from only six disorders of the intellect. The idea of disease as associated with madness is studiously ignored. Thus the opinion stands expressed by very high authority, that insanity is not a disease of the body—merely a disorder of the intellect. After reviewing the refutations of that opinion put forward by Morell, Schroeder Van der Kolk, Skae, Griesenger, Maudsley, and other modern authorities, he affirms that all alienist physicians will agree with Skae, the Cullen of psychiatric medicine, in "the all-important principle that insanity is a disease of the body, whether it be of some remote organ sympathetically acting on the mind, or of the organ of the mind itself." Insanity, according to Dr. Tuke, is a symptom of a disease either of the brain-plasm primarily, or of a disease of the brain dependent on exoteric influences. Acting on this principle, the following nosology of insanity is suggested.

CLASS I.—Insanity resulting from arrested or impaired development of the brain. *Subclass*: Idiocy, congenital and acquired.

CLASS II.—Idiophrenic Insanity. *Subclasses*: Sthenic and Asthenic Idiopathic Insanity, Phrenic Insanity (Inflammatory), General Paresis, Paralysis with Insanity, Traumatic Insanity, Senile Insanity, Epileptic Insanity.

CLASS III.—Sympathetic Insanity. *Subclasses*: Epileptic Insanity, Insanity of Masturbation, Insanity of Pubescence, Climacteric Insanity, Ovarian and Uterine Insanity, Insanity of Pregnancy, Puerperal Insanity, Postconnubial Insanity, Hysterical Insanity, Enteric Insanity.

CLASS IV.—Anæmic Insanity. *Subclasses*: Limopsoitos (from starvation), Postfebrile Insanity, Insanity of Lactation.

CLASS V.—Diathetic Insanity. *Subclasses*: Insanity of Tuberculosis, Syphilitic Insanity.

CLASS VI.—Toxic Insanity. *Subclasses*: Cretinism, Delirium Tremens, Insanity of Alcoholism, Insanity of Opium-eating.

CLASS VII.—Metastatic Insanity. *Subclasses*: Rheumatic Insanity, Pellagrous Insanity, Metastatic Insanity (from healing of long established issues).

Without entering into a detailed discussion of this nosology, we may say that it embodies a principle which appears to give promise of veritable progress in the study of the pathology and therapeutics of the diseases of the mind. In the formation of a Psychological Section, our Association has given a pledge of its desire to help forward the progress of psychological medicine. In giving prominence to this proposed classification based upon pathology, we are endeavouring to aid in fulfilling that pledge.

THE Library of the College of Surgeons will be reopened this day (Saturday), and the Museum on Monday.

DR. HOFFMEISTER of Cowes has been commanded by the Queen to proceed to Darmstadt, to attend Her Royal Highness the Princess Louis of Hesse in her confinement, which is expected to take place during the first week in October.

WE are enabled to state that the announcement of Professor Longmore having gone to the seat of war in charge of a field hospital under the National Society for Aid to Wounded, is not correct. Professor Longmore has been assisting in the organisation of the ambulance arrangements of the Society, but nothing has been settled about his leaving England for the Continent, as has been stated.

THE BABY-FARMERS.

THE trial of the baby-farmers, Margaret Waters and Sarah Ellis, was concluded on September 23rd, having lasted three days. The evidence proved that the infants who were in the care of Waters had been treated with narcotics and insufficiently supplied with food. A verdict of guilty was returned against her, and she was sentenced to death. The woman Ellis, who had been found guilty of obtaining money by false pretences, was sentenced to eighteen months' imprisonment. The police-sergeant Relf, by whom the iniquitous proceedings of the women had been brought to light, was complimented by Mr. Sergeant Ballantine and the Lord Chief Baron, who ordered him a gratuity of £20. The fate of the principal offender, and the publicity given to the case,

will, it is to be trusted, do something towards the abatement of the evil, now that it has become evident that the law can reach the guilty persons.

YELLOW FEVER IN SPAIN.

A TELEGRAM from Madrid, dated September 22nd, states that yellow fever has broken out in Barcelona, having been apparently imported by the Cuban steamer *Maria*. There had been about 1000 attacks and 350 deaths.

ALLEGED MALPRACTICE.

A GENTLEMAN well known by reputation in this country as an able surgeon, Dr. Sayre of Philadelphia, has lately been subject to the annoyance of an unfounded action for malpractice, which was, we regret to say, supported by two of his medical brethren. A child named Welsh, aged 6 years, was suffering from an abscess near the left hip, Dr. Sayre was called in, and, in the presence of Dr. Gross and two other surgeons, punctured it, giving exit to a large quantity of pus. The child's father, it is said, conferred with his "family physician", a person named Vaughan, who held a consultation with Dr. J. M. Carnochan and Dr. Willard Parker. They asserted that Dr. Sayre had punctured the joint and allowed the synovial fluid to escape. An action to recover 20,000 dollars was brought by the father. The case was, however, referred by the supreme court to three referees—one at least of whom was a medical man. They found that Vaughan was not a graduated physician, but had merely been employed in drug stores; that Dr. Carnochan and Parker had not made an examination of the alleged synovial fluid; that the patient had been treated with all proper skill and care; and that she had derived benefit from the operation. The court confirmed the report, allowing costs to Dr. Sayre. The plaintiff again brought the case before the supreme court, by moving that the defendant should shew cause why one of the referees—Dr. Swinburne—should not be set aside on the ground of incompetence. This was refused, with costs. Assuming the correctness of the narrative from which the preceding abstract has been taken, we must say that the action appears to have been a most disgraceful one; and that the conduct of Drs. Carnochan and Parker—who, we believe, are men of some standing in the profession in America—was, to say the least, very reprehensible. The *New York Medical Journal*, in noticing the case, makes a remark with which we heartily agree: "We have but a single regret to offer in view of the happy termination of the suit; and that is, that those who instigate such proceedings could not be made to suffer an equally severe penalty"—with that which they would extort from their designed victims.

QUACKERY AND THE RELIGIOUS PRESS.

THE *New York Medical Gazette* has the following remarks on the manner in which quackery is fostered by the religious press.

"The popular taste for amateur narcotism, catharsis, or other modes of poisoning, is more mischievously fostered by religious papers and certificates from members of the clergy than by any other agencies. In a peculiarly pious journal, now lying before us, we find advertisements, first, of an effectual cure for 'piles' which a venerable charlatan, who refers for a character to the editors, has patented, and which he offers to forward to the afflicted for the modest sum of ten dollars. Next is a 'cure for consumption'; then two poisonous hair-dyes, official analyses of which have been published widely and probably seen by the editors; then patent pills for the rapid cure of a score or more of diverse maladies; next, sandwiched between 'Gospel Tracts' and 'communion services', a narcotic preparation for the dangerous drugging of infants; and, finally, a 'catarrh specific' invented by a 'reverend brother', whose attention was turned in this direction by his own ill health, and who boasts that his nostrum 'will arrest the decay of the bones of the nose'. A certificate is appended from another reverend gentleman who 'hopes that God will bless' the advertiser's 'effort to relieve the afflicted of our race' (by keeping secret for his own gain a remedy which he asserts to be of use to all mankind?); and in another part of the paper is an 'unreserved' puff of the said specific, coupled with the somewhat irrelevant testimony that its reverend proprietor 'has served the Lord faithfully'.

RELAPSING FEVER AT MERTHYR TYDFIL.

MR. DYKE, the Medical Officer of Health for Merthyr, has called the attention of the Board of Health of that town to the presence there of relapsing fever. In his report, dated September 21st, he states that, during the last two months, there have been twenty-nine cases of relapsing fever in the district. He fears, from the history of the fever and the existence of poverty and dirt in many hundred houses in Merthyr, that the disease will spread. He therefore applies for increased accommodation for fever-patients.

THE EXAMINATIONS OF THE PHARMACEUTICAL SOCIETY.

PROFESSOR CHRISTISON and DR. GREENHOW, the Official Assessors of the Privy Council at the Examinations conducted by the Pharmaceutical Society, have given long and favourable reports of the manner in which the examinations are conducted. In concluding his report, Dr. Greenhow says:

"I have, in conclusion, only to repeat what has already been implied in my report, that, in my opinion, the examinations of the Pharmaceutical Society are of such sort, and are conducted in such manner, as to constitute a sufficient guarantee to the public with regard to the qualifications of persons admitted to register under the Pharmacy Act, 1868."

Dr. Christison sums up his opinion in the following words:

"The results of the professional examination seem to me satisfactory in every point of view. First, the number of candidates who have come forward last year is considerable. Secondly, the rejections, amounting to nearly a fifth of the whole, testify that the duty of the examiners has been faithfully discharged. Thirdly, it is creditable to the candidates that the number of failures has not been larger; for in other professions about a fifth of failures seems the usual average when examining boards are well organised and faithful, and the generality of their candidates are well prepared."

PRELIMINARY EDUCATION OF MEDICAL MEN.

THE preliminary education of persons entering the medical profession in America demands amendment. A correspondent of the *Philadelphia Medical Reporter*, calling attention to the subject, says very truly:

"The curriculum and the term of study may be extended to the furthest limit yet proposed; if the student does not enter upon his medical course with a mind trained and furnished by a literary course of study, he will, as a rule, do but little in after life to bring honour to medicine as a learned profession. I know that keen natural perception, a logical mind and sterling sense will overcome a deficiency of early training, but such cases are the exceptions to a very general rule, that a liberal education lays the foundation of the truly accomplished medical man."

He states that he had seen, in a certain medical communication, a reference to "pleuracy"; and that, in an article in a volume of transactions of one of the leading state societies, *ante partem* and *post partem* hæmorrhage are several times mentioned.

THE THEORY AND PRACTICE OF DEATH-CERTIFICATES.

SOME important information is contained in the last quarterly report of one of our ablest Medical Officers of Health, Mr. Liddle, of White-chapel, relating to the informality of certain medical certificates of the so-called "cause of death". The Registrar-General's form requires the medical certifier to state that such a person died on such a day in such a place, although he may never have seen that person dying or dead. Many certificates are being continually given by practitioners, who only know for certain that the patient had such and such a disease, not having been seen by them for some time before the alleged decease. Many thousands of certificates have been given on mere hearsay. No wonder, then, that sometimes the person has been still alive. To correct in some measure this absurd and mischievous abuse of the registration system, it has been suggested that the medical attendant, on being asked to certify a death, when he had not seen the dead body, or had no certain evidence of the death, should merely state that he had been informed, or that he believed, that the person was dead. Now the question which Mr. Liddle's report raises is this: ought the Registrar to accept such a statement as a certified cause of death? We think, with Dr. Farr, that no certificate ought to be given in such cases. The

fact of death is the first thing to be sure of. The cause or manner of death is the second. A strict adherence to rule is necessary, to whatever extent this may diminish the number of medically certified deaths. The defect in the system is to be cured, not by conditional certificates, but by the employment of a public officer to ascertain the fact of death, some one acting under the authority of an officer of health, or, according to Dr. Farr, a "registration medical officer", who would himself ascertain the "cause" in all cases where the medical attendant is unable or unwilling, for any reason, to certify. What should be the precise machinery for securing absolute accuracy in mortuary registration, is a matter on which the Sanitary Commission will have to offer a decisive recommendation. Much valuable evidence has been taken on the subject. But, in the meantime, we protest against any attempt to make good obvious defects of registration, by a sort of provisional or hypothetical certificate, which, after all, may be given before the person is dead. Certainly the medical attendant ought not to be made the legal informant of death. But, so long as the present form of certificate is required, the Registrar-General is justified in directing the Registrars not to enter as certified those deaths which are informally certified. On the other hand, medical men act rightly in declining to certify to the fact of death when they have not seen the corpse. The more plainly this error in the machinery of registration is made to appear by a large return of uncertified deaths, the surer will be our prospects of a speedy and thorough reform of the whole system. The fallacies of mortuary registration and of death-rates have long been under consideration by medical statisticians. The very expression, "cause of death", is open to a multitude of interpretations, any one of which may be employed by every certifier. Hence the present returns depend on certificates of very various meanings, and are not reliable, etiologically, to the extent which the official supporters of the system assume. We call attention to Dr. Stokes's remarkable words before the Commission. "There is no problem more difficult than to determine the cause of decease, even by a *post mortem* examination, in many cases. There are certain conditions which we know to be incompatible with life; and where such conditions are found, the explanation of the cause of death is not difficult; but those conditions are quite exceptional, and in the great majority of cases, even where you find local disease, it does not follow that the patient died of that disease. He died *with* it, but not necessarily *of* it; and that is a condition of uncertainty, in relation to all returns of death, which the Commission should clearly understand."

AN ACTION FOR MALAPRAXIS.

WE regret to learn that a surgeon in practice in Lancashire has been subjected to the annoyance of an unfounded action for malapraxis. The case was tried at the Liverpool assizes a short time ago. A child aged 5, the son of a tailor named Duckworth, at Haslingden, in July 1868, cut the palm of his hand severely by falling on a glass bottle. As the hæmorrhage could not be stopped, the parents sent, on July 30th, for Mr. Stott, a surgeon at Haslingden, whose assistant, Mr. Hindle, attended and bound up the wound. The hæmorrhage recurring, Mr. Stott was again sent for, and saw the patient, with Mr. Hindle, on August 2nd. After ineffectual attempts to secure the ends of the wounded artery and to apply pressure either to it or to the arteries of the forearm, he arrested the hæmorrhage by flexing the arm on the elbow; emphatically impressing on the father the necessity of having the child near his surgery. In the evening, he received a message stating that it was not necessary to see the child that night. The next morning, Mr. Stott found that the little finger was becoming gangrenous; the arm was erysipelatous. He relaxed the flexion and applied cotton-wool. In a few days, the little finger separated; some sloughing also took place in the forearm. The main point of the charge was, that Mr. Stott had left the child tied up with the arm in a position of great pain, in which, through the defendant's inattention, it remained during twenty-six hours. The arm, it was pleaded, would be of no use for the purpose of ordinary labour. The only medical witness called in support of the plaintiff's case was Mr. William Martland, of Black-

burn; who said that the treatment was correct, but that the child should have been seen sooner. On the part of the defendant, Mr. W. Smith of Manchester, and Mr. Hakes, Mr. Long, Mr. Bickerton, and Mr. Harrison, of Liverpool, testified that the treatment adopted by Mr. Stott was in every way proper, and that he was not responsible for the consequences. A verdict for the defendant was returned. The Manchester Medico-Ethical Association has since investigated the case, and has passed the following resolution, with which, after reading the published account of the trial, we cordially agree.

"That this Association has heard with much regret of the recent action against Dr. Stott, of Haslingden, for alleged malapraxis, and expresses its sympathy with that gentleman for the trouble and annoyance which, in spite of a verdict in his favour, he must have incurred, seeing that, in the opinion of this Association, the treatment pursued was most skilful and scientific."

FEVER IN LIVERPOOL.

THE following is the report of the Fever Hospitals for the week ending September 24th, 1870. Remaining September 17th, 1,006; admitted since, 402; discharged, 281; died, 11. Remaining September 24th, 1,116.

NEW SCHOOL BUILDINGS AT CHARING CROSS HOSPITAL.

WE have recently had an opportunity of inspecting some material alterations and improvements now in progress at Charing Cross Hospital. The Hospital itself is in course of enlargement, and the out-patient department is being remodelled; but the most important improvements are going on in the school premises. A considerable portion of some recently acquired buildings will be given up to the school for library and other purposes. Offices of various descriptions will also be added for the convenience of the students and teachers. A new and elegant chemical laboratory, with balance-room, etc., has been erected, and is in course of fitting up. A large and well-lighted dissecting-room, with every convenience for the student, slate walls for chalk diagrams, and so on, is rapidly approaching completion. By the contrivance of a projecting window, the *post mortem* room, which has otherwise been enlarged and improved, is rendered lighter and more commodious. The new museum will be arranged so as to afford room for small classes for the purposes of demonstrations and such like. The new out-patient rooms are also being fitted out with a due regard for the purposes of clinical instruction. When space is as valuable as it is now-a-days near Charing Cross, much room can scarcely be expected; but certainly everything has been done to make that available as useful as possible to teachers and students.

CONTRIBUTIONS TO THE STUDY OF ENTOZOA.

AT the recent meeting of the British Association in Liverpool, Dr. Cobbold communicated a notice respecting the embryonal development of the terrible entozoon termed by himself *Bilharzia hæmatobia*. He had succeeded in observing the larval forms in a more advanced condition of development than had hitherto been described by any other observer. In their active state they resembled the cone-shaped ciliated embryos of the common fluke infesting sheep. They displayed, under high microscopic powers, a beautiful aquiferous system of vessels, such as Dr. Guido Wagener had discovered in the embryos of a species of *Diplodiscus*. Dr. Cobbold shewed several drawings of these larvæ; and, by means of tables of entozoa, explained the zoological position and relations of the parasite. He had also performed a number of experiments, which he intended to publish, with other details.—Dr. Cobbold also exhibited the heart of a dog filled with large parasites. He had received the specimen from Robert Swinhoe, Esq., H.B.M. Consul at Amoy, China, accompanied by a note from the donor, stating that the animal died after three days of great suffering. The author remarked upon the prevalence of hæmatozoa amongst animals, referring especially to the investigations of MM. Grube and Delafond, who had found thousands of larvæ in the blood of five per cent. of the 480 dogs which they had examined. The hæmatozoon in question, hitherto

spoken of as the *Spiroptera sanguinolenta*, was a viviparous hematode, and probably a distinct species. He hoped shortly to be able to set this question finally at rest; and for other details referred to his paper "On the Prevalence of Canine Entozoa in relation to Public Health", published in the ninth volume of the Linnean Society's *Journal*.

THE DISPOSAL OF SEWAGE.

THE question of the best means of disposing of the sewage of towns has been this year very fully discussed both in the British Association for the Advancement of Science, and in the Social Science Association. In the former, Dr. Corfield gave an outline of a work on Sewage which had been prepared for the Committee of the Association. It was apparently in favour of the use of sewage for irrigating lands. Mr. David Taylor read a paper in which he described a process by which water could be pumped from sewage by the addition to it of soluble phosphates and lime-water. He thought that his plan would be useful in localities not adapted for sewage irrigation. In the Social Science Association, papers in favour of sewage irrigation were read by Mr. J. T. Blackburn, and Dr. Elliot of Carlisle; and of the dry earth system by Mr. F. Taylor and the Rev. Mr. Moule. Papers on the subject were also read by Dr. Fergus and Mr. J. Brierley. All the papers were well discussed, and a variety of opinions were expressed.

THE FACULTY OF SCIENCE IN UNIVERSITY COLLEGE.

A FACULTY of Science has been formed at University College. The inaugural lecture will be delivered by Dr. Williamson, F.R.S., the Professor of Chemistry, on Tuesday next, at 3 P.M. Courses of lectures will be given on Mathematics, by Professor Henrici; Applied Mathematics, by Professor Moore; Physics, by Professor G. C. Foster; Chemistry, by Professor Williamson; Mineralogy and Geology, by Professor Morris; Engineering, by Professor Fuller; Architecture and Construction, by Professor Lewis; Botany, by Professor Oliver; Comparative Anatomy and Zoology, by Professor Grant; Physiology, by Professor Sharpey; Practical Physiology and Histology, by Professor Burdon Sanderson; Philosophy of Mind and Logic, by Professor G. C. Robertson; and Political Economy, by Professor Cairnes.

SANITARY LAWS AND THEIR ADMINISTRATION.

AT the meeting of the Social Science Association, a paper has been read in the Public Health Department by our associate Mr. W. H. Michael. In the paper he dealt generally with the question of the desirability of modifications in existing laws and their administration. The people must be told how disease may be prevented; and it was necessary that boards of health should be convinced of the short-sighted policy they had too often pursued. In pursuance of a false economy, they had done things by halves instead of taking proper sanitary measures, and the consequence was that the whole system was brought into disrepute, and distrust of sanitary operations was diffused owing to the failure of the expected results. It appeared to him that it was the duty of the State to enforce the adoption of such means as were possible to produce good results; for though in theory the requirements of the law were at present complied with, practically they were not attended to; and if local boards neglected their duty in this respect, it was a question whether a public officer should not be appointed to examine into what they neglected. The laws on the subject required entire reconsideration and consolidation; and he recommended—firstly, the careful apportionment of the country into health-districts, and then, further, into health-unions. A State minister should be appointed, with power to enforce upon such unions and districts the proper performance of their duties; and in the event of such reconstruction, the financial arrangements should be such as would, as far as possible, equalise the distribution of rates. Mr. Michael dealt very fully with the details of his proposed amendment of sanitary regulations, enforcing the extreme urgency and vast importance of the subject.

REPRESENTATION OF THE ROYAL COLLEGE OF SURGEONS IN THE MEDICAL COUNCIL.

WE have been requested to publish the subjoined letter; to which we would call the special attention of all those of our readers who are concerned in the matter.

SIR,—I beg that you will allow me to appeal through your columns to those Fellows and Members of the Royal College of Surgeons of England who desire to assert the right of the Corporation to elect a representative in the General Medical Council under the Medical Act of 1858. Whatever improved modes of representation of the profession may be contemplated in drafts of future Bills, we have nothing to do with them at present. Our right to elect a representative exists in the opinion of the lawyers who have been consulted; and it rests now with the Corporation to show whether it values that right sufficiently to contest it in a court of law.

The necessary proceedings to bring about a legal decision as to whether the Corporation or the Council is entitled to elect should be commenced in November, and we ought to have £150 in hand. Dr. Morris, of Spalding, who has already shown his energy in the cause of reform at the College of Surgeons, has consented to act as Treasurer to the fund; and an account in our joint names will be opened at the Western Branch of the Bank of England, Burlington Gardens, where subscriptions, limited to one guinea, may be paid to the "College of Surgeons Representation Fund." Dr. Morris or myself will be glad to receive contributions in any form, and to any amount up to a guinea; and we do not propose to expend money in advertising the names of contributors, but shall simply publish a balance-sheet when the object of the fund has been accomplished. Trusting that those gentlemen who exerted themselves to obtain signatures to the memorial by which the original meeting of the Fellows and Members was brought about will now be kind enough to solicit subscriptions in the cause.

I am, etc., CHRISTOPHER HEATH, F.R.C.S.

9, Cavendish Place, W., September 26th, 1870.

ROYAL COLLEGE OF SURGEONS.

FROM the annual report of this institution, it appears that, from Midsummer-day 1869 to Midsummer-day 1870, the receipts amounted to £12,453 : 7 : 1, and the disbursements to £11,986 : 9 : 6. The revenue is chiefly derived from fees paid for examination of candidates for the various diplomas of the College, which amounted to £9871 : 12. The dividends on stock (£34,000) were £1057 : 10. The rent of property adjoining the College amounted to £936 : 10 : 6. The trust-funds produced £383 : 2 : 10, including the sum of £94 : 10, the *honorarium* for his lectures returned by Professor Erasmus Wilson, towards payment of expenses for providing cases for the large and valuable dermatological collection. In regard to the expenditure, the greatest amount was in fees paid for the necessarily large staff of examiners, including the College of Preceptors, which amounted to £4426 : 3 : 6. The next heavy amount is for salaries and wages paid to the officers and servants of the College, Museum and Library Departments, which is put down at £3,107 : 13 : 8. Another heavy item is taxes and stamps; viz., £1045 : 17 : 3. In the amount paid for pensions there is a slight decrease; they now amount to £489 : 4 : 6. It will be seen that there is a balance of £466 : 17 : 7.

HOW SCARLATINA IS SPREAD.

MR. T. R. PEARSON of Stowmarket writes as follows on this subject. "There has been an epidemic of scarlet fever lately in one of my parishes. Some of the cases have, I believe, not been seen by any medical man; but the general character of the epidemic was severe, and four cases have ended fatally (one in an adult). I do not know how the first case originated, but the rapid spread of the disease was easily accounted for. No sooner does a case occur, than away hurry the neighbours to have a look at the patient, to decide for themselves whether the doctor is right in calling it fever; to examine the state of the skin, and see whether it is 'as full as their little Johnnie's was last year', and so on. On the last occasion of my calling at one house, I found the door fastened, and was told by a neighbour that the family were all out gleaning. Three of the children were at that time in the stage of desquamation. The only wonder is that a single cottage escaped the visitation. It is now five weeks since the last case occurred in this parish. To-day, I have been called to a very bad case similar to that of Dr. Fox of Broughton, reported on September 17th. A servant-girl has been sent home after being four days ill. She goes to a cottage, where there are five children, none of whom have had scarlet fever. I can only hope the result may not be the same as in his case."

MEDICAL SCHOOLS AND HOSPITALS IN IRELAND.

UNIVERSITY OF DUBLIN: SCHOOL OF PHYSIC.—Regius Professor of Physic, Dr. W. Stokes, F.R.S.; Regius Professor of Surgery, Dr. R. Adams; University Professor of Anatomy and Surgery, Dr. B. G. M'Dowel; Tu., Thurs., Sat., 1. University Professor of Chemistry, Dr. J. Apjohn, F.R.S.; Tues., Thurs., Sat., 2. University Professor of Botany, Dr. E. Percival Wright. Professor of Surgery in Trinity College, Dr. R. W. Smith; Mon. Wed. Fri., 1. University Anatomist, Dr. E. H. Bennett; Tues. Thurs. Sat., 12. University Lecturer in Operative Surgery, Dr. R. G. Butcher. Erasmus Smith's Professor of Natural Philosophy, Rev. J. Leslie, Mon. Wed. Fri., 2. King's Professor of Institutes of Medicine, Dr. R. Law. King's Professor of Practice of Medicine, Dr. W. Moore; Mon. Wed. Fri., 3. King's Professor of Materia Medica and Pharmacy, Dr. Aquilla Smith. King's Professor of Midwifery, Dr. E. B. Sinclair; Mon. Wed. Fri., 4. Professor of Medical Jurisprudence, Dr. R. Travers. Heat, Electricity, and Magnetism—Mr. Gailbraith; Mon. Wed. Fri., 2. The Courses consist of 56 Lectures each; attendance on at least 42 Lectures in each Course is required.—The Winter Session will commence on October 1st, by the opening of the Dissecting-Room. Lectures will commence on November 1st.—Two Medical Scholars are elected annually by the Board of Trinity College, at the Previous Medical Examination, held at the end of Trinity term; subject to conditions stated in the College Calendar. Each Scholarship is worth £20 per annum, and is tenable for two years. Two Travelling Prizes of £50 each will be adjudged, one to the best answerer in Practical Medicine, and the other to the best answerer in Practical Surgery. The Examinations for these Prizes will be held in Trinity Term, on days specified in the University Almanack. Candidates are to give a week's notice beforehand to the Medical Registrar. The Professors of the School of Physic give three Exhibitions annually, amounting altogether in value to £40; subject to conditions prescribed by the Professors themselves.—No Student can be permitted to attend any of the Lectures delivered in the School of Physic, or to attend Dissections, who has not complied with the provisions of the School of Physic Act as to Matriculation.

SCHOOL OF SURGERY, ROYAL COLLEGE OF SURGEONS OF IRELAND.—The Dissecting-Rooms open on Oct. 1st.—The Winter Courses will commence on Monday, October 24th, as follows. Anatomy and Physiology—Dr. Mapother; daily, except Sat., 2 P.M. Descriptive Anatomy—Dr. Bevan and Mr. Morgan; daily, 12 noon. Surgery—Dr. Hargrave and Mr. Hughes; Tues., Thurs., Sat., 3. Practice of Medicine—Dr. Benson; Mon., Wed., Fri., 3. Chemistry—Dr. W. Barker; Mon., Wed., Fri., 1. Midwifery—Dr. Sawyer; Mon., Wed., Fri., 4.—The Dissections are under the direction of the Professors of Descriptive Anatomy, assisted by the Demonstrators, Mr. Croly, Dr. Stoney, Dr. Hewitt, Mr. S. Hewitt, Dr. Stoker, Mr. Kelly, and Mr. Ormsby.—A Public Course of Lectures on Comparative Anatomy is delivered by the Professor of Anatomy and Physiology at the commencement of the Session, and additional Lectures on the same subject are delivered at intervals during the Winter.—Practical instruction in Operative Surgery is given by the Professors of Surgery.—The Professor of Chemistry receives Operating Pupils into the Chemical Laboratory.—Prizes in Anatomy and Physiology, and Surgery, will be given to Students of each year.—In the Summer Session, the following courses will be delivered. Materia Medica, Dr. Macnamara; Medical Jurisprudence, Dr. Davy; Botany, Dr. Minchin; Practical Chemistry, Dr. W. Barker; Midwifery, Dr. Sawyer; Hygiene, Dr. Cameron.—Fee for each Course, £3 3s. Comparative Anatomy and Hygiene are free.

CARMICHAEL SCHOOL OF MEDICINE.—This School is in the immediate vicinity of the Richmond, Whitworth, and Hardwicke Hospitals. The Student is thus furnished with every facility for completing his professional education. The Winter Courses of Lectures will commence the first week of November. The following Lectures will be delivered. Surgery and Operative Surgery—Mr. W. Stokes; Medicine—Dr. Gordon; Anatomy and Physiology—Mr. Curran and Dr. Purser; Anatomy, Descriptive and Surgical—Dr. Corley and Mr. Mayne; Chemistry—Dr. Campbell; Midwifery—Dr. Jennings. Dissections are superintended by Mr. Curran, Dr. Corley, Dr. Purser, Mr. Shaw, Mr. T. W. Madden, Mr. R. St. J. Mayne, and Mr. Clarke. The Dissecting-Rooms are open on October 1st.—The Museum comprises a valuable collection of Anatomical and Pathological Preparations. There is also an extensive Museum of Materia Medica.—*Carmichael Premiums*, of the value of £60, are awarded yearly, each year's Class having its own Premiums allotted. The *Mayne Scholarship*, value

£15, will be awarded for proficiency in purely Practical Medicine, Surgery, and Anatomy, as tested by Clinical Examination, Operations, and Dissections.—In the Summer Session, the following Lectures will be delivered. Botany—Dr. Blakely; Materia Medica and Pharmacy—Dr. Frazer; Medical Jurisprudence—Dr. O'Reilly; Practical Chemistry—Dr. Campbell. *Carmichael Premiums* will be awarded in each of these classes also, at the termination of the Session.—Fee for each course, £3 3s.

CATHOLIC UNIVERSITY, DUBLIN.—The following Courses will be delivered. Anatomy and Physiology, and Anatomical Demonstrations, Dr. Hayden, and Dr. Cryan; Surgery, Mr. Tyrrell; Medicine, Dr. Lyons; Chemistry, Dr. Sullivan; Midwifery, Dr. Byrne; Practical Chemistry, Dr. Sullivan; Materia Medica, Dr. Quinlan; Medical Jurisprudence, Dr. MacSwiney; Pathology, Dr. Lyons; Botany, Dr. Sigerson; Natural Philosophy, Mr. Hennessey, F.R.S.—Fee for each course, £3 3s. A Connolly Exhibition (value £20) is offered for competition in the combined subjects of Physiology, Physiological Anatomy, Chemistry, and Botany; and a Gold Medal (value £7), in Surgery, Medicine, and Midwifery. Class Prizes are also given.

LEDWICH SCHOOL OF SURGERY, DUBLIN.—Anatomy, Physiology, and Pathology, Mr. E. Ledwich and Mr. T. P. Mason; Surgery, Mr. J. H. Wharton and Dr. J. K. Barton; Medicine, Dr. Little and Dr. Eames; Midwifery, Dr. John Ringland; Chemistry and Natural Philosophy, Dr. C. Cameron; Practical Chemistry, Dr. C. Cameron and Mr. E. J. Reynolds; Materia Medica, Dr. B. F. M'Dowel; Botany, Mr. T. D. T. Maunsell; Forensic Medicine and Hygiene, Dr. R. Travers; Anatomical Demonstrations, Mr. S. Bright, Mr. A. R. Glanville, Mr. Mr. J. Kilgariff, Mr. C. H. Robinson, and Mr. W. H. O'Leary.—Fee for each Course, £3 3; Course of Operative Surgery, £5 5. Certificates of attendance on the Courses are recognised by all the Examining Boards.

DR. STEEVENS'S HOSPITAL AND MEDICAL COLLEGE, DUBLIN.—Clinical Instruction is given at the Hospital by Mr. Wilmot, on Saturday at 10; and at 8.30 A.M. as follows: Dr. Freke, Monday; Mr. Colles, Tuesday; Mr. Hamilton, Wednesday; Mr. M'Donnell, Thursday; Dr. Grimshaw, Friday; Dr. Isdell, Saturday.—Operations at 10 on Saturdays.—Pathological Demonstrations by the Lecturers as opportunity offers.—The following Lectures are given in the Medical School: Anatomy and Physiology, and Morbid Anatomy, Mr. Hamilton, daily, except Saturday, 10 A.M.; Practice of Medicine, Dr. Freke, Monday, Wednesday, Friday, 11; Surgery, Mr. Colles, Tuesday, Thursday, Saturday, 11; Midwifery and Diseases of Women and Children, Dr. Isdell, Monday, Wednesday, Friday, 12; Chemistry, Dr. Cameron, Tuesday, Thursday, Saturday, 12; Descriptive Anatomy, Mr. M'Donnell, daily, except Saturday, 1 P.M.; Dissections, superintended by the Lecturers on Anatomy and the Demonstrators, 7 A.M. to 8 P.M.; Materia Medica, Dr. Grimshaw; Medical Jurisprudence, Mr. J. F. Pollock; Botany, Mr. C. A. Bell.—A perpetual Fee of £78 15s., payable in two instalments, enables the Student to attend all the Lectures and Hospital Practice required by the Colleges of Surgeons, Halls, and the Public Service.—Each Course of Lectures, £3 3s.; Hospital Practice, 6 months, £7 7s.; 9 months, £9 9s.; Dresserships, winter 6 months, £21; summer 6 months, £15 15s.—The Reading Room and Museum are open daily. There is also a lending Library.—Arrangements have been made with persons of respectability to provide pupils with lodgings in the neighbourhood, on reasonable terms.—Senior, Middle, and Junior Exhibitions are awarded, at the end of the Session, for general proficiency.—There are also two Prizes for the best reports of the cases in the Hospital during the Session.—Two Midwifery Assistants are each year selected by competitive examination; salary, £30 per annum.—There is accommodation in the Hospital for two Medical and six Surgical Resident Pupils.

ADELAIDE HOSPITAL, DUBLIN.—Physicians—Dr. Henry H. Head; Dr. James Little. Surgeons—Dr. A. J. Walsh; Dr. J. K. Barton; Mr. B. Wills Richardson. Obstetric Physician—Dr. L. Atthill. Ophthalmic Surgeon—Dr. H. R. Swanzy. Assistant-Physician—Dr. W. G. Smith. Assistant-Surgeon—Mr. W. A. Ward.—Attendance daily; Surgeons, 9 to 10 A.M.; Physicians, 10 to 11.—The central position of this Hospital renders it peculiarly convenient to gentlemen attending Lectures at the University, College of Surgeons, or Ledwich School.—The arrangements for Clinical Teaching have been made as complete as possible, and are such as not to interfere with attendance at the Medical Schools.—There are Fever Wards apart from the Hospital, and two Wards for Infants and Children.—Special hours are devoted to Clinical Instruction in the Diseases peculiar to Women, the Diseases of the Eye, and Cutaneous Diseases; and Students are individually instructed in the use of the Stethoscope, Ophthalmoscope, Laryngoscope,

and Microscope.—Two Resident Pupils are selected half-yearly.—Prize Examinations are held at the termination of the Session. *Fee*—Nine Months, £8 8s.; Six Months, £6 6s.; Perpetual (paid at entrance), £21.

CITY OF DUBLIN HOSPITAL.—*Physicians*—Dr. J. H. Benson; Dr. S. M. Hewitt. *Surgeons*—Dr. W. Hargrave; Mr. Jolliffe Tufnell; Dr. H. G. Croly; Dr. J. M. Purser. *Ophthalmic and Anal Surgeon*—Mr. L. Stoney. *Consulting Physicians*—Professor Apjohn and Dr. C. Benson. *Consulting Ophthalmic Surgeon*—Dr. A. Jacob. *Consulting Obstetric Physician*—Dr. T. E. Beatty. A wing of the Hospital is appropriated to cases of Fever and Contagious Diseases.—There are also special Ophthalmic and Children's Wards.—At the morning visit (9 A.M.), each case is explained at the bedside. Clinical Lectures are also given on the more important cases.—The *Purser Studentship* of £20 *per annum* (with apartments) is open to all Students, through competitive examination.—*Fees*: 9 months, £8 8s.; 6 months, £6 6s.; 3 months, £3 3s.; perpetual, £21.—Certificates of attendance are recognised by all the Examining Boards.

COOMBE LYING-IN HOSPITAL.—*Masters*—Dr. Ringland and Dr. Sawyer. *Obstetric Surgeon*—Dr. G. H. Kidd. *Assistant to Masters*—Dr. W. Roe. *Supernumerary Assistant*—Dr. T. P. Mason. *Consulting Physicians*—Sir D. J. Corrigan, Bart., M.D.; Dr. J. T. Banks; Dr. A. Hudson; Dr. R. D. Lyons. *Consulting Surgeons*—Dr. S. G. Wilmot; Dr. G. H. Porter; Mr. R. G. H. Butcher; Dr. J. S. Hughes. *Consulting Accoucheurs*—Mr. H. Carmichael; Dr. W. Jameson; Dr. F. Churchill; Dr. E. B. Sinclair. *Medical Officer of the Dispensary*—Sir W. Carroll, M.D. *Analytical Chemist*—Dr. C. A. Cameron.—The Hospital contains forty beds; and Clinical Lectures are delivered on the more important cases. A Dispensary is connected with the Hospital. Clinical Clerks are selected half-yearly. Prizes in Practical Midwifery and Diseases of Women are given at the end of each session. There is accommodation for eight intern pupils. Pupil Midwifery-Assistants are selected by competition, and hold office for a period not exceeding twelve months. *Fees*: Hospital Practice, intern pupils, 6 months, £10 10s.; extern pupils, £4 4.—including Clinical Lectures in both cases. Registrar's Fee for Diploma of Hospital, 10s. 6d.

JERVIS STREET HOSPITAL is one of the oldest of the Dublin Infirmarys. Clinical lectures are delivered three times a week by Drs. McSwiney and Martin, and Messrs. O'Reilly, Stapleton, Hughes, Forrest, Corley, Meldon, and White.

MATER MISERICORDIÆ HOSPITAL, DUBLIN.—*Physicians*—Dr. J. Hughes; Dr. T. Hayden; Dr. H. Curran. *Surgeons*—Mr. R. P. O'Reilly; Dr. F. R. Cruise; Dr. H. J. Tyrrell; Mr. P. J. Hayes.—The Hospital contains one hundred beds. Two Clinical Lectures will be delivered in each week. Connected with the Hospital is an extensive Dispensary. Special Instruction will be given on Diseases of the Eye, and on the Use of the Stethoscope, Microscope, Laryngoscope, Endoscope, etc. Two Resident Pupils are elected twice yearly.—Two Clinical Prizes in Medicine, and two in Surgery, of the value of £10 and £5, will be awarded under the will of the late Mark Leonard, Esq.—Certificates of attendance on this Hospital are recognised by all the Licensing Bodies.—*Terms*—Nine months, £8 8s.; six winter months, £6 6s.; three summer months, £3 3s. Instruction in Compounding Medicine is given in the Pharmacy.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.—*Physicians*—Dr. Stokes; Dr. Hudson. *Surgeons*—Dr. H. Porter; Mr. J. H. Wharton; Dr. P. C. Smyly; Dr. Rawdon Macnamara; Dr. R. P. White; Mr. Mayne.—Clinical Lectures, of which four will be delivered weekly, and instructions in Medicine and Surgery, will be given on alternate days. The Physicians and Surgeons will visit the Hospital at 9 A.M. The Hospital, which contains 120 beds, and to which an extensive Dispensary (open daily) and Lending Library are attached, is within a few minutes' walk of the College of Surgeons and the Ledwich School of Medicine. There is a Ward for the reception of Children. Certificates of attendance at this Hospital are recognised by all the Universities, Colleges, and Licensing Bodies in the United Kingdom. Four Prizes will be given at the termination of the Winter Course in the respective classes. The office of Resident Pupil is open to Pupils as well as Apprentices.

MERCER'S HOSPITAL, WILLIAM STREET, DUBLIN.—*Physicians*—Dr. T. P. Mason; Dr. H. Eames. *Surgeons*—Mr. Ledwich; Mr. E. S. O'Grady; Mr. J. Morgan; Dr. Benjamin F. McDowell. *Consulting Surgeon*—Mr. A. Read.—There are two wards for the reception of Fever and Contagious Diseases. Systematic Clinical Lectures and catechetical instruction will be given. Dressers will be selected from the most attentive of the Students; and the Dispensary affords ample opportunities of acquiring dexterity in manual operations in Minor Surgery. The appointment of Resident Pupil is open to any Student

through the medium of a Competitive Examination, and at the termination of his office he will be entitled to a Special Certificate, should his conduct have met with the approval of the Physicians and Surgeons.—*Terms of Attendance*—Six months, £6 6s.; nine months, £8 8s.; perpetual pupils, £21.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS, DUBLIN.—*Consulting Physician*: Sir D. J. Corrigan, Bart., M.D. *Physicians*: Dr. J. T. Banks; Dr. B. G. M'Dowel; Dr. S. Gordon; Dr. R. D. Lyons. *Surgeons*: Dr. R. Adams; Mr. J. Hamilton; Dr. R. W. Smith; Mr. William Stokes.—These Hospitals contain 312 beds; 110 for Surgical, 82 for Medical, 120 for Fevers and Epidemic Diseases. The Truss Establishment, for the distribution of trusses to the ruptured poor of Ireland, is connected with these Hospitals. There is an extensive Pathological Museum, containing above 4000 drawings, casts, and preparations. There is also a well-selected Medical and Surgical Lending Library. Medical and Surgical Clinical Lectures are delivered in the Hospital Theatre, and Bedside Clinical Instruction is given daily by the Physicians and Surgeons. There will be a distinct Course of Lecture and Clinical Instruction on Fever. A Course of Practical Instruction in Ophthalmic Surgery will be given. Surgical Operations are performed on Wednesday mornings only, except in cases of emergency. Practical Pharmacy is taught under the superintendence of the Apothecary of the Hospitals. Eight Resident Clinical Clerks and the Dressers are selected each half-year from among the best qualified of the Pupils, without the payment of any additional Fee. At the termination of the Session, Premiums will be awarded in Clinical Medicine and Surgery. The Richmond Institution for the Insane adjoins these Hospitals. *Fees*: Winter and Summer Session (nine months), £9 9; Six Summer Months, £5 5; Perpetual Pupils, £25 paid on entrance.—The Practice of these Hospitals is free to the Medical Officers of the Navy and Army.—The Carmichael School of Medicine is in the immediate vicinity of the Hospitals.

ROTUNDO LYING-IN HOSPITAL.—*Consulting-Physician*, Dr. A. Hudson; *Consulting-Surgeon*, Dr. R. Adams; *Master*, Dr. G. Johnston; *Assistant-Physicians*, Dr. T. M. Madden and Dr. A. Taylor. This Hospital, the largest Chartered Clinical School of Midwifery in the British dominions, contains 130 beds.—An Obstetrical Museum, containing upwards of 500 Preparations, and a Library, are attached to the Hospital.—Clinical Instruction in Midwifery and the Diseases of Women and Infants is given daily. The Pupils are privileged to attend the Cow-Pock Institution.—The Lectures are recognised by the Licensing Bodies of the United Kingdom.—The Diploma is recognised by the Poor-law Commissioners in Ireland as a qualification in Midwifery.—The Intern Pupils have each a separate bedroom, with the use of a sitting-room.—Two Courses of Lectures are given yearly—the first commencing early in November, the second early in May. *Fees*: Intern Pupils—Six Months, £21; Three Months, £12 12s.; Two Months, £8 8s. Extern Pupils—Six Months, £10 10s.; Three Months, £6 6s.; Two Months, £4 4s.

ST. VINCENT'S HOSPITAL, DUBLIN.—*Physicians*, Dr. F. B. Quinlan, Dr. Cryan; *Surgeons*, Dr. E. D. Mapother, Mr. W. H. O'Leary; *Surgeon-Dentist*, Mr. Doherty.—The Hospital contains one hundred beds.—Connected with the Hospital, are an extensive Dispensary, and a Sanatorium for Convalescent Patients at Stillorgan. Medical and Surgical Clinical Lectures will be delivered three times a week, and Clinical Instruction will be given daily.—Operations admitting of delay are performed on Friday mornings.—Certificates of attendance on the Practice of this Hospital are recognised by all the Licensing Bodies.—Two Resident Pupils will be appointed by competitive examination at the commencement of each Session.—At the end of the Winter Session, Senior and Junior Prizes in Clinical Medicine and Surgery will be given.

SIR PATRICK DUN'S HOSPITAL, DUBLIN.—*Consulting Physician*—Dr. Stokes, F.R.S.; *Consulting Surgeon*—Dr. R. Adams. *Clinical Physicians*—Dr. R. Law; Dr. Moore; Dr. Aquilla Smith. *Midwifery Physician*—Dr. E. B. Sinclair. *Clinical Surgeons*—Dr. R. W. Smith; Dr. E. H. Bennett; Dr. T. E. Little. *University Lecturer in Operative Surgery*—Dr. R. G. Butcher.—The Hospital is visited daily at Nine o'clock, with a class, by each of the Physicians and Surgeons on duty. *Hospital Attendance*.—The payment of £3 3 entitles any Student to attend the Clinick of the Hospital for Twelve Months, and the Lectures delivered by Dr. Butcher at 10 A.M. on Thursdays. Students who have taken out the Degrees of Bachelor in Medicine and Master in Surgery, in Trinity College, are entitled to attend the Hospital as Perpetual Free Pupils.—*Clinical Lectures* are delivered in the Hospital Theatre, at 10 o'clock, on the following days:—Mondays, the Clinical Physician on duty; Tuesdays, the Clinical Surgeon on duty. In addition to the Hospital Fee, a Fee of £6 6 is required for the privilege of attending

these Lectures. Total Fees for Hospital and Lectures for Twelve Months, £9:9.—*Practical Midwifery*. Students desirous of entering for Six Months' Instruction in Practical Midwifery are required to pay a Maternity Fee of £3:3 each to the Registrar of the Hospital. Students of Trinity College are not liable to any other payment for instruction in Practical Midwifery. Other Students are required to pay £3:3 each, to the King's Professor, for Six Months' Practical Instruction, in addition to the Hospital Maternity Fee. Students who have paid the Hospital Maternity Fee are entitled to attend the Demonstrations in Obstetric Surgery, given by the King's Professor, at 10 A.M. on Fridays. Total Fees for College Students, £3:3; for externs, £6:6.—*Army Midwives*. The Secretary of State for War has authorised the formation of a Class of Midwives for Service in the Army, in connexion with Sir P. Dun's Maternity. Each Army Midwife will receive a Diploma from the Governors of the Hospital, on her completion of Six Months' Practical Instruction. The Army Nurses are required to attend the Lectures delivered in the Hospital, by the King's Professor. The Hospital Students are not permitted to attend these Lectures.—*Clinical Medals*. The Governors of the Hospital award two Silver Clinical Medals, in Medicine and in Surgery, to the Students who shall pass the best Examinations on the Medical and the Surgical Cases treated in the Hospital during the year.

WESTMORELAND LOCK HOSPITAL, DUBLIN.—*Surgeons*—Dr. B. M'Dowell; Mr. J. Morgan.—The Hospital contains 150 beds. Two Clinical Lectures will be delivered each week, commencing the first Monday in November. Fee for Hospital attendance, including Clinical Lectures: Winter Session, six months, £4:4; Summer Session, three months, £2:2.

QUEEN'S COLLEGE, BELFAST.—Faculty of Medicine. The Winter Session of 1869-70 will commence on November 2nd. Anatomy and Physiology, Dr. Redfern, daily, except Sat., 2; Practical Anatomy, Dr. Charles, daily, except Sat., 12; Chemistry, Dr. T. Andrews, daily, except Sat., 3; Medicine, Dr. J. Cuming, daily, except Sat., 4; Surgery, Dr. A. Gordon, Mon., Tues., Wed., Thurs., 1; Materia Medica, Dr. J. S. Reid, Mon., Tues., Wed., Thurs., 4; Midwifery, Dr. R. F. Dill, Mon., Tues., Thurs., 3; Medical Jurisprudence, Dr. J. F. Hodges, Wed., 3, Fri., 1; Natural Philosophy, Mr. Everett; Natural History, Dr. Wyville Thomson, LL.D., Mon., Tues., Wed., Fri., 1.—*Fees*: Anatomy and Physiology—1st course, £3; each subsequent course, £2. Anatomical Demonstrations and Practical Anatomy—each course, £3. Practical Chemistry, £3. Other Medical Lectures—1st course, £2; each subsequent course, £1.—The Examination for Medical Scholarships, tenable for one year, and of which two are awarded to the Students of each year of the Medical Course, will commence on Thursday, October 20th. The Matriculation Examination will commence on the same day.

BELFAST GENERAL HOSPITAL.—Physicians, Dr. Drennan, Dr. Smith, Dr. Ross, Dr. Cuming; Surgeons, Dr. Browne, R.N., Dr. Murney, J.P., Dr. Gordon, Dr. W. MacCormac.—*Fees for Clinical Instruction*—Perpetual, £10:10; or two instalments of £5:5 each at the commencement of the first and second years. Hospital Fee, 10s. 6d. each session.—This Hospital being the only one for the reception of accident and other surgical cases occurring in the large manufacturing town and seaport of Belfast, affords unusual facilities for acquiring a knowledge of Practical Surgery. Four Resident Pupils are appointed by examination.

QUEEN'S COLLEGE, CORK.—Faculty of Medicine. Professors: Anatomy and Physiology, and Practical Anatomy, Dr. J. H. Corbett, daily, except Sat., 1; Medicine, Dr. D. C. O'Connor, Mon., Wed., Fri., 3; Surgery, Dr. W. K. Tanner, Tues., Thurs., 4, Sat. 1; Materia Medica, Dr. Purcell O'Leary, Tues., Thurs., 3, Sat. 12; Medical Jurisprudence, Tues., Thurs., 12, Fri., 1; Midwifery, Dr. J. R. Harvey, Mon., Wed., Fri., 4; Natural Philosophy, Mr. England, Tues., Thurs.; Chemistry, Dr. Blyth, Mon., Wed., Fri., 2; Practical Chemistry, daily, except Sat.; Natural History, Dr. J. R. Greene, Mon., Wed., Fri. The Lectures will commence on November 2nd. In the Course of Practical Anatomy, the Professor of Anatomy and Physiology will be assisted by the Demonstrators. Eight Scholarships will be awarded to Students in Medicine, commencing their first, second, third, or fourth years.—*Clinical Medicine or Clinical Surgery* at the North and South Infirmaries, by the Physicians and Surgeons of these institutions.—*Fees*: 12 months, £8:8; six months, £5:5; Practical Pharmacy, 3 months, £3:3.—*Clinical Midwifery* at the Lying-in Hospital. Fee: 6 months, £3:3.

QUEEN'S COLLEGE, GALWAY.—Faculty of Medicine: Chemistry, Dr. T. H. Rowney, Mon., Wed., Fri., Sat., 12; Natural History, Dr. A. G. Melville, Tues., Thurs., Sat., 11; Fri., 10; Anatomy and Physiology, Dr. J. Cleland, daily, except Sat., 3; Practical Anatomy, daily, except Sat., 1; Medicine, Dr. N. Colahan, Tues., Thurs., Sat.,

2; Surgery, Dr. J. V. Browne, Mon., Wed., Fri., 11; Materia Medica, Mr. S. M'Coy, Mond., Wed., Fri., 4; Midwifery, Dr. R. Doherty, Mon., Wed., Fri., 2; Sat. 1; Medical Jurisprudence, Mr. S. M'Coy, Tues., Thurs., Sat., 4. There are well supplied Anatomical, Pathological, and Materia Medica Museums. The College also possesses the Collection of the late Dr. Montgomery of Dublin. The First Matriculation Examination for the Session 1869-70, will be held on October 21st; the last, for Students in the Faculty of Medicine, will be held on November 16th. The Examinations for Scholarships and Exhibitions will commence on Thursday, October 20th. Eight Scholarships of the value of £25 each will be offered for competition; viz., two to Students of the first, second, third, and fourth years respectively. In addition, three Exhibitions of £12 each will be offered; two to Students of the first and one to Students of the second years respectively; and two Exhibitions of £16 each—one to Students of the third and fourth years respectively. All Scholars are exempt from payment of a moiety of the fees for the classes attended.

MR. RAWLINSON ON PUBLIC HEALTH.

A VALUABLE address was delivered on Monday last in the Public Health Department of the Social Science Association, by Mr. Robert Rawlinson, C.E., President of the Department. We give some extracts of the most important passages.

Speaking of the registration of marriages, births, disease, and deaths, Mr. Rawlinson said that it enables the student in sanitary science to compare the state of the public health week by week, quarter by quarter, and year by year. But very much more information is required before the simplest practical sanitary problem can be reasonably solved. The Registrar-General's returns are made up for "registration areas", some of which include towns, villages, and rural districts, living under conditions which produce results favourable in some cases, and unfavourable in others. A small town has, for instance, been sewered, drained, and supplied with good water; cesspools and common privies may have been abolished, and such diseases as typhoid fever and diphtheria may have ceased. But in the registration area, bearing the name of such town, unimproved detached residences and villages are included; and the diseases incident to defective conditions prevail in these houses and villages, and are classed in the return as having occurred in the town which has been improved. There may be also county hospitals, asylums, workhouses, and gaols. This is a double injury; it injures the town, and also misleads the outside public. The subject has, however, previously been noticed, and will probably soon be amended. The returns given for large towns are also imperfectly instructive. In that vast aggregation of humanity which we call London, and which we also complacently consider the healthiest city in the world, in place of reading "25 per 1,000" as the "average" return, we should learn from the details that there are districts in which the mortality ranges from 50 up to 100 and more per 1,000—human dens of wretchedness, crime, and pauperism; the owners of property in such districts having no regard to sanitary improvement but to avoid and retard it.

Mr. Rawlinson sketched the progress of sanitary improvement from the period of the publication, in 1842, of "The Report on the Sanitary Condition of the Labouring Population". The labour of Miss Nightingale during the war in the Crimea was referred to as having been much greater than that of nursing the sick and wounded. The outcome of it has been the appointment of Sanitary Commissions, which have inquired into the condition of barracks and hospitals in Great Britain, at the Mediterranean stations, in India, and, in fact, wherever a British soldier is stationed on duty throughout the world. The results, so far, are greatly reduced rates of mortality in the army, both at home and abroad. The local causes of disease in India were referred to; they may be summed up in the word filth.

Mr. Rawlinson spoke very strongly on the bearing of the dwelling accommodation of the people on their moral condition. "If human beings", he said, "have no means of observing the decencies required by civilisation, it may reasonably be expected that the doctrines which inculcate purity of life, of thought, and of speech, will be a dead letter. This question of human habitations is, therefore, the greatest problem sanitarians and statesmen have to solve. So far as history illustrates or explains anything connected with the past condition of the masses of mankind, the story is one of utter State neglect in securing decent home accommodation. This has been true of the past, and is also true of the present, over the entire surface of the inhabited portion of the world. It is true of country districts; it is also true of towns and cities, however magnificent they may be in their outward appearances. To describe the mud and bog cabins of Ireland, the

both of Scotland, and the cottage of England, would be to depict nests of foul air, of scrofula, of physical debility, and of moral impurity. There are reports in abundance on English, Scotch, and Irish villages and towns, setting forth the facts in all their hideous details. Single rooms occupied by all the members of a large family, males and females; father, mother, brothers, sisters, and male and female lodgers (sometimes pigs and dogs), mixed in one nest of impurity." To remedy this state of things was a duty in which the State had as yet failed, although sanitary legislation had commenced in 1848, and Act upon Act had been piled up one to mend the other, till men "learned in the law" could neither understand nor interpret the Acts. Having referred briefly to the Royal Sanitary Commission, Mr. Rawlinson said: "Whether Parliament will provide any practical remedy for improving human dwellings remains to be seen. Poverty of the occupant is a plea which may be put forth by the peasant in the country, and also by the labourer in the town, and which cannot be gainsaid. The unaided poor cannot provide their places of residence, but must exist in such as they find: the poverty of the individual is, therefore, an effectual bar to improvement by him—he must take his health and his morals as provided for him by others. Defective house-accommodation produces disease, immorality, pauperism, and crime, from generation to generation, until vice has become a second nature, and morality, virtue, truth, and honesty, are, to human beings so debased, mere names. The money expended in relieving pauperism, in detecting and in punishing crime, and in supporting the sick, if properly expended, would provide sufficient funds to furnish improved house accommodation. Taking floor areas and cubic space into account, and the money expended in such spaces, it will be found that wretched dens of misery and vice are more costly to the community than any equal area and cubic space in a palace. There are tenements by hundreds of thousands, which generate sickness, pauperism, and crime, the cost of which is paid for out of rates, and yet such property is not worth more than from three to five years' purchase, but the round of degradation is allowed to go on. . . . Statesmen have this lesson to learn; namely, that that which is necessary to the well-being of society, and which individuals cannot provide, but which States can provide, must be the bounden duty of the State to furnish. No excuse can be valid. It does not follow that States must build and own cottage tenements; but it may be inferred that States ought to frame laws, and provide means and machinery for enforcing such laws and regulations as are necessary to bring about the required improvements." State aid, Mr. Rawlinson said, had been given in many forms, but on no definite principles; and he suggested as a question whether the State ought not to lend money for the purpose of sanitary improvement. "The money (£1,750,000) lent to the distressed cotton district (1863-69) has been spent on works of a permanent and sanitary character—such as main sewers, house-drains, forming streets and roads, constructing water-works, and other works of local improvement—thereby securing to the inhabitants means to enjoy health, comfort, and greater facilities for locomotion and trade. The advance of this money relieved local distress, at no cost to the State, because the local rates are mortgaged as security, and both the principal and interest (at 3½ per cent.) will be repaid to the uttermost farthing, 'within a period not exceeding thirty years'. If Government would lend money at this rate of interest to enable parish authorities, town councils, local boards, improvement commissioners, and other similar bodies, to improve dwelling-houses, to sewer, drain, construct water-works, markets, etc., and to effect street, road, and other town improvements, the progress of the whole country in sanitary improvements would be rapid, and the Registrar-General would soon be enabled to record the beneficial results in his returns; pauperism would cease its alarming growth, and crime would be lessened." Mr. Rawlinson said that about £8,000,000 had been expended in places, exclusive of the metropolis, for sewerage, cleansing, water-supply, road and street improvements, etc. For the whole of England, he estimated that about £50,000,000 more would be required; but this large expenditure would be—as it had been—a relief, and not a burden; inasmuch as by improved sanitary conditions house-property was increased in value, and, so far as the causes of zymotic diseases were removed, the people enjoyed better health, and were consequently more able to pay their rents.

One of the great obstacles to sanitary improvement was noticed. "There are many persons who do not appear to value health, if providing the means to obtain it touch their pockets. These persons in towns and villages are, small shopkeepers (in business or retired), small speculative builders, and owners of cottage property, generally owners of those of the worst class, which, on account of their badness, are relieved from paying rates, but in which fever and pauperism are manufactured with singular regularity; the parish relieving-officer indirectly, but nevertheless regularly, paying the rents."

Mr. Rawlinson then referred to the results of the labours of the Army Sanitary Commission, through which a reduction of the sickness and mortality in the army had been effected; and to the sanitary movement now in progress in India. He pointed out also the difficulty imported into sanitary work by accumulated populations; and that, in all conditions, personal and municipal, care and labour were required for carrying out sanitary improvements. "The physician and the sanitary inquirer must both, as a first lesson, learn the simple laws of nature, that they may know their weakness, as also in what may consist their power." The lecturer pointed out the necessity for the study of the grand phenomena of nature, and their influence on health and disease. He concluded with the following remarks.

"Sanitary science, before it can be of practical use, must be learned by statesmen. The strength of a nation is in its health; and where there is the healthiest community, there bodily purity and morals will have the greatest development. Empires, monarchies, and republics have this lesson to learn. In the cities of the republican States of North America, the worst sanitary defects of the worst cities of Europe are being repeated. The sanitary engineer of the future will know nothing of 'refuse matter' other than as an useful product, which, properly applied to the soil, will add to the wealth of the community. The aim and end of statesmanship ought to be to ensure to every individual born in the State means of health and of morality. Each Englishman's home should not only be his castle, but his hospital. Charity will not then degrade, but will elevate; and that alone will be true charity which assists the poor to assist themselves, and so live independent of almsbegging and almsgiving. We are now proud of our charities—of our public hospitals, which cost £1,000 per bed, *plus* the additional expenses of administration, in which hospital-beds sick men are treated at a money rate three times greater than the wages they could ever earn when in health. 'Our charitable institutions are the glory of our land;' but happy will that State be which neither possesses nor needs such form of glory."

CHLORAL IN MIDWIFERY.

MR. E. LAMBERT, late House-Surgeon to the Edinburgh Maternity Hospital, has published in the *Edinburgh Medical Journal* for August an account of eleven cases of labour in which chloral was administered. Three of them were under the notice of the late Sir James Simpson. The conclusions at which Mr. Lambert arrives are the following.

"1. Chloral is an agent of great value in the relief of pain during parturition. 2. It may be administered under favourable circumstances during and at the close of the second stage, with the result of producing absolute unconsciousness, in the same sense in which we understand unconsciousness under chloroform. 3. When thus given successfully, it has this advantage over chloroform, that it requires no interference with the patient. 4. It is desirable to retain chloroform in the position which it at present occupies in midwifery, and to reserve for the agency of chloral the first stage of labour. If, however, chloral or some agent having analogous properties be found successfully to relieve the pain of uterine contraction, the use of chloroform will be restricted to a lesser period of the duration of labour, or to the facilitation of manual or instrumental interference. 5. It is demonstrated that a labour can be conducted from its commencement to its termination, without any consciousness on the part of the patient, under the sole influence of chloral. 6. The exhibition of chloral in no wise interferes with the exhibition of chloroform. 7. The proper mode of exhibiting chloral is in fractional doses of fifteen grains every quarter of an hour until some effect is produced; and according to the nature of that effect the further administration is to be regulated. Some patients will require doses of one drachm; and it is better to produce an anæsthetic effect by three drachms given in the space of two hours, than by one drachm given singly. 8. The effects of chloral are continued beyond the period of complete parturition; and the repose experienced by the patient after her labour is one of the favourable circumstances to be noted in considering its application to childbirth. 9. Any stimulating effects, in the form of general excitability, occasionally observed during the administration, have passed away very rapidly. 10. Chloral not only does not suspend, but rather promotes, uterine contraction, by suspending all reflex actions which tend to counteract the incitability of the centres of organic motion. 11. Labours under chloral will probably be found to be of shorter duration than when natural; for unconscious contractions appear to have more potent effects than those which are accompanied by sensations of pain. 12. Experiments are required in order to determine whether there exists the same antagonism between ergot and chloral as is known to exist between strychnia and chloral."

13. The general conditions under which chloral is to be administered are the same as those which regulate the administration of chloroform, and the rules laid down by Sir James Simpson in connexion with this subject must be rigidly adhered to."

NOTES OF THE WAR.

PROFESSOR VIRCHOW, at the request of the Berlin Aid Committee, has drawn up a code of "Health Regulations for the Army in the Field". A large number of copies have been distributed among the soldiers.

ALLEGED MURDER OF A SURGEON.

A CORRESPONDENT of the *Daily Telegraph* states that a Turco, while having his wounds dressed by Dr. Mettenzweig of Oranienburg, near Berlin, stabbed him with a knife as he was turning aside to arrange the bandages and other materials. Dr. Mettenzweig died at the end of six days.

THE LAZARETTES IN BERLIN.

THERE were, in the lazarettos at Berlin on September 15th, 2390 Prussians and 336 French. Of these, 323 Prussians and 103 French were severely wounded; 1011 Prussians and 198 French slightly wounded; 52 Prussians and 5 French had disease of the eyes; one Prussian and one Frenchman were suffering from pyæmia; 11 Prussians and 13 French had hospital gangrene; 3 French had small-pox; one of each nation was suffering from dysentery; 717 Prussians and 8 French were slightly ill; and there were 214 Prussian convalescents and 1 French.

SURGERY AT SEDAN.

DR. W. MACCORMAC, of the Anglo-American Ambulance, has written to Colonel Lindsay an interesting description of the proceedings of himself and his colleagues during and after the battle of Sedan. On the 1st September, the caserne in which they were was in the direct line of a constant fire carried on by the Germans for six hours. The building was bomb-proof, but the shells raked the wards from window to window, killing one hospital-helper and severely wounding another. Dr. MacCormac was constantly employed for several days in operating; the operations comprising two cases each of ligature of the subclavian and of the carotid arteries, excisions of joints, and innumerable amputations. Attempts at conservative surgery, in cases of injury of bones, have not been satisfactory, even where the injury has at first appeared slight. The Prussian bullets splinter bones in every direction, generally to such an extent as to demand immediate resection or amputation. Up to the 16th, the date of the letter, there had been no erysipelas, hospital gangrene, or pyæmia, and but one case of secondary hæmorrhage after operations. This immunity from epidemic disease he ascribes to the copious use of carbolic acid, and especially to free ventilation. The windows of the rooms were kept wide open at all times—to the great horror of a French intendant-general, who told Dr. MacCormac and his colleagues that "they were going to kill their patients with *courants* of air".

A DEFENCE OF THE INTERNATIONAL SOCIETY.

MR. BERKELEY HILL and Mr. Ernest Hart, who have been inspecting the ambulances of the British Aid Society in the Sedan district, have written to the *Daily Telegraph* a letter in which they deny the statement recently made by a correspondent of that paper, "that in no single military ambulance have the amateur medical assistants taken off their coats, so to speak, and gone to work like men at what they are engaged to do". They complain that the correspondent has mixed up all the ambulances—British, French, Belgian, etc.—in one common condemnation. They point out that as regards the French surgeons the charge of indifference is not applicable. In the French ambulance, "the very moment that one of us entered the hospital, M. Tilleaux was performing disarticulation of the arm at the shoulder-joint, aided by some of his assistants, while others were dressing in the wards. The joy with which they received our medical stores, taking only what was strictly necessary, betokens no want of interest in their work; and having had no inconsiderable experience of hospital work, in which we have been engaged all our professional lives, we have seen no signs of loafing, but, on the contrary, of earnest and devoted work". Of the medical officers in the service of the British Society, the writers of the letter say that their conduct has been beyond praise; and they protest against the implication, far more the direct statement, that those who have enlisted under the British Society are careless or idle. They repeat the statement that has been already made, that there is a crowd

of loafers wearing the red cross: but they believe that, if their badges were examined, not one would be found to bear the stamp of the British International Society, and that the wearers are not directly attached to the foreign ambulances. Messrs. Hill and Hart state that they found very general evidences of a want of organisation and of deficiency in the means of communication and supply between the red cross ambulances of the British and Foreign Societies. The real difficulty for the British Society, they write, has been in the sudden and marvellously rapid development of its resources, which left little time indeed for the regular organisation of its now gigantic task, and in the entire absence of any previous machinery to be used for the purpose. To improvise a large series of ambulances suddenly, in a foreign country, occupied by combatant forces, with all kinds of impediments to traffic and difficulties of transport, would have puzzled very wise and experienced heads, even where the extent and localities were of necessity accurately known, and the amount of resources was ascertained. Moreover, the first administrators sent out were inexperienced, and many employed are still so. The authors of the letter have laid before Captain Brackenbury, the chief agent of the British Society here, and have written home to Colonel Lindsay, some detailed criticisms and suggestions. Many of them had been anticipated by Captain Brackenbury, who, they believe, concurs in all. On the large scale on which the British Society is now able to work, more numerous centres of action must be taken. Experienced administrators, such as deputy-inspectors of the hospitals of the army or navy, are wanted—one at each centre; experienced commissariat officers, and an organised intelligence department. All these wants could not be accurately forecast; they are on the way to be rapidly fulfilled. Meantime thousands have been comforted and saved by the British Society, and both France and Germany have cause to bless its name.

THE GERMAN FIELD-HOSPITALS.

The following is from a correspondent.

On the 13th of September, an order was issued from Berlin not to establish any more new hospitals for the wounded, as a great number of beds are empty, and the present accommodation appears amply sufficient. How great the available number of beds all over Germany must be, can be guessed if we mention that such towns, as for instance Frankfort or Mannheim, have made up from 1200 to 1500 beds each, and that even the smallest places would not stand behind, but wanted to have a few wounded soldiers to nurse. Everywhere the local practitioners attend them, and the nursing is done by trained nurses and sisters of charity, assisted by ladies of all ranks. The hospitals are mostly temporary wooden buildings, so-called "barracken", of a most simple construction, the only aim of which is to afford protection from rain, and to allow thorough ventilation. The place of windows is taken by wooden frames covered with canvas, which are opened whenever the weather allows. As the cold weather lately prevailing did not admit of their being freely opened, they have in some hospitals been replaced by glass-windows to admit more light, and thereby to render the ward more cheerful. These wards are mostly built entirely of wood; in some places, however, part of the walls is made of bricks. They have either no floor but the dry ground, or, what is much better, and carried through in all the richer towns, the floor is raised about two feet above the ground, and the boards are soaked with oil. The roof is well projecting, and free ventilation is secured by open spaces where the roof rests on the side-walls, as well as on the crown of the roof, which is raised two or three feet. A number of such wooden houses are arranged either without any system at all, simply as the ground at disposal has permitted, or they are placed in rows, or more elaborately grouped round the kitchen, which is generally the central building.

The large barracken-lazareth at Frankfort, with 600 beds, consists quite of a little town of wooden houses in three rows; the houses, containing 20 beds each, being placed with their lengths at right angles to the road between them. At Mannheim they are arranged in the form of a triangle, one behind the other, and connected one with another by a covered passage. The sides of this triangle are flanked by two large wards of 34 beds each, the other wards containing only 22. These larger wards have raised floors and windows. The closets are either partitioned off at one end of the ward, the same as the scullery, or they are altogether outside and projecting from the wards. Moule's earth-closets are much used at Frankfort, but at Mannheim and other places they use barrels, with sulphate of iron or zinc and other disinfectants: these barrels are emptied every day.

There are not many severely wounded at Frankfurt, but a great many are to be found at Mannheim and Darmstadt. These are the places where good surgery and the most modern appliances for the treatment of compound fractures can be seen. At Darmstadt, Professor Lücke

of Bern is at the head of the hospitals, assisted by a staff of young Swiss surgeons. At Mannheim, Professor Bergmann of Dorpat, with several Russian surgeons, and Dr. Lossen of Halle, manage the two largest "barracken-lazareth"; whilst Professor Billroth of Vienna acts as consulting surgeon for the whole of the Mannheim hospitals. The work in these hospitals is done with a regularity and order not exceeded by any permanent clinical hospital; the staffs of young surgeons being sufficiently numerous to take temperatures in all severe cases, and to make notes of the more interesting ones. There were a good many patients that had undergone serious operations—about half-a-dozen resections of the head of the humerus, several excisions of the elbow, a number of amputations, several cases in which ligature of an important artery had been made; bullet-wounds in all possible, and apparently impossible, directions; narrow escapes from balls having passed through the neck and having just spared the carotid, or through the inguinal region without injuring the femoral artery; bullets having passed through the knee- or ankle-joint without setting up suppuration, etc. Plaster of Paris is most extensively used. A very convenient swinging apparatus, which is much used in compound fractures of the lower extremity, consists of a plaster of Paris bandage, in which runs a narrow iron splint, with three projecting rings for suspension along the front of the leg. Professor Volkmann of Halle is the originator of this method; and he has also most conveniently modified what is known in England as the American method of treating fractures of the thigh by simple extension without splints. Instead of attaching the string bearing the weight immediately to the loop of adhesive plaster, he interposes a small piece of wood which is placed horizontally, and which rests and freely moves on the edges of two triangular blocks of wood lying on a board, one at each side of the foot. This arrangement makes the extension much more steady.

Behind the large "barracken-lazareth" at Mannheim, is a tent-hospital containing 32 beds, established by the Dutch, Drs. Schubart and Brondgeest of Utrecht being the chief surgeons. They brought their tents, beds, nurses, and every thing with them. The whole has a very cheerful aspect.

In the Palatinate, we had an opportunity to observe the very strict measures which have been taken to stamp out the cattle-plague, which unfortunately has made its appearance in several places. A military cordon is placed round the affected villages; all the animals in a stable where a single case has appeared are doomed to destruction; the most rigid disinfection of the stable is carried out. Small disinfecting huts are established at all the chief roads coming out of a village; and every one leaving the village is bound by a heavy penalty to stay a few minutes in an atmosphere of chlorine before he is allowed to proceed on his journey. We had to undergo this fumigating process twice yesterday afternoon. Horses and cattle are disinfected by washing their feet with water containing chloride of lime. Cats and dogs are not allowed to be at large. It is to be expected that by these strict measures the further spread of the disease will be prevented.

September 20th, 1870.

THE GERMAN AID SOCIETIES.

OUR correspondent at Berlin writes as follows, under date Sept. 26th.

I have now to speak at present about the private societies found every where, and having for their purpose either the relief of the sick and wounded, or the support of the families of reserve and Landwehr men who have entered the army, or the relief of the troops themselves by sending refreshments, etc.; or, as most of them, fulfilling all these purposes at once. For their common interests, all the local societies for the relief of the sick and wounded throughout Germany have a Central Committee, formed of delegates, and stationed in Berlin, Unter den Linden, 12. This Committee has charge of the intercourse and correspondence with foreign aid societies, and gives directions to the local societies in regard of the places where, and the manner in which, help is wanted. Nevertheless, the local and provincial societies may, under direct communication with the Central Committee, support the hospitals in their own neighbourhood and their own respective troops, and may independently order materials where they are wanted. Besides the local depôts of materials (clothes, bandages, medicines, food, etc.), there is a Central Depôt, also at Berlin; general depôts, resorting of it, at Coblenz, Mainz, Mannheim, and, depending on these, special depôts at Saarlouis, Saarbrücken, Weissenburg, Hagenau, Courcelles, Remilly, Nancy, Pont-à-Mousson, Sedan, and various other places. Now and then, the Central Depôt publishes lists of the objects sent by them. For instance, I quote from the last list: 1,000 trunks with charpie, 2,000 with plaster of Paris, 1,100 pounds of carbolic acid, 2,000 pounds of chloroform, 237 pounds of tincture of opium, 2,000,000 of cigars, 160,000 bottles of claret.

The number of beds prepared by private societies existing in all

the larger towns of Germany, as Leipzig, Magdeburg, Hanover, etc., for the reception of sick and wounded, is enormous, and, we are glad to say, surpasses everywhere the amount actually necessary; so that you may often find in the papers complaints about not yet having received the expected wounded. Corresponding to the size and means of the town, the largest of these local societies is the "Berlin Aid Society for the German Field Armies". By its own means this society established a hospital of four hundred beds in the Uhlans barrack, and built on the field of Templehof fourteen barracks, for thirty patients each. The furnishment and management in the hospitals are excellent; in some points, I should think, even too luxurious. Besides this society, there are in Berlin a number of smaller societies formed by private circles or in single parishes, and following one or some of the purposes above named. In this way there are here more than a dozen of hospitals *ad hoc*, for twenty to fifty patients each. The large permanent civil hospitals, as the Charité, St. Hedwig's Hospital, St. Elizabeth Hospital, etc., receive also a certain number of military patients. I may add, that by the military authorities three large caserns and the halls of the Centralturnanstalt are arranged as hospitals; so they have at their disposal alone (together with the garrison hospital and the new wooden barracks) about two thousand beds. In the beginning of the war, the wounded were sent to the different hospitals without regarding their nationality; but by-and-bye affairs of discipline made it necessary to send the French to the exclusively military hospitals, where they might be under a stricter superintendence.

Though not really belonging to the Aid for the Sick and Wounded, I mention in a few words the societies, already referred to, which support the families of reserve and Landwehr men. Success has shown what may be done by an army like the German, composed of civilians, and originating out of every class of society and every calling; but proportionally large is the influence of this organisation on home affairs. In consequence of the mobilisation, many thousands of wives and children are destitute, and unable to support themselves alone. Hence it is quite necessary to support these families to a certain degree. Besides numerous parish committees, five large societies have been originated for this purpose, to ensure as judicious and correct as possible a distribution of their means. They have now formed a Central Board, under the presidency of Mr. Seydel, Mayor of Berlin.

With the beginning of the cold season, public opinion thinks about sending refreshments, spirits, and warm clothes, to our troops; innumerable stockings, flannel-shirts, sashes, etc., are bought by local committees, and are to be sent in special trains to the different army corps.

From the beginning of the mobilisation, measures were taken by private and by public authorities to refresh the passing troops on the railway stations: large and small towns emulated each other in doing so. At Berlin, the most extensive arrangements were made on the "east station". Mrs. Lina Morgenstern, who has managed for some years the Berlin "Volksküchen"—institutions furnishing the working-classes with good and cheap dinners—in a most excellent way, has, to the general satisfaction, the superintendence of these arrangements. Within the last few weeks, at the same stations, dressing-places have been made ready for the trains of wounded who pass Berlin and go to more distant hospitals. The medical arrangements at the stations are under the charge of a number of Berlin surgeons, who have made it their duty to be present when the trains bringing the wounded are announced.

The cattle-plague observed a few weeks since in the Palatinate, and supposed to be brought in with the Hungarian cattle, has broken out sporadically at different places in Germany. Some villages near Berlin are surrounded with a military cordon on account of the outbreak: generally, the strictest measures are taken to avoid a spread of the disease.

In 1866, permanganate of potash was the antiseptic remedy *à la mode*; this year it is carbolic acid. In every hospital it is used on the largest scale for dressing and washing wounds, in more or less strict accordance with the directions of Mr. Lister.

The following is a part of a report from Donchery, dated September 17th. Four thousand six hundred and seventy-seven Germans have been up to this day sent home through Belgium; a few more may be sent in ten days or a fortnight. For this purpose, Messrs. von Stein and von Tettau will stay in Libramont and Bouillon until the 1st October, and will be so able to finish their work there entirely. Mr. von Albedyll and Count Kleist remain here; the latter, after breaking up the station at Neufchâteau, went for a few days only to Libramont. Generally, the evacuation of the wounded is very difficult, from the want of carriages. It was in vain tried on our part, by the Intendant-General, and Mr. Hubert Salatin, to send on the wounded by the railway through Mézières and Givet. The Etappen-Inspector of the army of the Meuse wished to establish large hospitals at Sedan, and to send the patients thence through Belgium; but General Boeger thought the air of Sedan and its neighbourhood too unhealthy.

ASSOCIATION INTELLIGENCE.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Royal Clarence Hotel, Bridgwater, on Thursday, October 13th, at 5 P.M.; J. CORNWALL, Esq., of Ashcott, President, will be in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, September 13th, 1870.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE first general meeting of the Session (1870-1871) will be held at the Midland Institute, on Thursday, October 13th, at 3 P.M.; THOMAS UNDERHILL, Esq., President, in the Chair.

T. H. BARTLEET, *Honorary Secretary*.

Birmingham, September 27th, 1870.

SOUTH MIDLAND BRANCH.

THE fourteenth autumnal meeting of the above Branch will be held at Stony Stratford, Bucks, on Tuesday, October 18th.

Gentlemen who intend reading papers or cases, are requested to furnish the names or titles, as early as possible, to

J. M. BRYAN, M.D., *Honorary Secretary*.

Northampton, September 20th, 1870.

CUMBERLAND AND WESTMORLAND BRANCH.

THE autumnal meeting of the above Branch will be held at the Keswick Hotel, Keswick, on Wednesday, October 19th, 1870, at 1 P.M. THOMAS F. PANSON, M.D., of Whitehaven, President of the Branch, will take the Chair.

Gentlemen intending to read papers, or be present at the meeting, will greatly facilitate arrangements by communicating with the Secretary without delay.

HENRY BARNES, M.D., *Honorary Secretary*.

Carlisle, September 28th, 1870.

SHROPSHIRE SCIENTIFIC BRANCH.

THE autumnal meeting of the above Branch will be held in the Museum of the Natural History and Antiquarian Society, Shrewsbury, on Thursday, October 20th, at 2 P.M. President for 1869-70, Dr. OAKLEY; President-elect for 1870-71, J. D. HARRIES, Esq.

Gentlemen intending to read papers or report cases, are requested to communicate with the Honorary Secretary.

The dinner will take place at the Lion Hotel, at 4.30 for 5 exact time: J. D. Harries, Esq., in the Chair.

SAMUEL WOOD, F.R.C.S., *Honorary Secretary*.

Shrewsbury, September 26th, 1870.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETING.

THE September Meeting of this district was held on the 13th, at Hayward's Heath; Dr. BYASS, of Cuckfield, presiding.

Dr. Williams, the Superintendent of the County Lunatic Asylum, having entertained the members with a sumptuous luncheon, the business of the meeting was commenced by resolving that the November meeting be held at Brighton, and that Dr. Ormerod be requested to take the chair on that occasion.

The Rev. T. E. Crallan, Chaplain to the Asylum, submitted to the meeting a meteorological record, which he had kept on the premises during the past two years, in conjunction with a register of illness kept by the medical staff; the chief remarkable points in which were the very high amount of ozone generally prevailing—averaging 8.0; and the coincidence repeatedly observed in the occurrence of maniacal excitement and melancholic fits respectively amongst the patients during the twenty-four hours immediately succeeding to dry and bright weather (as regards mania), and during the twenty-four hours immediately succeeding dull and damp weather (as regards melancholy). There also seemed to exist an impression on the minds of both the chaplain and the medical staff that the electrical conditions of the atmosphere greatly influenced the patients; but no matured records on this point were offered.

Two new Members were nominated: Dr. Braid, of Burgess Hill, and Mr. Porter, of Lindfield.

The Asylum.—The medical officers, Dr. Williams and Dr. Nicol, conducted the members over the establishment. This, being of modern construction and arrangement, and having had the benefit of such able superintendence and management as could be given by Drs. Lockhart Robertson and Dr. Duckworth Williams, may be looked upon as a representative place amongst the pauper asylums. Some of its leading features, therefore, seem worth narrating, and we give them accordingly. —The site is most eligible, on high ground, and commanding extensive views.—The water is derived from an Artesian well, situate several hundred yards from the building, and is slightly chalybeate, to which quality the good general health of the patients is ascribed.—The drainage is carried about a quarter of a mile away from the building to some low ground on the premises, and then is applied to the land, producing five or six crops of rye-grass annually. The water-closets are frequently flushed with chloride of lime and carbolic acid.—The grounds extend to 240 acres, and admit not only of the vegetables for the use of the asylum being grown, but also of the feeding and butchering of the necessary beef and mutton. Twenty milch cows are also kept.—*Number and Industrial Employments of the Patients.* On the occasion of this visit, the male and female patients were in exactly equal proportions, viz., 343; total 686. Besides the productiveness of the establishment above alluded to, as to meat, vegetables, and milk, all its other arrangements are planned to make it so self-productive and so comparatively independent of the outer world, as to constitute it almost a community of itself. Thus it has its own bakery; its own brewery; its laundry; carpenters', shoemakers', and other workshops; chapel; cemetery, etc. In each of these departments, it was very remarkable to what an extent the labour-power of the inmates was utilised, to the physical benefit of the patients themselves, and the economy of the establishment. To take one example: in the laundry, fifty female patients were industriously engaged in the various processes of washing, wringing, mangling, ironing, etc., superintended by only two or three sane directors, and all was going on as orderly as possible; and, although some powerful machines for wringing and other purposes were in use, no accident had ever occurred. One suicide, however, had been committed by immersion in a huge cauldron of hot water. In the different workshops, similar order and industry seemed to prevail; and the various tools and implements in use are said to be never put to malicious purposes.—*Wards.* The grand distinction between day and night rooms was very noticeable. The dormitories were clean and airy in the extreme, and such comforts as spring-bedsteads, water-beds, and air-pillows were here and there observable. The padded rooms attracted notice; and it was remarkable that on the day of the visit, of all the 686 patients then in the asylum, only one of them required confinement in one of these padded cells. This was an epileptic youth, with crippled knees from chronic scrofula, who, though generally quiet enough, is subject at long intervals to extremely vivid hallucinations, as was the case at the visit. He was then in a state of nudity, clapping his hands violently, and declaring himself as possessing the power of seeing God—pointing, as he did so, to a corner of the room. On the occasion of his having an epileptic seizure, an aura appears to originate on the outside of one knee, where there is a sinus. The male and female infirmaries respectively contained but few patients, and those were mainly chronic cases. We understand that the hypodermic injection of morphia is much used and valued as a means of procuring rest. The Turkish bath is also in favour. The day-rooms were conspicuous for their comfortable appearance—here and there easy chairs, flowers on stands, and books and newspapers, contributing not a little to this effect. Many of the patients seemed so listless and apathetic as to be incapable of occupation, and scarcely even of noticing the passage of so many visitors through their rooms. Others were much attracted by it, and eagerly inquired the meaning of it. Not a few were quietly engaged: the women in needlework, reading, etc.; the men in reading, and at games of different kinds. The artisans have a day-room distinct from the others, well supplied with books, periodicals, etc. There are dining halls distinct from the other day-rooms; also a large recreative hall, where music and dancing are, on suitable occasions, in the ascendant.—Lastly, there are the terraced airing courts and the grounds for out-door exercise.—Taken altogether, this institution offers a magnificent instance of what skill and able management can do for those suffering from the severest affliction to which humanity is heir; and the inspection of it in this thorough manner was much appreciated by all present.

Dinner.—Early in the evening, the members of the Association and their friends dined together at the Station Hotel; finally dispersing, one and all, with the conviction that the district meetings are a happy feature in the arrangements of the Association, and that not one of

them was ever a greater success than this particular one. Twenty-seven gentlemen attended; and in the absence of the district secretary, on account of illness, his duties were performed by the Secretary of the Branch, Mr. Hodgson.

OBITUARY.

SAMUEL WRIGHT FEARN, F.R.C.S., DERBY.

Mr. S. W. FEARN, one of the consulting-surgeons of the Derbyshire General Infirmary, died at Samaden in Switzerland on the 8th September. For some considerable time past, Mr. Fearn's health had been such as to excite the gravest apprehensions of his friends, at whose earnest entreaty, and by the advice of eminent physicians in London, he was induced, much against his inclination, to relinquish, what was fondly hoped would be but for a brief interval, the active duties of the profession to which he had long and zealously devoted himself. It was felt by those who knew and loved him best that entire rest, together with change of air and scene, afforded the only prospect, humanly speaking, of his recovery.

Mr. Fearn was a native of Derby, and the nephew and pupil of the late Mr. John Wright, an eminent operating surgeon in the town. After an excellent education in the schools of London, Edinburgh, and Dublin, where he especially distinguished himself as an accomplished anatomist, Mr. Fearn commenced practice in Derby, and steadily rose to a very high rank in the profession. His thorough knowledge of his art, and skill in its practice, not only won the confidence of his patients, but caused his assistance to be eagerly sought by his brother practitioners, who confided equally in his ability and honourable conduct. He was a bright example of manly straightforwardness; and perhaps his eminent position as a surgeon was due to high moral qualities no less than to superior intellectual qualifications. He had a warm and generous heart, loved truth for its own sake, and rose above every paltry prejudice. It was as an operator that Mr. Fearn especially shone. His sound anatomical knowledge, combined with manual dexterity, at once assured his success. With a naturally quick and clear perception, he combined promptitude and boldness of execution. His operations gave evidence of a master hand, and were performed with a celerity and completeness that left nothing to be desired. He was the first surgeon who tied both the carotid and the subclavian arteries in the same subject for the treatment of aneurism of the innominate artery. The patient was a woman aged 28. The carotid artery was tied in August 1836; and the subclavian two years later. Death occurred from pleurisy nearly four months after the second operation. The operation has, we believe, been performed in six other recorded cases; in one only of which recovery has followed.

At the Derbyshire General Infirmary, where he succeeded to the office of honorary surgeon on the retirement of Mr. Douglas Fox in 1855, Mr. Fearn was distinguished by unwearied attention to the patients committed to his care. How his valuable services to the Hospital were gratefully appreciated by the Board and Governors, was shown by the cordial and unanimous vote of thanks passed to him on the occasion of his retirement from office in the spring of this year. The best, and too often the most severe, judges of a man's professional character are his professional rivals. The fierce stress of competition too often excites jealousy with carps, or even malice which detracts. Singularly free himself from all such littleness of mind, Mr. Fearn seemed incapable of inspiring such paltriness in others. His colleagues were his admirers: his rivals were his friends.

Mr. Fearn was for many years a member of the British Medical Association, and took an active part in the proceedings of the meeting held in Derby in 1847 under the Presidency of Dr. Heygate. For several years he was Secretary (for Derbyshire) of the Midland Branch; he retired from the office in 1855.

Mr. Fearn possessed and cherished deep religious convictions in a spirit of earnest catholicity, holding in abhorrence everything which at all savoured of cant or sham. Those who knew him best were best aware of his sincere and increasing reverence for the Scriptures, which, silently and unobserved, formed part of his daily study, and the teachings of which he, without ostentation and parade, strove to make the rule and guide of his daily life.

His charity to the suffering and the poor was great. He never boasted of what he felt was at once a pleasure and a duty; the many whose wants he relieved and whose pains he alleviated will long remember his constant kindness and his unchangeable willingness to help and to soothe. He cherished the delight of proving himself the medical adviser and the good Samaritan to those especially who had seen

better days. His time, his skill, his purse, were at the disposal of the very many, who will lament him as a benefactor and friend.

No one who knew him could fail to observe the utter absence of anything like a spirit of resentment, pride, or jealousy, from Mr. Fearn's character; and even those who were acquainted with him but slightly could not fail to be impressed with his excellent social qualities, his *bon-homme*, his ready wit, his sympathy, and heartiness. His love of art was strong and cultivated. To the last he remained a student; and by none will his loss be more felt than by the many younger men who so often had recourse to his experience and reading, and to whom he was at once an adviser and a friend.

Dr. Walker, an English physician, for many years resident in Milan, was spending his holiday at Samaden, and, finding Mr. Fearn ill, devoted himself with unremitting care to do all that was possible to promote recovery, laying aside all considerations of the recreation he had gone to seek, and spending hours by the bedside of a fellow-professional of whom he had no previous knowledge. Such unexpected kindness softened greatly the regret of Mr. Fearn's friends that his last days should have been spent in a far-off land.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received his certificate to practise, on Thursday, September 22nd, 1870.

Huggins, Samuel Tillcott, Banbury

At the Preliminary Examination in Arts, held at the Hall of the Society, on the 23rd and 24th of September, 1870, 107 candidates presented themselves; of whom 38 were rejected, and the following 69 passed, and received certificates of proficiency in general education; viz., in the First Class, in the order of merit.

1. Robert John Price. 2. Frederick Worrell Friend and Harold M. Powell.
3. Richard Randell William Oram. 4. James Arthur Hardy, Edward John Henderson, and A. Stamford Morton. 5. George Black Butter and Robert William Collet. 6. Harvey Gosset Brown, Francis Arthur Hallsworth, Ernest Carr Jackson, Robert Bickersteth Miller, and Howard Douglas Stewart.
7. Edward William Lane. 8. Beresford Robert Bullen.

In the Second Class, in alphabetical order.

John Alexander Aitkens, John Davis Allen, James Scott Battams, Charles Scot Bayley, Samuel Benton, James Black, Percy C. Boyd, Reuben Augustus Louis Bynoe, Robert Cobb, Edward Cheyne, Wm. Theobald Blanton Clark, Harcourt Coates, Augustine Dennis, Charles Augustus E. A. Field, Charles Harris Franklin, Robert W. Greenish, Cecil Niel Griffiths, Henry Edward Groves, William Guy, Frederick S. Hardwick, George Hastings, Frederick Dell Hayman, William John Heslop, Francis E. C. Hood, Thomas Henry Hopcroft, James William Hope, Joseph Hopkins, Welby P. Anson, Michael Lewis Jarrett, Edward Mackenzie Laughlin, Patrick James McDonogh, John Mackenzie, Jonathan Macready, Reginald Maples, George Edward Miles, Henry C. Noot, Reginald Norman, Charles J. C. Otway, Wm. James Outhwaite, George Roger Parker, Chas. F. Pickering, Thomas Jno. Robillaird, Henry Sawyer, Arthur Wm. Scatliffe, Herbert Smalley, Winckworth T. Smith, Jno. Fredk. Jos. Sykes, Thomas Henry Stephens, Charles Vernon Taylor, John Henry Vistler, William Frederick Walker, Edward Sadler Warrillow, and Robert Wharry.

MEDICAL VACANCIES.

THE following vacancies are announced:—

- CENTRAL LONDON DISTRICT SCHOOL, Hanwell—Resident Assistant Medical Officer: applications, 4th.
- CLONMEL UNION, co. Tipperary—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the St. Mary's Dispensary District: 4th.
- DONEGAL LUNATIC ASYLUM, Letterkenny—Consulting and Visiting Physician: 12th.
- DORSET COUNTY HOSPITAL, Dorchester—House-Surgeon: applications, 19th; election, Nov. 5rd.
- KELLS UNION, co. Meath—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Nobber Dispensary District: 7th.
- KIDDERMINSTER INFIRMARY—House-Surgeon and Secretary: applications, 5th; election, 12th; duties, early in November.
- KILMUIR, Parish of, Isle of Skye—Parochial Medical Officer.
- LEICESTER PROVIDENT DISPENSARY—Medical Officer: applications, 17th; election, 20th.
- LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Lecture-ship on Pathology: applications, Oct. 6th.
- MIDDLESEX HOSPITAL—Assistant-Physician.
- MORVEN, Argyleshire—Parochial Medical Officer: applications, 1st.
- NAAS UNION, co. Kildare—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Kildare Dispensary District: 7th.
- NORTHALLERTON, Yorkshire—Surgeon to the Gaol: applications, 8th; election, 18th.
- NORTHUMBERLAND COUNTY LUNATIC ASYLUM, Collingwood, Morpeth—Medical Officer: applications, 3rd.
- ST. BARTHOLOMEW'S HOSPITAL, Rochester—Assistant-Surgeon: 13th.
- SEVENOAKS UNION—Medical Officer for District No. 5: applications, 4th; election, 5th.
- SHEPPEY UNION, Kent—Medical Officer for the Minster District.
- WEST KENT GENERAL HOSPITAL, Maidstone—House-Surgeon.
- WESTMINSTER HOSPITAL—House-Physician: applications, 1st; election, 11th.
- WOLSTANTON and BURSLEM UNION—Medical Officer for the Tunstall or No. 1 District: applications, 3rd; election, 4th.

WORCESTER AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION—Medical Officer: applications, 11th; vacancy, Christmas.
YELL and FETLAR, Islands of, Shetland—Parochial Medical Officer: applications, 1st.

MEDICAL APPOINTMENT.

Names marked with an asterisk are those of Members of the Association.

*PROVIS, Wilton, Esq., appointed Medical Officer to the Biddenden District of the Tenterden Union, *vice* John Chapman, Esq., resigned.

BIRTHS.

ARMSTRONG.—On September 20th, at Gravesend, the wife of *John C. Armstrong, Esq., Surgeon, of a son.
GARSTANG.—On September 2nd, at Blackburn, the wife of *Walter Garstang, M.D., of a daughter.
GOODE.—On September 10th, at Derby, the wife of *Henry Goode, M.B., of a son.
SMITH.—On September 27th, at Alderley, the wife of Samuel Hignett Smith, Esq., Surgeon, of a daughter.
STILWELL.—On September 21st, at Hillingdon, Uxbridge, the wife of *Henry Stilwell, M.D., of a daughter.
WILLIAM.—On September 25th, at Penygroes, Carnarvon, the wife of *John William, M.D., of a daughter.

MARRIAGES.

*HADLEY, George Percival, M.D., of Lozells, Birmingham, to Elizabeth, daughter of the late Thomas SANSOME, Esq., of Hampton, Evesham, on September 20th.
*NOBLE, S. C., Esq., Surgeon, Kendal, to Mary Ellen, daughter of Robert WETHERELL, Esq., at Matlock, Bath, on August 23rd.

DEATH.

WAHLTUCH.—On September 21st, at Manchester, aged 7 weeks, Edward Simon, infant son of *Adolphe Wahlutch, M.D.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY—Obstetrical Society of London. 7.30 P.M., Council Meeting. 8 P.M., Dr. Martin (Melbourne), "Notes of a Case of Solid Fibrous Tumour of the Right Ovary: Ovariectomy: Recovery." Dr. Hodder (Toronto), "Ovarian Multilocular Tumour: Ovariectomy: Death." Dr. Copeman (Norwich), "On Tumours of the Pelvis obstructing Delivery." Mr. E. J. Lowe (Burton-on-Trent), "A Case of Hæmorrhage from Retained Placenta after Abortion, terminating fatally."

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ERRATUM.—In Dr. Johnson's paper on Lead-poisoning, p. 325, the first line of the third paragraph, for "immersed", read "incinerated".

JOHN HUNTER.—Sir William Fergusson, the President of the College, will deliver the Oration in February next.

E. F. puts the following case for an opinion thereon. "A. B. goes away. He leaves C. D., and E. F. his assistant, in charge of his practice. E. F. rides about one hundred and fifty miles, has a compound fracture, and a confinement (a case of twins); for all of which A. B. is paid. C. D. has only to pay one visit. Is it usual in such cases for A. B. to give E. F. or C. D. any present or fee?"

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

PRESTON.—The person mentioned is unregistered; in fact, his name was removed from the list of members some years ago.

WEAK INTELLECTS.

SIR,—In reply to the query of "J. H.", I beg to inform him that the institutions at Earlswood, near Red Hill, and at Lancaster ("The Royal Albert Asylum", of which a notice appeared in the JOURNAL of the 24th September, page 339), offer special facilities for the training of weak-minded youths, every mode of eliciting dormant mental power being applied under medical direction, and amusement being blended with the more serious and methodical pursuits of the patients in such a way as to furnish them with constant occupation and to dissipate as far as possible the listlessness to which they are so prone.

Full information may be obtained on application to the Medical Superintendent of either asylum.

Sept. 26th, 1870.

I am, etc.,

AN ASSOCIATE.

A STUDENT.—The registration at the College of Surgeons which commences this day (Saturday) will close on Saturday, the 15th instant. Under the peculiar circumstances stated you will, no doubt, be enabled to register the following Monday, taking with you the hospital cards.

ERRATUM.—In Dr. Balfour's letter in last week's JOURNAL, line 19 from bottom, in the clause "no comparison was instituted between the relations of the cardiac pulse to the cardiac impulse, etc.", the word "cardial" should be "carotid".

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, August 29th; The New York Medical Gazette, Sept. 10th; The Parochial Critic, Sept. 29th; The New York Medical Record, Sept. 15th; The Boston Medical and Surgical Journal, Sept. 15th; The Madras Mail, July 18th; The Shield, Sept. 24th; The Kensington News and West London Times, Sept. 10th; The Derbyshire Advertiser, Sept. 16th; The Essex Standard, Sept. 23rd; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. A. Wiltshire, London; The Medical Officers and Lecturers of St. Mary's Hospital Medical School; Dr. E. D. Mapother, Dublin; Dr. T. Clifford Allbutt, Leeds; Mr. E. Sandwell, London; Mr. J. Wright Baker, Derby; Dr. J. William, Penygroes; Dr. R. Gee, Liverpool; E. F.; Dr. Bree, Colchester; Dr. R. Lord, Crewe; Dr. W. Fergus, Marlborough; Mr. W. Provis, Biddenden; Dr. G. W. Balfour, Edinburgh; Mr. T. Hadley, Birmingham; Dr. Hardie, Manchester; Dr. Kelly, Taunton; Dr. W. Garstang, Blackburn; Mr. Christopher Heath, London; Dr. Bryan, Northampton; Mr. Reginald Harrison, Liverpool; Dr. A. Wahlutch, Manchester; Mr. S. C. Noble, Kendal; Mr. W. Rivington, London; Dr. F. Wadd, Beaconsfield; Dr. J. Fulton, Toronto, Canada; Mr. James Bird, London; An Associate; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. Graily Hewitt, London; Mr. Hulke, London; Dr. J. H. Bennet, London; Mr. G. F. Hodgson, Brighton; Dr. R. T. Manson, Witton-le-Wear; Mr. C. R. Thompson, Westerham; Mr. T. D. Saunders, Smarden; Mr. W. Draper, York; Mr. T. H. Bartleet, Birmingham; The Secretary of the Obstetrical Society; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Mr. S. Wood, Shrewsbury; Dr. Henry Barnes, Carlisle; Mr. S. Smith, Weaverham; Mr. Thomas Flower, Guildford; The Medical Officers and Lecturers of Charing Cross Hospital; Mr. J. Sewill, Caterham Valley, Surrey; Dr. George Johnson, London; etc.

BOOKS, ETC., RECEIVED.

St. Andrew's Medical Graduates' Association. Transactions, 1869. Edited by Leonard W. Sedgwick, M.D. London: Churchill and Sons. 1870.
Health and Longevity. By Lionel J. Beale, M.R.C.S. Second Edition. London: 1870.

A Pathological Classification of Mental Disease. By J. B. Tuke, M.D.

The Treatment of Snake-bite in Victoria. By G. B. Halford, M.D.

Two Cases of Rheumatic Insanity. By T. S. Clouston, M.D. 1870.

Report of a Committee of the Medico-Psychological Association.

The Celtic Origin of a Great Part of the Greek and Latin Languages. By Thomas Stratton, M.D. Second Edition. Edinburgh, London, and Plymouth: 1870.

Snuff-taking: its Utility in preventing Bronchitis, Consumption, etc. By John C. Murray, M.D. London and Newcastle: 1870.

Public School Reforms. By M. A. B. London: 1870.

Koumiss, and its Use in Medicine. By Dr. Victor Jagielski. London: 1870.

Dover as a Health-Resort and Place of Residence. By Charles Parsons, M.D. Edin. London: 1868.

The Sixth Annual Report of the Royal Albert Asylum for Idiots and Imbeciles. Lancaster: 1870.

Atlas of Ophthalmoscopy. By Dr. R. Liebreich. The text translated by H. R. Swanzy. Second Edition, enlarged and revised. London: 1870.

The Etiology and Prevalence of Diseases of the Heart among Soldiers. By Arthur B. R. Myers. London: Churchill and Sons. 1870.

L' Ago-elettro-puntura negli Aneurismi dell' Aorta; Casi Clinici e Considerazioni Pratiche. Del Dottore Malachia De-Cristoforis. Milano: 1870.

Aneurisma dell' Aorta Ascendente trattato coll' Elettro-puntura: Caso Clinico del Cav. Dott. Malachia De-Cristoforis. Milano: 1870.

Altre tre Applicazioni d' Elettro-ago-puntura negli Aneurismi dell' Aorta. Storie Cliniche del Cav. Dottor M. De-Cristoforis. Milano: 1870.

Il Raddrizzamento Meccanico delle Flessione Uterine a vincere la Dismenorrea e la Sterilità; Casi Clinici del Cav. Dottor M. De-Cristoforis. Milano: 1870.

The Canada Lancet for September 1870. Toronto: 1870.

REMARKS ON THE TREATMENT OF THE SICK AND WOUNDED IN WAR.

An Introductory Address delivered at the commencement of the Medical Session at University College, October 3rd, 1870.

By BERKELEY HILL, M.B.LOND., F.R.C.S.,
Assistant-Surgeon to University College Hospital.

THE present moment, when all minds are engrossed in the contemplation of the fearful drama passing through its weary stages on the other side of the channel, appears to me an appropriate occasion for comparing the modes of succouring the sick and wounded in military services during the present and recent wars, with those employed before science had made its several important changes in the conduct of warfare.

In this examination, we must consider in what way the modes of receiving and treating the sick and wounded in battle have been altered from the means employed during the wars of the last, and even of the commencement of the present, century. Frederick the Great, we are told, experienced such insuperable difficulties in the way of adequately providing for his wounded, that he suggested that all wounded should be recognised by belligerents as neutrals (such, indeed, was the agreement between Earl Stair, commanding the English forces, and the Duc de Noailles, on the French side, in 1743); or, failing this mutual concession, it would be not only a more convenient, but a more humane practice, to abandon the wounded on the field of battle; arguing that, with the means at command in those days, any care that could be bestowed on the sick and wounded rarely did more than stave off death for a time, and so uselessly prolong their sufferings.

But other views have prevailed. The physicians who attended the forces engaged in these very struggles, in the middle of the last century, laid down, and sufficiently defined, most of the main principles of military hygiene, which, nevertheless, did not until recently receive much attention. The military authorities of this country neither copied the improvements of other nations, nor, during the peace subsequent to Waterloo, did they profit by the experience gained in the wars against Napoleon. The true advance for this country in the practice of military hygiene began when the English nation learnt, through their press, the ravages that death and disease from preventible causes were inflicting on the fine troops sent to the Crimea. This discovery at once aroused the national sympathy, and created the determination to compel the authorities to make the necessary exertion; which, supplemented by an abundant supply from private means, quickly converted a miserable exhausted remnant of a gallant force into an army complete at all points, and in the highest state of health and efficiency.

The English expedition to the East landed in the Crimea almost entirely destitute of transport and hospital supplies. This destitution and the disastrous wrecks at Balaclava caused nearly ten thousand men to die from preventable disease in the first winter. In the second winter, on the contrary, the loss by death was but six hundred; scurvy, typhus, and other diseases originating in hardship and neglect, were unknown. Indeed, through the wise and successful exertions of the Government and of the nation, during the second winter, the health of the British forces in the Crimea was as good as, or even better than it is at home in time of peace. (*Medical and Surgical History of the British Army in Turkey and the Crimea in 1854-5-6*. Presented to Parliament, 1858. Vol. ii, p. 43.) On the other hand, the French army, through their preparations for war, imperfect though they were, suffered less from disease during the first winter, sending in that period, from sickness alone, 81,000 cases to hospital, with a mortality of 10,000; but in the second winter they sent 106,000, with a mortality of 21,000, or twice as large as that of the first winter.

Let us now consider the consequences of neglecting or observing one or two of the most important principles of army hygiene. One of the most incontestably proved principles of military hygiene is *segregation*, or avoidance of overcrowding, either of the sick or of the healthy. Still, this important condition of health was not ensured to our troops until the middle of the Crimean war, since which time it has been upheld in every campaign as of first-rate importance. For instance, Sir John Pringle, who described the campaign of the British forces in Germany, under George II, in 1742-43, and in Scotland and the North of

England in 1745-46, gives the plainest possible examples both of the effect of overcrowding in producing disease, and of isolation in arresting its progress when at its worst. He tells us that, after the battle of Dettingen, in 1743, which, you may remember, was the last occasion of an English king being present on the field of battle, nearly half the English forces, of about 16,000 men, fell sick of dysentery. The village of Feckenheim was employed as a hospital. In it 1500 sick were lodged; hospital fever soon broke out, and spread even to the doctors and attendants, causing great mortality throughout the army. At last the camp was raised, and the disease at once rapidly abated. But 3000 sick were left behind; of these, nearly half died, and with them the unfortunate inhabitants of the village were almost wholly destroyed. So, again, in the campaign against the rebellion of 1745, the sick of the army under the Duke of Cumberland suffered most severely from typhus, or "jail fever", as it was then called, through the sick men being crowded into the workhouse at Lichfield; yet Pringle says that, at all other places where there was no common hospital, and the sick could not be collected together, the jail fever was unknown. (Sir John Pringle, M.D., *Observations on Disease in the Army*, 5th ed. London: 1765; p. 41.)

Without attempting to write an essay on hospital construction, it may be useful to touch on certain points which determine the salubrity of such buildings. All large hospitals are necessary evils; necessary, because it is impossible to manage and attend to large numbers of sick or wounded without grouping them together; evils, because each patient is a copious source of poisonous emanations, which, if not rapidly and continuously cleared away, breed disease and death for those around him. This being admitted, it remains to be seen how far we understand the methods of diminishing the mischievous consequences of aggregation so that they shall not outweigh the advantages the sick receive from medical attendance and nursing. These evils so rapidly gain strength that, as it has been remarked by several of the earlier writers on military hygiene, a bad hospital system will destroy an army faster than the most energetic government can recruit it. (Fergusson's *Recollections of a Professional Life*.)

In preventing the evils of overcrowding, the quantity of *pure air* deemed indispensable has undergone gradual augmentation, as special researches on hospital sanitation have successively increased the quantity, until at least a superficial area of 100 square feet and a cubic space of 2000 feet are now pronounced necessary for each patient. The air of this space must be renewed every hour, and for fever or pyæmic patients even twice in the hour. Indeed, for the latter, treatment almost in the open air appears to be most beneficial. The writers on the diseases of soldiers and sailors have again and again remarked that in fever epidemics, those patients who were the worst housed and the least protected from the weather recovered most rapidly and in greater numbers from those deadly diseases than others who were more commodiously quartered in regular hospitals, churches, or well-built houses. Dr. Parkes (*Practical Hygiene*, 3rd ed.) remarks that the effect of a great supply of air for some diseases is marvellous; he relates how the patients with spotted fever, in 1814, at Paris, were placed, with great reluctance, in consequence of the crowded state of the regular hospitals, in the abattoir of Montfaucon; and that, contrary to expectation, they recovered infinitely better in this structure than in the ill-ventilated wards of the regular hospitals. So, again, Donald Munro, writing his treatise one hundred years ago, which is replete with minute and practical directions for maintaining the health of troops, tells us (*Observations on the means of preserving the Health of Soldiers and of conducting Military Hospitals*, 2nd ed., 1780, Lond.) that, in 1755, some men-of-war carried out to North America a malignant jail fever brought by convicts impressed from prison to make up the strength of the crews, not an uncommon practice in those days. The fever continued to spread among the crews while the ships were at sea, but at Halifax the sick were lodged in huts or very old houses that admitted the air freely, and this change put a sudden and effectual stop to the disorder. The experience of former wars received so little attention in even recent wars that, for example, the overcrowding of the great French hospitals at Pera in the Crimean war, and at Genoa in the Italian war of 1859, was acknowledged to have greatly increased the mortality of the French sick (Chenu, *Statistique Médicale de la Campagne d'Italie en 1859 et 1860*, Paris, 1869; *Observations générales*, p. xxiv). During the Crimean war, the enormous loss by sickness in the French army was the consequence, we are told by Chenu, of the inability of the French *Intendance* to appreciate the importance of the most clearly recognised rules of sanitary science. In spite of the remonstrances of their chief medical officer, and of requests that quarters should be changed from time to time, the same field-hospitals for the immediate reception of the sick and wounded were employed throughout the war, with what disastrous consequences may be judged by contrasting the sickness and mortality of the three

successive periods of six months which the French army passed in the Crimea. In the first six months, 51,000 were sent to the tent- or field-hospitals, with a mortality of 4960; in the second, 85,000, with a mortality of 12,000; in the third, 61,000, with a mortality of 11,000. Similar testimony is borne by the results of treatment in the large general hospitals established by the French at Constantinople to receive their sick from the field-hospitals. The vast number of sick soon filled the accommodation the hospital originally provided, and the corridors were fitted up, in spite of the protest of the chief medical officer, M. Michel Lévy. Thus 2100 beds were installed in a single palace. The result was a mortality of 12 per cent. in the first six months, 18 per cent. in the second six months, and 27 per cent. in the third (Chenu, *loc. cit.*) This loss, in the third six months, was almost entirely from sickness, for active hostilities had almost ceased; only 300 wounded were treated. Again, Dr. Hammond, Surgeon-General to the Federal forces during the late American war (*Report of the American Sanitary Association*), in a report on the condition of the hospitals of Western Virginia and Maryland during an early stage of the war, states that in several of the hospitals 200 and 300 cubic feet, in one instance only 84 cubic feet per patient was the space afforded. It needs not further comment to lead us to believe that no time was lost by the Americans in changing this state of affairs and in producing the beautiful hospitals that served as receptacles for their sick and wounded in the later part of the war. To clinch the evidence of the enormous value of fresh air, and to show that it must be secured at any sacrifice, I quote the observation of Dr. Shrimpton, a surgeon-major in the French Algerian army (*The British Army and Miss Nightingale*, Paris, 1864, p. 52). In the second winter of the Crimean war the three armies of the English, French, and Sardinians were all huddled. But the huts of the English were alone constructed (thanks to the labours of English sanitarians, directed by the late Lord Herbert) with due regard to ventilation. As a consequence, the English army was that winter quite free from typhus and other fevers, while the French had 73,432 admissions to hospital, for "of ventilation there was none."

The undeniable evils that result from overcrowding in hospital, and the rapid improvement that takes place in even apparently hopeless cases, when either by accident or design they obtain a free supply of fresh air, has led to the opinion that sick persons should never be collected together; and that the obvious advantages, both to the sick themselves and to the cause of science, by housing them together in hospitals, are outweighed by the evils that they inevitably suffer from propinquity to each other. Dr. Farr (*Twenty-fourth Report of the Registrar-General*, pp. 229 *et seq.*) first attracted attention to this point by a series of statistics, which showed that in our large metropolitan hospitals the mortality was twice as great as that in similar but much smaller institutions situated in provincial towns or in country districts. He thus concluded that this difference was due to the unhealthy and overcrowded condition of our London hospitals. This important suggestion excited much discussion at the time; Dr. Guy, of King's College, suggested that possibly some part of this enormous difference should be ascribed to the difference in the kind of cases admitted to our London hospitals from those attended in provincial institutions. This suggestion of Dr. Guy was held to be the true explanation by Mr. Holmes and Dr. Bristowe, who were charged by the medical department of the Privy Council to visit the different hospitals of the United Kingdom, and to report upon their relative healthiness and upon the causes which determine the mortality in these institutions (*Appendix to the Sixth Report of the Medical Officers' Report to the Privy Council*). The large London and provincial hospitals admit a far greater proportion of acute medical cases, of which the mortality, wherever treated, is high. From these gentlemen's reports, it would appear also that those diseases which are chiefly met with where large numbers of wounded are collected together, diseases that are doubtless much increased by defective ventilation, such as erysipelas and pyæmia, form but a small percentage of the mortality of a London hospital, and are by no means unknown in the rural hospitals.

The late Sir James Simpson, who turned his energetic mind to solving the question of mortality in hospitals, arrived at the conclusion that it is impossible to prevent a high mortality if more than a very few patients be placed together under one roof; and that the advantages of hospital treatment, without preponderating evil, can be afforded to the sick only by treating them in a series of small detached buildings. Sir James showed that of 2098 amputations in private practice, 226 died; and of 2089 amputations in hospital practice, 825 died. This gives a surplus of 629 deaths in hospital practice; and, taking St. Bartholomew's to represent a large well-managed London hospital, he showed that, whereas 1 in 9 of the rural amputations died, 1 in 2½ died of those performed in that hospital. Moreover, Sir James pointed out a fact that to my mind is most cogent; namely, that the difference

in mortality was greatest, not in amputations of the thigh (which operation, it has been suggested, is resorted to in the country for less severe injuries than in town, and would thus show a larger percentage of recoveries), but that the mortality after amputations of the forearm is 15 times greater in St. Bartholomew's than in private practice in the country.

Ultimately, Sir James Simpson put forward this table of the results of 6000 cases of limb-amputations.

In Parisian hospitals	1 died in 1½
In British hospitals, over 300 beds	1 " 2½
" " from 300 to 180 beds	1 " 4
" " from 120 to 50 beds	1 " 5
In cottage hospitals	1 " 7
In private practice	1 " 9
Ditto of frequent operators	1 " 12

Against this, at first sight, most striking series of statistical facts, it has been advanced, with much truth, that, while we know pretty accurately what were the conditions of patients operated on in the hospitals, and can estimate how far their previous conditions influenced their recovery from operations, we have no means of doing the same by those operated on in private practice; hence the comparison lacks a condition essential for accuracy; and until these data are supplied the question is not ripe for discussion. In the meantime, Mr. Callender (*BRITISH MEDICAL JOURNAL*, October 1869) has introduced a fact that goes far to exonerate the hygienic condition of large town-hospitals from increasing the mortality after operation. He showed that the mortality of a small series of amputations on persons sent to St. Bartholomew's Hospital from the country, and therefore presumably in a constitutional state similar to those operated on in the country, was 1 in 5½, or almost identical with that set down for rural hospitals by Sir James Simpson. Nevertheless, until the question is settled, it is open to presumption that some part of the enormous difference in the relative mortality of town and country hospitals is caused by faulty hygiene; and it may fairly be expected that the experiment on that subject now being carried out will give us some valuable results for elucidating the question.

Having adverted to the enormous loss that attends overcrowding and neglect of hygiene, it is very reassuring to mark how nearly all arrangements for treating the sick and wounded in the present war have been subordinated to the principle of segregation. Our own Government has, since the Crimean war, made most important steps in this direction, though leaving still something to be done before all that past experience indicates as necessary is adopted. The unsuitableness of dwelling-houses, churches, and other ill-ventilated buildings, has been very extensively recognised; and a great portion of the hospital-accommodation prepared for the wounded consists of hut-hospitals either erected for the purpose, or contrived from open sheds in which the necessary free ventilation can be satisfactorily obtained. Let me, then, for a moment occupy your attention with a brief sketch of the arrangements of the hut-hospitals called Barack-Lazarethen in Germany. The most successful military hospitals of modern times have been constructed on the plan first devised in the Crimea by Mr. Brunel. Under the instruction of the sanitary officers, the hut-hospitals have proved that certainly hospital-fever and hospital-gangrene, and probably pyæmia (diseases which have destroyed so many of the wounded in former wars), can be entirely prevented in military hospitals.

In construction they are extremely simple, and can be erected from the commonest materials in a very short time. A short description of the hut-hospital at Saarbrück — one of the best in point of sanitary excellence I saw during my recent visit to Germany — will serve to explain their mode of construction. In an open garden clear of the town, the series of single-roomed huts which formed the hospital were arranged in a double row, each hut being separated from its neighbours by a space equal to its own height. Light and air can thus penetrate freely around. The ground was well drained to carry off rain-fall water, and a distinct system of pipe-sewers carried away the excreta and refuse of the hospital. Water, laid on from a neighbouring mountain rivulet, was present in any quantity. The huts, built of rough weather boarding, were raised on stages two feet above the ground, so that air penetrated freely between the planks of the walls, the floor, and the roof. Besides this, at the floor-level, apertures were purposely left for the entry of fresh air, while the ridge of the roof was lifted above the rest to a height of eight inches along the whole length of the hut, in order to afford an easy exit for the heated air of the interior. The windows consisted partly of glass, but chiefly of light shutters, that could be raised or lowered at pleasure, being fixed above on hinges and free before. Each hut contained about fifteen beds. At the time of my visit almost all were occupied. The kitchen and other offices and abode of the surgeons, nurses, and attendants, were constructed in additional huts of a more complex and permanent kind; but the sick

were entirely housed in isolated batches of fifteen, in domiciles through which the wind blew freely in and out on all sides. The atmosphere of the interior was as fresh as the air outside. This absence of anything like a sick-room smell I noticed only in the hut-hospitals: in buildings of every other kind it was easy to detect that peculiar smell so universal in continental hospital wards, and not unknown in even our better managed English hospitals. In all the hut-hospitals which I visited, the condition of the patients was most satisfactory, and not a single case of pyæmia had occurred. In the houses and other buildings converted into hospitals, in too many instances hospital diseases have begun to appear. For example, I visited at Saarbrück a large building, the school-house of the town, which had been occupied as a hospital about six weeks. I found that one ward had been entirely emptied for purification; four patients had died of pyæmia in the few days before my visit; and other cases of pyæmia and hospital gangrene had previously occurred; yet the building was apparently well adapted for its new use, being situated in the outskirts of the town, and, consisting of lofty rooms, with wide easily-opened windows, reached by a wide airy staircase. So again in the hospital for wounded in the Bessunger Orangeriehaus at Darmstadt, in which Her Royal Highness the Princess Alice takes so constant an interest. This beautiful hospital, situated in a fine garden, was built by the Grand Duke of Hesse Darmstadt. It consists of a series of huts built on the plan I have described, the gifts of various charitable persons, and of three houses used in winter for storing the orange-trees, which in summer decorate the garden. These orange-houses at first sight appear well suited for hospital use: they are wide, lofty rooms, with windows on the sunny southern side, reaching from ceiling to floor, and opening freely. But the absence of doors or windows on the other sides renders thorough ventilation extremely difficult; and in these orange-houses several cases of pyæmia and one of extensive gangrene have already occurred; the latter, however, ceased to spread directly the patient was removed from the orangery to a small tent of which the sides were open all round. My visit to the hospital, in managing which the Princess Alice takes an active part, was extremely interesting. The surgeons there carry out the newest methods of conservative surgery with great zeal and assiduity; and are thoroughly impressed with the unfitness of the orangeries for the reception of wounded men. They are very anxious to get huts to receive all the 240 patients under their charge, but their funds are nearly exhausted, and the £200 necessary for the construction of two more huts is a great difficulty. In towns smaller than Darmstadt and Saarbrück, single hut-hospitals have also been prepared. In large cities like Berlin, hut-hospitals have been prepared on the enormous scale found so successful and economical in America during the late war. Such an one, to receive 1300 patients, is now preparing in an open space near Berlin under the superintendence of Professor Virchow. It is in its main features a reproduction of the great hospitals at Philadelphia and other large cities of the United States. The plan which hangs before you represents the Mower General Hospital of Philadelphia, which consists, as you see, of a series of one-storied huts disposed round an interior area, in which the offices and abodes of the administration are situated. The site was a high and airy plateau, on which fifty huts afforded accommodation for five thousand patients. These huts were arranged like spokes of a wheel, around a central corridor open freely to the air, and warmed in winter by stoves; and this afforded at all seasons a pleasant lounge for the convalescent patients. A tramroad ran round the corridors, on which waggons brought the food and supplies to the end of each hut-ward without delay. A telegraph connected the huts and the kitchen with the director's office and other parts of the administration. A branch from the railroad permitted the railway cars, in which the patients had been laid near the battle-field, to discharge their freight at the door of the hospital: thus the patients suffered only one change, from the railway to their beds. Among other arrangements, there was a printing establishment on the premises which printed a newspaper, edited by one of the chaplains, and filled with news and articles written by the patients and medical officers. The journal was distributed gratis to all the patients, its cost being defrayed by the sum received for the slush from the hospital kitchen. A telegraph and post-office completed the communication of the vast sick asylum with the outside world.

Transport.—Having described the receptacles for sick and wounded, which have been constructed on the principles of segregation, and which, it must be recollected, have been prepared on a greater or less extent in every town of Germany, with the double object of preventing too great an agglomeration of the sick, and of distributing the burden of their care and maintenance equally over the community, I next proceed to the question of transport. This, since the American war, has attained, through the addition of voluntary aid, marvellous progress in its organisation.

As lately as the wars of the first French republic, the only means of

transport for the sick and wounded were the baggage-carts and the services of soldiers from the ranks where they could be spared. The first Baron Larrey, while attending the republican armies on the Rhine, devised a system of special carts with sick-bearers to convey the wounded from the front; for, at that time, the moveable field-hospitals were one league in rear of the attack, consequently twenty-four hours always elapsed before the wounded were brought into hospital. This was the commencement of the system of ambulances which is now employed by the French army, and has, with many modifications, been adopted by all other military nations. It will, perhaps, be as well to explain the different meanings attached to the word "ambulance". Abroad, it signifies a *moving hospital*, i.e., a corps of surgeons, attendants, stores, waggons, horses, etc. In England, the term is frequently, but erroneously, applied to the waggons for conveying the sick from place to place. I shall always use it in the continental signification. In the hands of the French the ambulance system frequently breaks down. The direction and supply of the material, waggons, horses, stores, etc., are entrusted to the *Intendance*, a department that manages commissariat, transport of supplies of all kinds, even the convoy of ammunition; and, consequently, has far too much to do to allow it to meet sudden emergencies in the Medical requirements of the army. Again, an invariable consequence of this centralisation is a general break-down when the army to which it is attached suffers defeat, as in the present war. The French *Intendance* has been utterly unable to assist in the conveyance of their wounded, who have been left to the Germans and to the few volunteer French and foreign ambulances that have been able to get to the battle fields. Nay, even when the army is in a friendly country or victorious in a hostile one, the *Intendance* has been unable to meet even a trifling demand when of an unexpected character. The Emperor Napoleon III, at the outset of the Italian campaign of 1859, decreed that the baggage of the officers should be carried for them by the *Intendance*. This could only be done by taking for that purpose the cattle which were attached to the hospital field-waggons. (Chenu, *loc. cit.*, p. 6.) It is, therefore, not surprising that, a few days later than the date of this decree, we learn that for four days after the battle of Montebello, 20th May, 1859, 800 wounded were fed entirely by the charity of the inhabitants of that town. The *Intendance* had failed to bring supplies, and still more, surgical necessities of all kinds were badly wanted. (Chenu, *loc. cit.*, p. 30.) In short, had the French been fighting in a thinly inhabited or hostile country in 1859, their loss from sickness even great as it was (for the enormous number of 193,186 men were sent to hospital during the short stay of the French army in Italy), would have been largely increased. But far more disastrous than this was the condition of the English army in the beginning of the Crimean war, and of the American army at the beginning of their last war. The English army landed in the Crimea with a means of transport of one pony and ten canvas stretchers per regiment. Notwithstanding that the principal medical officer of the Crimean army had before the campaign, as he states in evidence before the Sanitary Commission, asked for 42 waggons, 336 canvas stretchers, and 672 men for his hospital corps, he received, in return, three waggons without horses, harness, or drivers. (*Official History of the British Army in Turkey and the Crimea*, vol. ii, p. 253.) This neglect delayed our army two days after the battle of the Alma, collecting the wounded; and many lives would have been lost had not the French lent their litters and mules to transport our sick and wounded to the shore, where the crews of the men-of-war conveyed them to the hospital ships. Again, after the battle of Inkermann, the French lent us 500 mules to bring in the wounded, and in great measure to their aid we owe it that the English wounded on that occasion were in bed and attended to by ten o'clock of the evening after the battle. Indeed, it is reported (Shrimpton, *loc. cit.*, p. 19) that from December 1st, 1854, to January 20th, 1855 (seven weeks), 8000 sick belonging to the British army were borne on mule-litters and cacolets lent by the French, from our camp to Balaklava, where they were embarked for Scutari, a voyage of seven or eight days. These miserable creatures were often so crowded together that it was impossible for the attendants to get near enough to them to supply their wants. A large number died on the voyage and were thrown overboard. Of these no account could be taken; but when those who survived these miseries arrived at Scutari, they were without their kits, and almost without clothing, numbers of them in a dying condition—unable to tell either their own names or the regiments to which they belonged.

It is extremely gratifying that in the second winter, when we were well housed, efforts were made by the British commanders to assist the French—on whom, by the way, lay the chief burden of preventing the Russians from escaping from Sebastopol after active hostilities had ceased. Dr. Baudens (Chenu, *loc. cit.*, p. civ) tells us that Sir Henry Storks offered to construct and maintain accommodation for 1000 sick

in the French camp, saying, "Whatever we do, we cannot repay what the French did for us last year." So also may we rejoice that, during the present unhappy crisis in France, the English have another opportunity of returning to the French sick and wounded some of the aid which our distressed countrymen received from their army in the Crimea.

But the want of a prearranged system of transport and machinery for receiving the sick and wounded was most grievously felt in the early battles of the American war. Dr. Hammond, afterwards the American Surgeon-General (official letter to United States' Secretary at War, quoted by Longmore, *The Transport of Sick and Wounded*, p. 16), writing eight days after the first battle of Bull Run, tells his superior that 600 wounded then remained on the battle-field, where many poor fellows had already died of starvation. So also, after the battle of Manassas Gap, September 7th, 1862, 2000 wounded lay from Saturday to Wednesday on the field without food or water. The surgeons even were starving with their wretched patients. Again, Dr. Agnew (Longmore, *loc. cit.*, p. 17), a member of the American Sanitary Commission, estimated that 500 lives were lost after the battle of Antietam, September 17th, 1862, for want of proper transport. The news of these and similar horrible mischances acted upon the Americans of the Northern States as thoroughly as that of our own Crimean disasters did on us. A volunteer association was formed, endowed by the Government with large inspectional powers, and furnished with abundant means for the succour of their sick and wounded soldiers, from the contributions of all classes of their fellow-countrymen. From the foundation of the leading volunteer association and its satellites, order and plenty were quickly provided for the soldiers and the sick and wounded. The volunteer aid and transport was so perfectly organised that on many occasions—notably on that of the battle of Fredericksburg, December 13th, 1862—the carts and agents of the volunteer aid societies were under fire on the field of battle several hours before the ambulance carts of the regular forces reached the scene of action. These volunteers carried off the wounded as they fell, to hospital-tents, where their injuries were dressed and their wants supplied; and again at Gettysburg, July 1863, one of the battles which decided the war, where 20,000 Federals fell in the three days of the battle, and at least as many Confederates, the agents of the Sanitary Commission were again so close to the moving columns with their supplies and assistants, that by the day after the fighting ended every wounded man was in hospital, his wounds dressed, and his clothes changed.

The transport and aid for the sick and wounded was developed to a higher perfection by the Americans in their war than by any other nation. In the present war, many of their expedients have been copied—notably that of the arrangement of hospitals for receiving the wounded away from the scene of war; and, again, that of the hospital-trains, etc., which form part of the means of transport immediately to be described.

The German system of transport is in two parts—one organised by the Military Department, the other the volunteer transport; which last, though recognised and aided by the Government, is entirely dependent for its funds on the contributions of individuals.

The Military System of Transport.—In the Prussian service, each army-corps of 30,000 men is considered a complete army, and is supplied with equipments of every kind to enable it to act independently, if advisable. There, each army-corps has its medical staff of twenty head-surgeons, with a proper proportion of assistants, dressers, carriers for the wounded (*Krankenträger*), drivers, horses, litters, stores, waggons, some to convey the wounded, and others to convey surgical stores, water, etc., on going into action. Certain of the surgeons, with the sick-bearers, litters, and waggons, are detailed to follow the *corps d'armée* closely; the remainder post themselves in the neighbourhood, to form the field-hospitals. To these, the surgeons of the detachment with the forces engaged in action despatch the wounded as fast as they are gathered by the sick-carriers from the field of battle. The wounded receive attention to their most urgent wants without delay. Each soldier carries on his person a bandage and a piece of lint, which the sick-bearers are taught to apply, as well as to put in force means of stopping loss of blood, should that be necessary, before the wounded man is raised from the ground. The sick-bearers are likewise instructed in the best way of carrying the man, according to the nature of his wound. With these precautions, the wounded are taken to the surgeon, who is close to the scene of action. He examines the wound; applies splints or what dressing is necessary to enable the man to reach the field-hospital; and inscribes on a slip of paper provided for that purpose the nature of the injury and what has been done to relieve it. Thus, when the man reaches hospital, needless examinations are saved. All these officials are, in time of peace, carefully drilled in their duties, and have as their sole charge the collection and attendance of the wounded in battle, or the sick who fall out on the march. Thus the com-

batants not only fight with better heart, knowing that, if disabled, a body of skilled bearers will come at once to their rescue, but they have no excuse to leave their ranks at a critical moment of the fight to carry a wounded comrade to the rear.

The wounded or sick being safely disposed of in the field-hospital, the next step is to restore them to such a condition that they can be despatched to the permanent hospitals in Germany which are ready to receive them. This is always most advisable, because the field-hospitals are rarely, if ever, supplied with the best means of repairing injuries; nor are they salubrious abodes. It is also necessary to clear out these primary hospitals, to make room for fresh cases constantly coming from the front. Indeed, the heavy slaughter of the recent battles was far greater than the field-hospitals could meet; and thus the neighbourhoods of the battles have been crowded with wounded and dying, in a condition, as far as they are concerned, almost as bad as if no provision whatever had been made beforehand. Again, the necessities of the campaign require the staff of the surgeons, with their assistants, to leave their wounded, and to follow the marching columns, to be ready for the next engagement. In these emergencies, the *Volunteer Aid* associations have rendered important services. Their organisation enabled them to undertake the conveyance of the wounded already sufficiently restored to bear locomotion to their permanent abodes, to take charge of those not yet ready to move, and even to go to the scene of battle and aid the regular medical staff in applying dressings to the wounded.

The transport of the sick is accomplished in the following manner. Trains of ambulance waggons, and of country carts, when, as has often happened, the former do not suffice, are organised to travel to the nearest station on a railway open to the Germans. To this station is sent a service of trains, composed partly of the long American cars used on the Württemberg lines, and partly of luggage-vans. These carriages are fitted up with one or two tiers of cots, supported on elliptical springs fastened to the floors. In each train, travel a surgeon, attendants, and nurses, with provisions and supply of medicines for use *en route*. When all is ready for evacuating the field-ambulance, the patients are fed, their wounds dressed, and their wants supplied as well as the resources they are about to quit will allow, and they are placed in carts—too often, alas! of the rudest description—in which they travel, whatever may be the weather, to the railway station. Here a corps of the Volunteer Association is ready to receive them; to lift each man from his waggon, carry him to the sheds, where the surgeons quickly change his dressings (often sorely in need of it), feed him, and change his clothing before he is deposited in his cot in the train. When all of the convoy is removed from the carts, the latter return to the field hospital for a fresh detachment, and this process is repeated day after day.

The train starts on its journey, halting two or three times every day at towns *en route*, which receive a telegram announcing the approach of the convoy, in order that when the train arrives everything may be ready for dressing their wounds, and giving the sick a hot meal. The surgeons and dressers prepare their stores of lint, bandages, clean clothes, etc., and, by the time the train is due, the number of clerks, lads from shops and elsewhere, volunteers who have enrolled themselves for this purpose, appear on the platform ready to convey their patients to the dressing-places. If the train arrive after dark, the well lighted platform becomes, as the cars cease to move, a scene of picturesque activity. Carriage after carriage is quickly entered, the sick borne out, and their wants supplied. If they have not, as often happens, changed their clothes since the battle, they are re-clothed from head to foot. Having received a good meal, cigars or tobacco, and, if they can write, having delivered their letters to a clerk, who undertakes to post them, they are carried back to the train, which, as soon as all its occupants have been refreshed, resumes its journey. The lamps are then extinguished, the bearers, dressers, and cooks disappear, and stillness reigns where, a quarter of an hour before, all was bustle without disorder. A striking feature of this scene was the contrast between the panic stricken and hungry, though patient, countenances of the wounded, and the fresh, cheerful—I may even say merry—faces of their attendants, who work with such hearty good will, that for a moment the idea suggested itself that these young lads must be relatives of the wounded soldiers on whom they waited with such tender devotion. When the train has deposited its burden in the destined hospital, it returns to the gathering place for a fresh convoy. In this way, enormous numbers of wounded and sick have reached the Fatherland, and even their native towns. As many as 40,000 patients have passed through Mayence alone since the first battle of the war; indeed, they still come in crowds, 13,700 having been attended to at the halting place of Mayence during the eight days preceding my visit. Besides railway hospitals, sixteen Rhine steamers have been fitted up, and have conveyed many thousands

down the river to the cities on its banks in the easiest possible manner.

By these means, the sick, at first hastily collected into churches, houses, and hovels, their wounds treated as well as the means at hand would allow, have been rapidly deported into permanent and properly prepared hospitals. The Germans have been taken into Germany, whither also the slightly wounded French have gone as prisoners of war, as soon as their recovery was sufficiently advanced. The French who were severely wounded in the battles near the frontier are passed into Belgium, where they have been received into hospitals prepared in every large town, and treated with extreme assiduity and skill, under the immediate supervision of the King and Queen, who, as is well known, are ever active in the cause of benevolence. Belgium, by allowing her railways to be used for the heavy traffic of the thousands of German wounded, and by receiving any German wounded who chose to stay in her hospitable cities, besides providing for thousands of luckless French, has not only suffered inconvenience, but also serious loss, by the war. She will, I trust, be well repaid by the lasting gratitude of both France and Germany.

Having thus depicted but very imperfectly the manner in which the Volunteer Aid societies of Germany perform a small portion of their self-imposed duties, namely their share of the transport of the sick and wounded, I may detain you a few minutes with a word on the organisation of those societies.

That their work is of the highest value has, I trust, become clear from the earlier part of this paper, where, from the greatness of the emergency, regular medical staff and hospital corps must fail to supply adequate attendance to the masses of wounded men who, in the battles of the present day, are suddenly rendered helpless. This want can only be met by volunteers, who must supplement the action of the regular medical staff in every way. This fact has long been apparent, and has from time immemorial called forth the charity of individuals, and has in later times, here and there, even set on foot some slight organisation for the aid of the sick and wounded. The earliest with which I am acquainted is the Ladies' Union (*Frauenverein*) of Frankfort, which was formed in 1813 by three ladies of that city, to succour the wounded in the great struggle which led to the discomfiture of Napoleon I. In 1847, the short war of the Sonderbund called forth a society at Zurich, which, however, came to an end with the termination of hostilities. This was unfortunately the fate, also, of the aid-societies formed in Austria for the wars of 1859 and 1864, so that in the war of 1866 these useful associations had to be constituted afresh. The Crimean struggle was the occasion for the noble efforts of this country and the generous devotion of Miss Nightingale; but no organised society sprang up in the national crisis, and, the need for volunteer aid having passed away, the nation no longer interested itself in the matter. In the late struggle in the United States, a volunteer aid association—the American Sanitary Commission—grew up, which had a career of the utmost success. In the three years of its existence, it collected no less than 2½ millions sterling, and saved, it is said, 100,000 lives.

The German aid societies (*Hilfsvereine*) have had a very similar organisation. Many independent associations exist, working in the districts in which they have been established. Most of the larger ones are represented by a delegate to a central committee in Berlin, which receives contributions from the smaller societies, and disburses them both directly through its agents at the seat of war, and among the hospitals in Germany, and sends subsidies to the various societies whose resources are drained by extraordinary demands. One of the principal of these individual societies is the Knights of St. John, which ancient corporation has, in its new field of action, begun again its useful labour. Its regular members are mainly drawn from the aristocracy, many of them soldiers, taking active share in the campaign, who eagerly devote any leave or leisure they may obtain in aiding their brethren who are continuously engaged in the good work. Under the direction of this order, which, owing to its importance, enjoys a position recognised by the German Government, and possess many privileges, bands of volunteer assistants are enrolled and held ready to be despatched for service whenever they are most required.

It is said that over 13,000 volunteers are employed in various capacities in the present war, in succouring the sick, wounded, and distressed soldiery. The carrying out of these arrangements of this and other societies has been greatly facilitated by the Geneva Convention, by which all wounded and their attendants are treated as neutrals and their supplies are not liable to capture. This is the first war in which this convention has operated throughout.

The Surgery of the War.—The progress of surgery during the last twenty-five years has not been without effect in modifying the treatment of injuries received in warfare. In this period most important changes in the art and practice of surgery have been established. The general

use of anæsthetics is, perhaps, the most striking change. When the Crimean war commenced, the opinion of military surgeons was divided on the expediency of using it in very severe injuries, it being supposed by some that chloroform diminished the chance of recovery when the patient was prostrated by the shock of a severe injury; while, on the other hand, the sharp agony of the amputating knife was deemed useful to arouse the wounded sufferer from his exhausted condition. This belief was rapidly exploded, and, in the English camp at least, the use of chloroform became universal in all operations of any magnitude. In the present war the bounteous supplies contributed by charitable persons have also enabled the use of chloroform to be very general, and the cases where it was not used are very few.

Luckily, the nervous condition of soldiers, while excited by the struggle, prevents them from feeling painful operations nearly so acutely as do civilians when injured under ordinary circumstances. It is difficult to believe, yet it is perfectly true, that a young soldier, immediately after undergoing amputation of the arm, declined to stay in the bed where he had been placed, and, with a cigar in his mouth, returned to the operating room, to watch with lively interest a similar amputation performed upon a comrade.

Besides chloroform, the subcutaneous injection of morphia, and the new narcotic, chloral hydrate, are being employed with enormous benefit to those with severe suppurating wounds and extensive laceration of the flesh. Nitrous oxide is also to be tried largely; but how far it will practically be of use we do not yet know.

Of far greater importance is the substitution of resection of injured joints for amputation of the limbs. The experience of English, American, and German surgeons has demonstrated that, in cases of injury to the shoulder, the elbow, and perhaps the wrist, the limb left after resection of the joint in the majority of cases becomes more useful than any artificial appendage to a stump. Some very remarkable instances of the serviceableness of a limb so crippled have occurred in the surgical practice of the New Zealand war. Of eight cases operated on in New Zealand, which, on their arrival at Netley, were examined by Professor Longmore (*Army Medical Reports* for 1863 and 1864), considerable usefulness had been regained in most of the injured limbs, in some to a remarkable degree. A sergeant, whose shoulder had been resected for gun-shot injuries, had recovered so well that he was able to load and shoot off his rifle, and to lift considerable weights with the injured limb.

Similarly good accounts are given of the resections for injured joints of the upper limb in the German wars of 1864 and 1866; though it must be admitted that recently Hannover (*Medizinische Jahrbücher*, 18 Bd, 1869, p. 109), describing the condition of certain Danish soldiers who had been treated by resection in the German military hospitals during the war of 1864, throws considerable doubt on the ultimate usefulness of limbs of which the joints have been resected. In many cases, he says, the limb is an incumbrance, capable of very little use and a source of constant anxiety, lest it should receive injury. This intelligence, which must be accepted with some reserve, clearly shews both that the advantages of resection over amputation, in some cases of undoubted reality, and the rules for selecting either operation, are not yet fairly set down in surgical practice. We may, however, confidently look forward to the results of the present war making a considerable advance in this respect.

But from the observations that I was able to make in the hospitals and houses where the wounded were being treated during my recent visit to the scene of war, I am convinced that before niceties of conservative surgery can have fair trial, much more must be done in the provision of hospital and surgical accommodation. How greatly are the chances of recovery cut down in a case of compound fracture if the patient lies in a damp hovel on straw, half-starved, without anodynes to soothe his pain, without splint or apparatus to fix the injured parts at rest; or even supposing the patient is fairly cared for, is immediately lodged in dry and not overcrowded quarters, has an appropriate splint, how severe the ordeal of fifteen or twenty miles in a springless waggon, over rough roads, in drenching rain, and then three hundred miles in a railway-truck on straw—such has been the fate of hundreds—until the patient at length reaches the proper habitation, and receives the assiduous care that he needed a fortnight before when first wounded.

The consequence of this want of rest of all kinds has been to cause matter to collect along the track of the bullet, to excite general fever, and not unfrequently blood-poisoning, in which case the patient's only chance for life is amputation. This is not surgery as we understand it, nor as it is practised in all decent hospitals. Until these adverse conditions are removed it will be impossible to determine, scientifically, the various modes of treatment to practise in gun-shot injuries. Many limbs are now lopped off that undoubtedly, in better conditions of hygiene, might be saved. And to these limbs, so amputated, a fair chance

is not given by a long railway journey. The attachments of the healing surfaces are shaken asunder, so that conical stumps and protruding bones were by no means unfrequent in the hospitals where the primary amputations had been received.

In face of the enormous pressure, the preparations fell far short of the requirements of the occasion and of the utmost efforts of the surgeons, who were rarely able to carry out the most approved practice of modern surgery. The application of the plaster of Paris splints to compound fractures, though generally approved, was, where I went, the exception, not the rule, simply because the means were not at hand for employing them. Of Lister's method of treating wounds by carbolic acid I did not see a single instance. Carbolic acid is much used, it is true, but as a wash, or as an oily solution spread on a handful of charpie secured by a bandage. Doubtless, the carefully considered instructions published by Professor Lister for the use of military surgeons will be followed in several of the hospitals in Germany itself; but the colossal scale of the war, and the enormous difficulties that over-taxed the energies and resources of the surgeons at the seat of war, have prevented anything like a general application of the best surgery of the present day, though here and there, no doubt, the perseverance of our comrades has enabled them to put the best methods of treatment in operation.

This lecture has already taxed your patience most severely; I had intended to include an outline of the means this country should adopt in preparations for the medical treatment of our soldiers in war, should that unhappily be forced upon us. It has, however, been abundantly manifest to all who have watched the progress of the present war in the public prints, that no Government can adequately meet the exigencies of actual warfare; that, while enlarging the medical staff and supplying it with every appliance for the collection and treatment of the sick and wounded, it must enlist the services of a staff of volunteer assistants, by encouraging the establishment of societies in time of peace, by assisting them with its advice and experience, and by promoting the drill and equipment of those who undertake at the outset of war to put themselves at the disposal of the military authorities.

It must now conclude, only let me congratulate you, who to-day enter our noble profession, on the auspicious moment you have chosen. Never was the value of the physician or of the surgeon more generally acknowledged, or his opportunity better for rendering the great services that our professional training enables us to lavish on the unfortunate victims of a misused civilisation.

I assure you that many a time did I feel a glow of pride, though only a bystander, in belonging to a profession whose skill and devotion were bringing ease of mind and body to hundreds of miserable fellow creatures, starving and dying in agony. Prepare yourselves: your opportunity will come, I trust in not so bloody an epoch as this; but in occasions less exciting, and, therefore, conferring the more credit on you who undertake the often tedious duties of our sacred calling. Your vocation will not lead you to the highest offices of the state, or to the renown attainable by the soldier or the lawyer, but of true glory and of the noble satisfaction that rewards a well spent life, you can attain your just share. May you begin to-day a prosperous career!

ON SOME RARE FORMS OF OPACITY OF THE CORNEA.*

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THE cases which I desire to bring before the Association are all examples of opacity of the cornea; but they belong to two distinct classes, and each class is sufficiently rare and sufficiently important to make it worthy of the attention of the Section.

The first case is one of *congenital leucoma*—a very uncommon affection, and one which gives rise to many interesting questions. The others are cases of “symmetrical opacity of both corneæ”—a disease which is far from frequent, and the pathology of which is involved in great obscurity.

These two subjects I shall take in order. I shall first relate a well-marked case of congenital leucoma, and offer some remarks upon it; and then I shall proceed to give the details of three cases of “symmetrical opacity” which have lately come under my care, and, by comparing these with published cases, I shall hope to be able to give a clear account of the nature and progress of the disease, even if I am

unable to throw much light upon its causation or upon the means by which it may be cured.

And first of congenital leucoma. (Case —.) John Thomas Day, an infant five weeks old, was brought to Mr. Bowman at the Royal London Ophthalmic Hospital on account of “a skin over its sight”. As I had the good fortune to be clinical assistant to Mr. Bowman, I had an opportunity of observing the case and taking notes of it. In the left eye there was a leucoma, which occupied nearly a quarter of the cornea. It was situated on the inner side, and extended almost from the circumference to the middle line, covering just half the pupil. It was observed within an hour after birth, and it had the same appearance then that it has now. There has never been any perceptible inflammation or discharge. The pupil was adherent, but not displaced. The surface of the leucoma was perfectly smooth, regular, and polished: it was of a dense texture and of a brilliant white colour.

This case suggests some interesting considerations. How could such a white mark as this be formed upon the cornea? If the pathology of a congenital leucoma is the same as that of one coming on after birth, then we must suppose that a very unusual series of changes have taken place *in utero*. We must suppose that after the cornea was developed a large and deep ulcer has been formed in it either spontaneously or as the consequence of injury; that this ulcer has perforated the cornea, so that the iris has become adherent; and that subsequently the ulcerative process has ceased, repair has commenced, lymph has been poured out, the cavity has been filled up, the contour of the cornea has been restored, and there remains only the dense white scar, which I have attempted to represent in the accompanying drawing.

But, though nature has done so much to repair the mischief, the sight has been left permanently damaged, for the leucoma occupies nearly a quarter of the cornea, coming up to the central point and covering half the pupil.

I know of no surgical treatment that is likely to do any good in such a case; but it will be interesting to observe, as the child grows up, whether Nature makes any effort to remove the blemish. The leucoma is so dense and solid that we can hardly suppose that much of it will be absorbed; still, the lapse of time may bring about some amendment.

We now turn to the second and more important class of cases to which we have alluded; namely, the symmetrical opacities of both corneæ. The case which we have just related may be regarded as a surgical curiosity; it is so rare and so irremediable. But those which we have now to consider are not so very infrequent: they may, in some instances at least, be benefited by operations; and their symmetrical nature leads us to believe that they depend upon some constitutional cause which may perhaps be ascertained and counteracted.

Three cases of this affection have lately come under my observation at the Central London Ophthalmic Hospital. These I shall relate in order, and then I shall compare them with published cases of the same kind; and, finally, I shall offer some remarks upon the whole series.

CASE I.—John Woodfield, aged 55, a commercial traveller, living at Islington, presented himself at the Central London Ophthalmic Hospital in May 1870. He said that about two years ago a haze began to come over both his eyes at the same time. It was not attended by any pain or by any inflammatory symptoms, either acute or chronic. From that date it had been gradually becoming more and more dense, until it had now become so bad that he had been obliged to desist from his employment and to seek relief at the hospital. He was a hale, ruddy man, strong and healthy-looking for his age. There was an obscure history of syphilis thirty years previously, but it did not seem that he had ever had any secondary symptoms. He had never had either gout or rheumatism; his father, however, was “a martyr” to the former complaint. His work had always been of a very harassing kind, and for the last eighteen months he had felt nervous, faint, and giddy. Both eyes were affected, though the left was worse than the right. The opacities were of a rusty brown colour, and slightly shaded off at their edges. They lay somewhat horizontally, travelling in a direction from within outwards and downwards, and occupying exactly correspondent parts of the two corneæ. They were not raised above the level of the surrounding cornea, for the curvature of the eye was perfectly regular, and the epithelium covering them was smooth and brilliant. Probably they were situated in the anterior elastic lamina. With the right eye the patient could read No. 5 of Jaeger's test-types at ten inches, but with the left he was only able to make out No. 16 at the same distance, and that only when the test-type was held on the outer side of the eye. When the pupils were dilated with atropine, the *fundus oculi* could be clearly seen in both eyes, and presented a healthy appearance.

CASE II.—George Hill, aged 40, applied at the Central London Ophthalmic Hospital in February 1870. He was a water-gilder by trade, and had been in the habit of working over a hot stove, melting quicksilver and gold together; and he said that sometimes the fumes of the

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

mercury were given off so freely that there was quite a deposit upon his face. He was a thin, pale, delicate-looking man. There was no history of gout or rheumatism, and he said that he had never had syphilis.

Fifteen years ago, "a cloud began to come before his sight." It was not attended by pain or inflammation, or acute symptoms of any kind. For the last five or six years it had been so bad that he had been obliged to give up his work. There was now a symmetrical opacity in each cornea. It was of a rusty brown colour, and slightly diffused at its edges. It was of an oval shape; the long axis lying along the horizontal meridian of the eye, corresponding to the palpebral aperture. The opacity was about four lines long by two lines broad. The pupils were active. He could only read, with each eye separately, No. 10 of Jaeger's test-types at six inches. With the ophthalmoscope, the details of the *fundus oculi* could be clearly seen by looking over the opacity, and they had a perfectly healthy appearance.

CASE III.—Thomas Prichard, aged 50, living in Clerkenwell, was employed in making wooden frames for barometers, but he had nothing to do with the mercury. He had not been subject either to gout or to rheumatism, and there was no history of syphilis. For many years he had been an occasional applicant at the Central London Ophthalmic Hospital, but he first came before me in February 1870.

Fifteen years ago his sight began to get cloudy. First the left eye was affected, and soon afterwards the right. The opacity came on gradually without pain or inflammation. He says it took about six years to reach its worst. Then for four years it remained stationary; but he was always able to do his work with the aid of convex glasses. About five years ago his sight began to improve, and now both eyes were becoming somewhat better.

His state on admission was this: there was in each cornea an opacity of a greyish colour. The opacities were about five lines in length by three in breadth. The long axis of each lay along the horizontal meridian of the globe, corresponding to the palpebral aperture. The opacity was very dense, sharply defined at its edges, and having the appearance of being slightly raised. There seemed to be a tendency for the opaque deposit to break down and chip off near its centre, for in the right eye there was a large irregular patch in the centre, where the cornea appeared to be transparent. In the left was a smaller space of the same kind. It was through these apertures that he was able to see to do his work; and it was apparently as they increased that his sight improved. With his right eye he could read No. 4 of Jaeger's test-types at six inches, and with his left No. 10 at the same distance.

This case and the preceding one I brought before the Pathological Society of London in April last.

I shall now transcribe, with some little abbreviation, the only two cases of this rare affection that I have met with in our professional literature. They are to be found in the appendix to Mr. Bowman's *Lectures on the Parts concerned in Operations on the Eye*. The one occurred in Mr. Bowman's own practice; the other in that of Mr. Dixon.

CASE IV (Mr. Bowman's).—James Kemp, aged 55, for forty years a house-painter, a man of healthy constitution, but of late reduced by deficiency of food, arising from want of power to follow his occupation, came under my care in January 1849. On each cornea was a horizontal band, of brownish opacity, extending from side to side, and so much broader opposite the pupil as completely to hide it from view, unless the pupil was dilated, or was examined either from above or below through the still transparent cornea. Both the iris and the pupil could be seen to be perfectly natural and active. When the pupils were considerably dilated, he obtained some useful vision, especially with the left eye, where the opacity was not quite so extensive as on the right. The opaque part was very finely mottled with dark dots, some of which were only to be seen with a lens; its margins were shaded off rather abruptly, and the cornea beyond them was perfectly clear. The opacity had the appearance of occupying a superficial position, and of being very slightly raised; but the surface reflected the light as brilliantly as other parts. The shape of the opaque tract was peculiar in being slightly inclined downwards from the inner side, so that its lower edge in each eye corresponded exactly with the margin of the lower lid, when the eyes were directed to a new object. The inner end of the opacity in the left eye was traversed by a narrow line in which the cornea was as transparent as ever.

The singularity of these opacities led me to inquire particularly into the man's history. He had had an ophthalmia ten years before, lasting only a fortnight, and leaving no blemish. After a period of about three years, his wife noticed that he had a speck on each eye; but as his sight was perfect, he doubted it. After two or three years more, the specks were more evident to others, and he began to find that in a strong light his sight was clouded, so that he applied for relief at the Ophthalmic

Hospital, and remained a patient there for about two years, during which time he was treated with drops and lotions, but rather got worse than better; in fact, the opacity seemed confirmed and incurable, and was steadily encroaching over the front of the pupil. Within the last year he has been quite thrown out of work, able to see only in an obscure light, and then only objects on one side.

Like those who had previously seen him, I regarded these opacities as indelible; but as he came from time to time, it occurred to me to make an attempt to shave off a portion of one of them, in order to examine its nature more completely. I accordingly made the patient come from the hospital to my house, where I could at once place any portion I might be able to detach under the microscope. The first scratch with the point of the lancet on the right eye (January 20th), detached the epithelium, which seemed healthy, and brought me down upon the opacity, which felt hard to the instrument, and had a smooth surface. In scraping and trying to slice off a thin film of it, a thin flake cracked off and separated, leaving what seemed a hole through the cornea; but the aqueous did not escape, and I then saw that the pupil was visible through the perfectly transparent lamellated texture, behind the opacity. It was now easy to chip off the opaque film over a space corresponding to the pupil; and when this was done he could see large letters plainly, for the exposed surface was nearly smooth.

The subsequent inflammation was slight, and in a few days the epithelium was restored, without any return of opacity, and he could see very much better. The fragments which had been removed became of an opaque white when dry, and when examined under a sufficient magnifying power, presented the appearance of an aggregation of rounded, highly refracting grains, disposed in a sort of network. They all lay nearly in one plane, and the epithelium which had covered them was perfectly healthy. The deposit appeared to consist of the same ingredients as ordinary bone; viz., phosphates of lime and magnesia, with a considerable proportion of carbonate of lime.

On the 22nd of February, the area exposed by the operation on the right eye remaining clear, I performed the same operation on the left, and with precisely corresponding results, so that in a few days afterwards he could see almost as well as eight years before. With this eye he could, in fact, with some care, read "pearl type".

CASE V (Mr. Dixon's).—J. T., cabinet-maker, aged 58, applied to the London Ophthalmic Hospital October 16th, 1848, complaining of dimness of sight, which had been gradually getting worse for the last six months, until it had entirely prevented him from following his trade. His eyes, when cursorily viewed by a person placed directly in front of him, seemed to have no pupillary apertures; but, on close inspection, it was found that this appearance was produced by a transverse opaque band passing along the equator of each cornea, so as entirely to hide the corresponding portion of the iris. These bands were of a brownish tint, closely resembling that of the irides, about a line and a half in breadth, and gradually shaded off at their edges, leaving the upper and the lower portions of the cornea perfectly transparent, through which an oblique view of the pupils could be obtained. These were rather small, but perfectly normal; and the patient could readily distinguish an object placed above or below the level of the eye. Except the opacities of the cornea, no morbid appearance could be detected in either eye; and the patient stated that there had been no inflammatory symptoms during the time the dimness had been coming on.

Counterirritation, by means of issues in the temples, stimulant applications, and mercurial frictions around the orbits, having been employed in succession without any result, I tried to remove the opacities by operation. On February 19th, I carefully scraped off the epithelium from the centre of the right cornea, and found a very thin layer of hard matter beneath it. This was closely united to the proper substance of the cornea, and could be raised from it only in small flakes and with considerable difficulty. When this opaque deposit had been entirely scraped off, the cornea beneath it was found to be perfectly transparent.

By March 1st the irritability of the eye had subsided, and the spot where the opacity had been removed was covered with new and perfectly transparent epithelium. In the following week, the same procedure was repeated on the left eye, the result of which was a very great improvement of vision, and a restoration of the cornea in front of the pupil to its almost perfect transparency. The fragments removed became opaque when dry, like those in Kemp's case; and, on being chemically tested, were found to consist principally of lime, either in the state of phosphate or sulphate.

If, now, we take a review of these five cases of symmetrical opacity of both corneæ, we observe that they appear to belong to two varieties. The first two cases that I have related form one group; the three other cases another. In the first group, the opacity is of a rusty brown colour, and does not rise above the level of the surrounding cornea; in the second group, it has a greyish or mud colour, and is slightly ele-

vated. In the first group, the deposit appears to be merely pigmentary; in the second, it has a calcareous nature (phosphate and carbonate of lime).

It would seem from Case III that the calcareous deposit has a tendency after a time to chip off, and thus lead to a spontaneous cure. This corresponds with the experience of Messrs. Bowman and Dixon, who found that it easily broke off under the knife, and that the subjacent cornea was smooth and transparent. There is, therefore, in these calcareous cases, much encouragement to operate; or, if the patient decline an operation, we may hold out to him the hope of a spontaneous cure, though it may be long delayed. In neither class of cases does any milder treatment seem to be of any avail; but in one of my cases the use of stenopaic spectacles was attended with great benefit.

It has been supposed that these symmetrical opacities are connected in some way with the gouty or rheumatic diathesis; but the cases which I have related lend no support to this theory.

NOTES OF A CASE OF BILIARY FISTULA.*

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FISTULÆ of the biliary passages may open externally, or communicate with some internal organ. Of the latter, most pass from the gall-bladder or the ductus communis choledochus into the duodenum, stomach, colon, portal vein, or urinary passages of the right side.

As an example of external fistula, the following case may be instanced, which is at the present time under my care in the Newcastle Infirmary, and for the history of which I am indebted to the Senior House-Surgeon, Dr. Page.

Mary L., aged 34, a dress-maker, had been married thirteen years, and had had seven children, all born alive. Up to fifteen years of age, when menstruation first occurred, she had enjoyed good health. From fifteen to twenty-one years of age, when she married, she experienced no illness, with the exception of frequent headache and occasional constipation.

In June 1868, she went to bed feeling quite well, but during the night awoke with violent pain near the umbilicus. At this time she suffered severely from tenderness and distension of the abdomen.

In September 1869, in consequence of the severity of the abdominal pain and a protrusion of the umbilicus, she applied for aid at the Newcastle Dispensary. A few days afterwards, the skin around the umbilicus ulcerated and a quantity of glairy fluid escaped, at first like the white of an egg, afterwards yellow. About a week later she became jaundiced. Subsequently the discharge lessened and the jaundice passed away, and about this time she became pregnant.

On Christmas Day 1869, she was suffering so much pain, that the opening was enlarged and four gall-stones were removed.

In May 1870 she was confined. The sinus, which up to that time had continued to discharge, sometimes a yellowish, at other times a greenish, fluid, closed for about a week, when it recommenced to pour out fluid, and the patient suffered from a recurrence of the abdominal pain and again became jaundiced, and was admitted into the Newcastle Infirmary on the 9th of June, 1870.

June 11th. The skin and conjunctivæ were yellow, the tongue furred and dry, the urine dark porter-coloured, and the fæces pale. At the umbilicus, a fistulous opening existed, about the size of a goose-quill, from which a glairy greenish fluid exuded, easily increased in amount and in rapidity of flow by circumjacent pressure. A silver probe was easily passed for four inches, and could be moved from side to side. The patient was ordered salines and a generous diet, and improved daily in appearance and in strength.

On June 22nd sudden and severe pain occurred in the abdomen and very little fluid passed from the opening. The probe was arrested about an inch from the surface. Three gall-stones, about the size of small hazel-nuts, were extracted by Dr. Page, and the pain abated and the discharge recommenced.

It having been thought that the case might be of service in supplementing the experiments by Professor Hughes Bennett upon the cholagogue action of mercury upon the lower animals, a communication was addressed to that gentleman, who answered, that unless it was positively determined that the ductus communis choledochus was impervious, it would be utterly useless to institute any proceedings.

To clear the doubt, active aperients were administered. After free

purgation, the alvine evacuations from being clay-coloured began to give evidence of containing bile, and on July 2nd it was noted that such had become dark brown in colour. The proposed investigation for estimating the amount of bile which passed from the fistulous opening, of necessity, therefore, was abandoned.

In this case, in all probability, in consequence of gall-stones having become impacted in the biliary passages, the gall-bladder became widely distended, and, from consequent inflammation, adherent to the abdominal walls, which subsequently ulcerated. The quantity of bile which flowed from the fistulous opening was never excessive, hence the small effect upon the nutrition.

In contrast, the chief points of a case of fistula of the right pleura, at this time also under my care in the Newcastle Infirmary, will be briefly given.

William W., aged 17, was admitted on the 21st of July, 1870. About twelve months ago, a swelling appeared in the right side, which, after having been poulticed, broke. July 23rd. On the right side, about one inch outside of the nipple and two inches below, was an opening, about the size of a small pea. A probe was easily passed upwards and backwards for fully four inches. About one ounce of thin sanious pus passed in the twenty-four hours. During tranquil respiration, the percussion-note was resonant to the level of the fistulous opening, the liver-dulness commencing at this line. In forced inspiration, the percussion was resonant to a finger's breadth below the opening. Respiration was heard anteriorly fully one inch below the right nipple, posteriorly for two inches below the angle of the scapula. The heart's impulse was in the normal situation; the cardiac dulness was not increased. No account of an acute attack of pleurisy was given. It is presumed, therefore, that the case had been chronic from the first, and the effusion never great in amount.

These cases are both, at present, in the Newcastle Infirmary, and may be visited at any time by any of the members. The coincidence of their being under observation at the same time, together with the interest of and the dissimilarity of the cases, is a sufficient apology, it is trusted, for their being simply recounted.

DEATH FROM THE EXTERNAL APPLICATION OF CARBOLIC ACID ACCIDENTALLY APPLIED.

By EDWARD SANDWELL, L.R.C.P.Ed.,
Medical Officer Westminster Union.

ON August 31st, Emma —, aged twelve months, came under my care suffering from extensive ulceration of the whole of the gluteal region, together with the labia, etc. The mother of the infant is charwoman to the Ragged Schools in this district; and, having on the 29th of August to clean the rooms, took with her the baby and another child twelve years of age to look after her. Just before she commenced working, the superintendent had used his usual disinfectant of one ounce of carbolic acid to a quart of warm water, which he sprinkled about the room, as was his practice. The elder child sat the baby on a block of wood on which some of the disinfectant had been thrown. Nothing was noticed on the day of the occurrence, the child being washed and put to bed as usual. The next morning, blistering had commenced, and rapidly passed into the state of ulceration in which I first saw it. I ordered a dry application of Fuller's earth and French chalk, which seemed to comfort and cause a diminution of the inflammation. On the fifth day after the accident, I gave a lotion of liquor plumbi with glycerine. Several sloughs formed and separated, the child gradually becoming weaker from exhaustion and shock. There were some signs of internal inflammation, for which I applied the usual remedies. The child died on the tenth day.

On making a *post mortem* examination, I found the rectum much inflamed; the intestines had patches of inflammation; the right pleura was also much inflamed.

Before the accident, the child was very healthy, showing no signs of internal inflammation or other disease. It was well forward with dentition, and was a full robust child; but after the injury, emaciation was very rapid.

From inquiries, I find that it is not at all uncommon for people to complain of burning and even blistering of the gluteal region after having used a closet to which carbolic acid had been recently applied. This only tends to show the necessity of caution being used in the administration of this disinfectant, even in a diluted form.

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

ABSTRACTS OF INTRODUCTORY ADDRESSES

DELIVERED AT

THE METROPOLITAN AND PROVINCIAL SCHOOLS,

On OCTOBER 1st and 3rd, 1870.

KING'S COLLEGE.

THE Introductory Address was delivered on Monday, by Mr. JOHN WOOD, Professor of Surgery.

Before the commencement of the address, an announcement was made of the death of Dr. W. A. Miller, Professor of Chemistry to the College. After paying a tribute to the memory of his colleague, the lecturer referred to the objects of an introductory address and to the changes in the staff of teachers which led to his recent appointment, and then proceeded to make some remarks upon the alterations which each year brought about in the principles and practice of the medical art. He vindicated the profession from the imputation of difference of opinion among its members, which it only shared in common with most other professions dealing with probabilities rather than certainties. He advocated a patient accumulation and classification of facts upon the bases of hypotheses most in accordance with the present state of knowledge, and acted upon with a provisional and qualified assent, not pushed to extremes, and waiting for that more perfect light which is sure to arise from a just comparison of the differences in conclusion which the progress of knowledge will diminish and finally cause to disappear. He then proceeded to welcome the new comers to the study of medicine, and said: "Amid the melancholy impressions made by the hideous spectacle now presented by the chief nations of continental Europe, ravaged and made desolate by the most frightful war that has ever raged in modern times, applying the improvements of our boasted civilisation not in the practice of the merciful maxims of the Saviour by whose name it is called, but in the enormous range, deadly precision, and scientific butchery of its engines of destruction, it cannot but be a satisfaction to you that you are this day enlisting into a corps which is not armed with the murderous 'Chassepot' or the death-dealing 'mitrailleuse', but with the pain-assuaging chloroform and the comforting bandage, with the gentle hand and sympathising heart, helpful alike to both friend and foe, and tending those whom the fiendish passion for military glory has laid prostrate in the ruins of a late smiling land. You are, as it were, binding on your arms, and, I hope, imprinting upon your hearts, that glorious emblem of triumph even in death, of comfort even in despair, of the most touching compassion in pain and distress, of Almighty help in time of trouble—the red cross—more ennobled now in its saving work in the rear of armies than when raised on high in the van of battle against the infidel."

Mr. Wood then sketched briefly the facilities afforded by the Institution and its staff for the prosecution of scientific and medical studies, the arrangements for lectures and demonstrations, and for the practical work required for degrees and diplomas.

"The just importance attached by the regulations of the examining bodies to a regular attendance at lectures and in the dissecting-rooms we have in this College for a long time fairly appreciated; and we have honestly enforced such attendance, as far as practicable, by the system of marking in. Until lately we were alone in so doing among the metropolitan schools; and it has been supposed by some that we suffered from this exceptional position. But we have now the satisfaction of knowing that the Medical Teachers' Association recommended some such plan applied to hospital attendance, as best calculated to benefit our pupils and fulfil our duty to the public. Last summer, this plan was applied to the hospital attendance with a very fair prospect of success. I have great satisfaction in saying here, to the credit of our students, that no word of complaint or sign of irksomeness has been evident to me in carrying out my own share of it. It has been welcomed by the industrious man as insuring him the credit due to him; while very shame, I suppose, restrains the lazy man from decrying an honest attempt to improve his mental condition. . . . I am aware that an opinion has been spread to some extent that, with the great facilities now afforded by admirable books upon all the subjects of a medical education, lectures are a mistake, schedules an abomination, and marking a totally unnecessary restriction upon freedom of action; and that men should get the information necessary to pass examinations as the American backwoodsmen get land, 'when they will, where they will, and as they

will'. Now, gentlemen, conscious as I am that there are here and there favoured individuals to whom there is a higher law than mere official regulations—a law unto themselves planted in an enlightened conscience—yet I am sure that, as human nature is constituted, such men are not the rule in any profession, and I have not commonly found them in my own. I am convinced that it is good for the habits of all, whether teachers or disciples, to conform to regulations. Some who advocate the licence which I have mentioned conscientiously belong, I doubt not, to the purist class. More, I suspect, have been driven impatiently to this extreme opinion from their experience of the scandalous laxity which has often prevailed in the signing of incorrect schedules, lying certificates, and bunkum testimonials; and some I have heard to use the cry as a cover for the idleness and irregularity of their own habits. The result of such a liberty for procrastination, even with yearly recurring pass-examinations, would, I feel sure, be a general postponement of all serious application until within a few months of the examination, and a resort to charlatan grinders who profess to put men up to passing in all the 'ologies' as deftly and easily as a conjuror dupes his admirers. And what a spectacle our noble profession would then present to the eyes of a critical public, daily increasing in intelligence, so keen to note, and ever ready to expose the ridiculous points in a class of professional men endued with a flimsy and superficial covering of imposing technicalities, half understood, picked up second-hand at a grinder's shop, put on in a hurry, and barely hiding the rags of ignorance and the holes of neglect. But, happily, our examining corporations in London, whatever may be their shortcomings in many matters, are fully alive to the importance of this subject, and are directing their attention to make the education of their licentiates as practical as possible. Only lately, in a considerable measure through the exertions of one of our own profession, a late President of the College of Surgeons, that body has required that the course of surgery which I shall have the honour of commencing in this College shall in future be partly a practical course in the use of instruments and surgical appliances."

The lecturer then explained what he considered to be the chief use of lectures; viz., to guide the student through the difficulties of his subject, the multitude of its details and of the books written about them; and to strike and keep up through the course the key-note of the application of true scientific principles to all the variations which claimed his attention. In a practical art like surgery, for example, the firm implantation of such principles was of great importance to enable the surgeon under the most adverse circumstances, such as a railway catastrophe or a battle, to benefit his patient by scientific application of makeshifts where the ordinary apparatus is not at hand. He condemned the manner in which charpie is used as a stuffing for wounds in the surgery of the continental schools, maintaining that, thus employed, it became a means of propagating contagion; and that the simpler, less painful, and more cleanly ways of dressing in vogue in our own hospitals were preferable. He thought that the best use to which the immense superfluity of charpie now accumulated in the neighbourhood of the battle-fields could be put was as a material for pads in fractures not attended with wounds, and as sponges, first dipped into a disinfecting fluid, and burnt after being once used; but that, even for these purposes, tow was better, and the more pliant and soft fibres of dried grass a good substitute. He compared the endowments of a good surgeon with those of a good general, especially in respect to foresight and provision for eventualities. "Both have an art which is more or less conjectural, dealing with probabilities rather than certainties. Each must have his first principles well grounded, the application of them various and ready to hand; the conception of the position rapid and intuitive, but at the same time far-seeing and comprehensive; the action upon it cautious in difficulties, prudent in dangers and vigorous in emergencies, and with a watchfulness careful after victories as in defeat, and ever ready to change a seeming reverse into a triumphant success. Both deal with human life, and both on a large scale; but with this difference: the general on the occasion only of a war, by the agency of his subordinates, destroys it; but the surgeon's campaign ceases only with the cession of his profession, and, for the most part, he carries out himself his own conceptions for saving it. He is the tactical commander-in-chief—the strategical general of division—the vigilant and daring captain of picket and patrol. The intelligence of the rank to command, and the pluck and steadiness of the file to execute, are all required at his own hands."

The lecturer then alluded to the various tendencies to error which he had observed among medical students, congratulating his audience upon the great improvement effected by raising the standard of preliminary education. He urged that the practice of diagnostic and operative surgery could only be rightly founded upon a familiar acquaintance with the structures of the human body; and that to work perseveringly at the subject, and to observe attentively, was the only way to remem-

ber distinctly and usefully in anatomy. In the scarcity of subjects for dissection which prevailed, it was important to make the utmost possible use of them in cultivating the art of detecting minute differences.

The lecturer advocated the earnest study of science generally as a valuable preparation and training for medical pursuits, and illustrated its direct practical bearings by allusion to the late discoveries of minute living beings, which were found to be the cause of the infectious diseases among the silkworms and other lower animals. He then alluded to the opportunities afforded by the hospital to all the students to study by experience of its effects and treatment, and said that now-a-days it is not sufficient to walk the hospital, but the student must work the hospital with zeal, industry, and perseverance, in order to pass the portals of the examining bodies, who were becoming, under the pressure of public opinion, more and more practical in their examinations. To aid him to this end, numerous and regular examinations of a practical character would be carried out in the various classes. These enabled a man to compare his progress with that of others undergoing the same training, and were a guard against the imperfections of half-knowledge. He warned his hearers against the difficulties and humiliations brought about by procrastination, and encouraged each to find out in himself what work he was most fitted for, and to work up to it—not to be dismayed by mistakes and failures; and he concluded by warning his younger hearers against the temptations which beset, in London, the path of the young man void of understanding.

ST. THOMAS'S HOSPITAL.

THE Introductory Address was delivered by Dr. GERVIS, on Saturday, October 1st.

After some introductory remarks and words of welcome to the entering students, Dr. Gervis proceeded to speak on the subject of success, likening it to a ladder of many steps, on which, though all could not mount to the highest, yet there were none but could make some progress in the ascent. Success, too, was a question of kind as well as of degree. After sketching some illustrations of its varieties as well as of its grades, Dr. Gervis drew the same lesson from all: that, though in a large proportion of the posts occupied by the profession the amount of gold to be won might often be scanty, in no profession were there more frequent opportunities of winning golden opinions, and doing work whose reward was the approbation of conscience and the benediction of Heaven.

Dr. Gervis then proceeded to give some practical advice to students as to the mode of best avoiding too exclusive a cultivation of either branch of their education—the theory or the practice of medicine. He enumerated the practical opportunities afforded by St. Thomas's; and, after some reference to its teaching arrangements, gave various suggestions as to the best methods of work. On the subject of lectures, Dr. Gervis observed: "It has been somewhat the fashion of late to depreciate the importance of attendance upon lectures. From this, my own recollections of student life lead me to disagree. I still remember the very forms of expression which characterised the lectures of our various teachers; nay, the very sound of their voices still lingers in my ear. The power of the lecturer is akin to that of the speaker and preacher; and, as to listen to a Disraeli or Bright in the House of Commons, or to a Liddon or Guthrie in the pulpit, is a much higher treat and far more impressive than to read their speeches or sermons in print, so do I think that a lecture listened to is far more impressive than a lecture read." In conjunction with note-taking, of the utility of which Dr. Gervis spoke highly both from observation and experience, lectures were also of much service as guides for the work of the evening. After some other practical suggestions with respect to attendance in the medical as well as surgical wards, the value of regular attendance in the *post mortem* room, the subject of books, and the sessional examinations, Dr. Gervis made some remarks on three principles of action which he urged on students to follow as the guides of their studies and their life: the first, perseverance; the second, method; and the third, duty. The second was further illustrated by a quotation from Coleridge, and the third by the remark of Lothair, "It seems to me that a sense of duty is natural to man, and that there can be no satisfaction in life without attempting to fulfil it." Some words of counsel to the advanced students, and of farewell to those leaving, were succeeded by a reference to that parliamentary measure which, had it been enacted, would have made the year so eventful an one to the profession. With respect to it, Dr. Gervis expressed an opinion adverse to the three-board system, but thought that, after the plan of the London University, local examinations could be held simultaneously in various parts of the kingdom; and in this way the same level of examination

would be everywhere maintained, and no invidious distinction should be drawn between the value of the three diplomas.

Some questions connected with the out-patient departments of the metropolitan hospitals and the mutual relationship of school and hospital were then alluded to. On the latter point, Dr. Gervis said: "By the union of a school with the hospital, we believe the benefits of the hospital are largely extended and multiplied. Not only does the hospital get for its in-patients an amount of medical and surgical aid from educated and zealous attendants, such as I believe no ordinary paid nursing could replace; but, without their help, its out-patient surgical and maternity departments could scarcely exist. And still further, and, without any doubt, through the medium of the school, the hospital diffuses its benefits far beyond the range of its in-patient and out-patient departments. Wherever a St. Thomas's man is to be found, whether amid Canadian snows, or Indian jungle, or Australian bush, tending the invalided at Bingen, or doing deeds of charity and daring among the wounded in Alsace and Lorraine, there does the munificence of the founders and governors of St. Thomas's reap fresh and precious fruits."

Remarking on the present being the last introductory lecture to be given at the temporary hospital, Dr. Gervis took a retrospect of the changes that had occurred in the school during the seven years which they had spent at the Surrey Gardens, and concluded with the following remarks. "We trust that, long before the dawn of another October, we shall have left these temporary buildings, and entered upon our occupation of others whose erection will rank among the most memorable events of the present reign. Transferred from the south side of London Bridge to the south side of Westminster, rivalling in beauty the opposite palace of the legislature, and in interest its nearer neighbour of Lambeth, long may St. Thomas's there flourish, the pride of its governors and staff and school, and a perennial fountain of beneficence for the suffering poor of this realm. But, amid all the material glory of pavilions and towers and colonnades, and of its conspicuous position in the first city of the world, let us not lose sight of the yet greater glory accruing from the memories of the past, nor forget that the hospital at Stangate is the lineal inheritor of the fame that belonged to the hospital in Southwark, in connexion with the surgery of Cheselden and Cooper and Cline, the medicine of Mead and Fordyce, of Robert Williams and Roots. May it be the anxious endeavour of her present sons that the prosperity of their commonwealth suffer no loss in their hands, but that, as the building of the new St. Thomas's far eclipses in splendour the building of the old, so shall its present school perpetuate and outshine the bright glories of former days."

ST. MARY'S HOSPITAL.

MR. GASCOYEN delivered his Introductory Address on October 1st. He took for his subject the present system of medical education. Whilst admitting that great improvements had been made in the course of medical instruction and in the examinations during the last few years, the lecturer thought that much more was needed in both before they were made as perfect as they easily might be. He congratulated the profession that at last there seemed to be a prospect of obtaining a similar course of instruction, an equal examination, and an uniform fee, for students throughout the three divisions of the kingdom; and stated his opinion that examining boards chosen from our present licensing bodies, to conduct examinations and to grant diplomas, would be preferable to a board appointed by the Privy Council. Although strongly advocating this change, he believed that most of the present examinations were fairly conducted, and were not only fully up to the capacity of those examined, but even beyond it, and that the students, as at present prepared, were incapable of passing a higher test of proficiency. He thought that the students as a body were not so well prepared for their examinations or for the exigencies of practice as formerly, and attributed this to three main causes.

The *first* of these was the deficient general education of many of the students. The habit, acquired at school, of neglecting elementary instruction for the sake of varied and superficial attainments, created an indisposition to master the groundwork of medical science, and operated most injuriously upon the student.

The *second* reason was the very insufficient time allotted to the study of medicine; whilst the number of collateral subjects and the excessive detail crowded into this limited period, still further prevented adequate attention being paid to the most important.

The *third* reason was to be found in the scepticism in all matters medical which now pervades the profession, and which questions the treatment of the student as it does that of the patient. It has unsettled the student by doubting the utility of everything connected with our present system of teaching, and caused him to slacken in his work;

whilst, by hearing doubt cast upon the curative value of drugs, he has come to regard the medicinal treatment of patients as a secondary matter, and to act as if fully impressed with the truth of the doctrine that all will come right with waiting. It has brought about a condition of mind similar to that expressed by one of Dickens's characters, that "there is nothing new and nothing true, and it don't matter"—which is by no means an incentive to work.

To meet these difficulties, the lecturer proposed that the preliminary examination in arts should be made at least equal to the matriculation examination of the London University, as anything short of this would be insufficient to obtain an educational superiority on the part of the profession; that every student should be required to pass an examination in chemistry, botany, comparative anatomy, and natural philosophy, before he joins a medical school; and that he be at least eighteen years of age; that he should pass four full years at the school and hospital, and at the expiration of these pass one other year in active professional work, as assistant to a practitioner, house-surgeon at a hospital, etc., before being allowed to register his diplomas and practise on his own account. A clinical examination was also insisted upon as a *sine qua non*.

The waste of time, money, and energy, caused by the support of so many schools of medicine was commented upon. The lecturer advocated their amalgamation into *two* medical colleges, where the professors should be paid such incomes as would insure the best available teaching power, and attach them permanently to their Chairs; whilst the several hospitals could be used for clinical purposes as is now done.

The system of double examinations was then considered; but although acknowledged to be far superior to the former plan of single examinations, the lecturer doubted whether as yet they had been of much real service, in consequence of their tendency to split up the student's time into short periods, during which everything is sacrificed to those subjects in which he is about to be examined, so that, when the primary examinations have been passed, the time remaining is far too short for him to gain more than a hasty shallow knowledge of disease and its treatment.

The speaker expressed his strong belief in the value of lectures, and in the importance of retaining an official curriculum as essential to the student, his friends, and his teachers; and gave reasons why he thought the practice of requiring certificates of attendance should be continued.

The aims of medicine were briefly touched upon, and a judicious use of drugs advocated, instead of the purely expectant or stimulant treatment; and the address was concluded by offering encouragement and advice to the students, and by pointing out to them certain faults which seem to be handed down from one generation to another.

GUY'S HOSPITAL.

MR. C. BADER, Ophthalmic Assistant Surgeon, delivered the Introductory Address.

Before offering suggestions as to the mode of study, he made some remarks on the Hospital. It would in a few months, he said, have the largest number of beds among London hospitals. Though too much material might become a disadvantage to the student, and one case well observed would be of more use than any number of the same kind of cases carelessly looked into, yet numerous cases simultaneously present in a hospital offered great advantages. They afforded choice to the teacher: the student, in a short time, not only saw the chief features of a particular disease, but, like the botanist, among a large number of plants of the same species and in different stages of development, he acquired a rapid and thorough knowledge of the life and history of disease; and the patients, as he had often seen in the large Vienna Hospital, found it a great relief to have fellow-sufferers to ward off the inconvenience caused by eager students.

Guy's Hospital is surrounded by a numerous hard-working population. The medical student at once and on a large scale meets the harshest features of his work. Years before Mr. Bader was appointed to the Hospital, he daily visited its pathological museum. He had seen many museums in this and other countries, but had found none superior to Guy's; and, as regards diseases of the arteries, none its equal.

The medical profession, the lecturer said, requires a larger number of general accomplishments than any other. To be thoroughly familiar with the subjects of surgery, midwifery, and medicine, before entering on practice, is a self-understood thing; but to enter the medical profession with the principles and manners of a gentleman, to have received an excellent general education; to be a good linguist, draughtsman, etc.; to be in excellent health, able to share in and fond of athletic sports, are details, all of which are almost as important to success in the medical career as the professional knowledge.

The amount of knowledge required of the student by our examining

bodies, as test of his proficiency in medical science, is a very moderate one, and should, in the fullest sense, be complied with. Students of Guy's Hospital, unless on special duty, should live a short distance out of town. Ten minutes' railway journey will bring them to a place where a quiet night's rest, in better air than the Borough can give, will amply repay for the inconvenience of travelling. The new Guy's man should study the geography of his Hospital. He should visit the wards, the laboratories, the museum, the bath-rooms, kitchen, ventilating apparatus, etc.; the sight of the resources, size and scientific treasures of his future Alma Mater, will thus become a source of encouragement.

Mr. Bader advised his hearers to compete for the scholarships and prizes offered by the school. They should make it their motto—sooner be beaten than not try at all. They should also thoroughly master the use of those instruments employed at the Hospital. He advised them not to buy books or any kind of instruments without consulting some one of the medical staff.

On leaving the Hospital, ready to enter upon his career of practice, the student should remember that within a few months he will have forgotten a large portion of the book-reading, chemical formulæ, etc., required for the examinations. To make up for this loss, he should possess the very best books, and should also connect himself with some one at the Hospital to keep him informed of any important work. He should not fail to visit the Hospital whenever occasion presented itself; and go round the wards and continually keep up intercourse with some of the medical men of his school, so that if any good theory or new treatment of importance should present itself he might have the advantage of early information.

No one whose means at all permit it should leave Guy's without having frequented other hospitals for three or six months. In one week the student may learn more by this plan than even at the largest hospital in a month. Hospitals for special departments, and especially for children, are the places to visit.

Mr. Bader concluded with a few remarks on travelling after completion of the hospital career. It would be an excellent thing, he said, if a fund existed out of which those with insufficient means might be assisted towards a tour of several months into other countries. Guy's men have the reputation, all over the world, of being the medical travellers *par excellence*. From the experience obtained from former assistants, the lecturer could state that there are few parts of the globe where Guy's men are not to be found. It would be an excellent thing if, after completion of the medical studies, some months of travelling were made compulsory. In giving away appointments he should, other circumstances being equal, always give the preference to the one who has travelled.

In concluding his address, Mr. Bader advised the students not only to look upon the medical staff as upon their teachers, but to make them their advisers, and thus their friends.

MIDDLESEX HOSPITAL.

DR. CAYLEY delivered the Introductory Address. He gave some good advice to the new students; and, in the course of the address, made the following remarks on examinations.

There are two classes of examinations which you are expected to undergo, and which differ both in their origin and in their objects. One is imposed by external authority; the other developed from within. The object of one is to protect the public against the negligent student; that of the other to assist the industrious in his studies.

The first of these two classes, which will, doubtless, appear to you by far the more important, are those examinations which are imposed by the state for the protection of the public, to ensure, as far as may be, that all who are admitted to the privilege of practising the art of healing shall have attained to a certain standard of knowledge and skill. Now, the necessity for such a test is a kind of opprobrium to ourselves; for I need hardly say that the fact of a student having gone through the prescribed course of medical training ought, in itself, to be a sufficient guarantee of his fitness to practise his profession. But, unfortunately, there will always be a small minority among the students, who are unable to raise their minds to any higher idea of their profession than as a means of enabling them to earn a livelihood with as little trouble as may be, and who will, therefore, content themselves with the minimum of the necessary qualifications, or whose wills and moral purposes are too feeble to enable them to resist any present gratification for the sake of those higher objects which are alone worth striving for, and who, as they are insensible to higher motives, can only be acted upon by the lower one of fear—who study, in fact, a liberal profession in the spirit of slaves. To these, no doubt, the prospect of their examinations is a powerful incentive to exertion; but

to that larger class who study their profession from higher motives, whose minds are imbued with some portion of the true spirit of science, these examinations must be looked upon as rather harmful, as tending to supplant these higher and truer motives by lower ones, and insensibly, perhaps, leading the student to regard passing his examinations with credit as the main object of his education. Hence we must, I think, consider these examinations as evils, though unquestionably necessary ones.

With regard to the present system of conducting examinations, things are in a transition state; but there can be no doubt that very shortly all the present examining bodies will be superseded by one central board whose certificate will be made incumbent upon all; it only remains, then, to consider whether it is worth your while to add to this necessary legal qualification any honorary marks of distinction, as the Fellowship of the Royal College of Surgeons, or a Degree in Medicine. I think, on weighing the advantages and disadvantages of such a course, the former will be found to preponderate. To take a merely prudential view, you are entering on a profession the ranks of which are even now overcrowded, and in which success becomes daily more difficult. We have, indeed, now to expect a fresh accession to our numbers from an unexpected quarter, and for the future it is not with medical *men* only that you will have to compete. I think, therefore, no fair and honourable means of recommending yourselves to the confidence of the public, and none can be more so than to be able to give evidence that you have undergone a more complete training and submitted to more stringent tests.

With regard to degrees in medicine, apart from the older English Universities, we have the University of London and the Scotch Universities, the latter now requiring a year's residence; and certainly nothing could be more advantageous to the student than, after completing his three years in London, to spend a year at one of the great Scotch schools in the study of the higher branches of professional knowledge; or, perhaps still better, if he can afford the time, to visit one of those continental schools whose centralised administration and admirable organisation enable them to offer advantages which our divided resources and feebler administration can scarcely afford. For most of you, perhaps the University of London, as it is at our doors, will be the most convenient; and its medical degrees have now obtained a considerable reputation. If I might presume to criticise the proceedings of so able and enlightened a body as the senate of that institution, I should be inclined to say that their regulations would lead one to think that the one object in life—at any rate in student life—is to pass examinations. For the degree of M.D., I believe they now require five examinations; and certainly no one would object that they are conducted too laxly. But a considerable number of those who obtain its degrees find it necessary to procure, in addition, the licence of the older examining bodies; and, if we add to these five, two for the College of Surgeons and two more for the College of Physicians or Society of Apothecaries, we shall have nine. Now, I think that a system which requires a student to pass examinations for the purpose of obtaining recognition of having undergone a complete medical training, is one which might well be reformed.

The second class of examinations need not detain us long, as they will no doubt appear to you of quite secondary importance. They differ, as I have said, both in their objects and their origin, from the former class, and are simply intended to assist you in your studies. They are those class-examinations which are held periodically in all the different branches of your education. Now, the object of these is not, as is sometimes erroneously supposed, to enable you to enter into an intellectual competition with one another, and to crown the successful competitor with a prize, but to insure that your progress shall be safe, and that what you learn shall be learnt thoroughly and accurately. You should, therefore, use these examinations as you would any other help to your progress, quite irrespectively of whether you intend to compete for the prizes or not; for these, I need hardly say, can never be the true object of your efforts. For if to be impelled onwards chiefly by the fear of failing to pass your examinations, would be to study in a slavish spirit; so to strive after any branch of knowledge merely for the sake of gaining a prize, would be to do so in a childish spirit; and either course would be unworthy of the dignity of students of science. These prizes, therefore, must be looked upon as graceful marks of the recognition of merit, which, fairly won, may be honourably worn, and are useful in keeping alive a spirit of generous emulation.

I have heard it said by those who remember what may be called the good old times, when the system of medical education was very different to what it is now, when comparatively little assistance was given to the student, but he was left very much to his own exertions, and when the students themselves were very different to what a general change in the manners of society has since made them, that then, with

all their roughness, more real work was done and more zeal shown by the students than is sometimes the case under the present system; and that, though more is taught now, more was often learnt then. Certainly that system, imperfect as it was, produced men of whom the profession may well be proud. Those days, however, have gone by; and I do not suppose that the most inveterate praiser of the past would wish to see them return. But it rests with you to show that this reproach is entirely undeserved, and that you know how to enter with zeal and spirit into all the necessary details of your profession without sacrificing the refinement of gentlemen, and intelligently to appropriate to yourselves and digest your knowledge, in spite of the temptation to sit still and be passively crammed.

THE LONDON HOSPITAL.

THE Introductory Lecture was delivered by Dr. HENRY G. SUTTON.

After some preliminary remarks, the lecturer said that he intended to address not only medical students, but students of medicine. He would endeavour to show how each department of medical science bears on the prevention and cure of disease. There is an order in our studies with this object in view. The lecturer, in several parts of his address, pointed out the intimate relations of physiology and pathology. He urged very strongly that, in the study of healthy states, a large share of attention should be given to the anatomy and physiology of the lower animals and plants. The investigation of comparatively simple organisms would lead to less narrow views than the exclusive study of man's more highly complex organisation tends to produce. Besides studying the minute anatomy of the several parts of the body, and the functional relations of its numerous organs, in the "ideal man" of the physiologist, variations from the ideal standard must be studied. Men are born different; they live, or, as we may say, are educated (using the term in an extended sense) under different external conditions. Hence there are two factors—heredity, and the influence of outer circumstances—which make the adult what he is in health. The influence of each of these two factors must be considered in relation to disease. The influence of climate, variations of temperature, and the like, should be observed, not only as they affect man, but as they affect inferior animals and even plants. Each person has his own standard of health. Individual variations in mental and physical action are very great within the limits of what is called health. We cannot pretend to classify every one of our patients under some particular temperament; but there are large degrees of differences which should be noted; and we can, at all events, arrange very many men in groups, as they approach one or another standard. To illustrate the value of noting differences in temperament, the lecturer remarked on the difficulty frequently found in understanding the real meaning and bearings of certain symptoms which some patients present, but which are not present in other patients ill of apparently the same disease. Are not these symptoms due to the temperament of the man, rather than to the disease?

One of the reasons why the physiologist had far outstripped the pathologist was stated to be, that the former had taken as his field of observation the whole animal or vegetable kingdom, whilst the latter had, with few exceptions, confined his investigation to man. The external conditions which give rise to diseases in animals are fewer and simpler than in man, and there are also fewer acting at the same time. A man may be overworked, be taking large quantities of alcohol, and be suffering from extreme mental anxiety at the very same time. When disease follows, it is very difficult to say which of the circumstances mentioned is the cause, or the chief cause, of the malady. In diseases of animals, there is the opportunity of investigating the morbid process at any stage of the disease. Again, there are products, physiological in certain lower animals, that are pathological in man. Moreover, the structure and arrangement of tissues in the lower animals and plants are simpler, and admit of more easy investigation and more certain conclusions. The study of the orderly succession and slow growth of cells in health is essential, if we are to have clear notions of the disorderly succession and rapid growth of cells in disease. Pathological changes are to be studied as modifications of physiological changes. In the return from disease to health, there is a more or less gradual substitution of physiological for pathological order. The substitution, however, may not be complete. Having given instances of this, the lecturer next spoke of the sequences of disease. The presumption is, that all morbid processes have a definite course. In some diseases we can declare what that course is; there are well marked periods of outset, exacerbation, and decline; and in many others, which have no definite periods, there is a traceable order in the larger events. Without knowing this order, we cannot judge correctly of the progress of the patient; we

cannot foresee emergencies, and we cannot estimate the effects of treatment.

Dr. Sutton urged the importance of learning to use skilfully the thermometer, the stethoscope, the microscope, the ophthalmoscope, and the laryngoscope. He begged students to investigate cases of disease earnestly and sincerely. The great element of success in diagnosis and treatment is painstaking. They should care nothing for the commonplace reputation, only obtainable among uneducated people, of a jaunty ease in diagnosis, such as is contained in the expression, "Mr. So-and-so sees what is the matter at a glance." The lecturer then made some remarks on the prevention of disease, and concluded with the following summary.

"I have endeavoured to show how important it is that every student should examine the influences which man inherits from his parents, and the influence of the conditions which surround him. They are the two factors of health and disease; and the cure, alleviation, and prevention of disease are to be regulated by attention to each of them. The phenomena of health and disease are the certain results of antecedent conditions. When we observe what is passing around us—how the agriculturist, by taking advantage of inherited influences and of the actions of external objects, develops and rears animals to serve the purposes of man; how the horticulturist, by similar means, develops and modifies the colour, the shape, and beauty of his plants and flowers to educate and gratify the mind of man—we perceive great principles, which the medical practitioner may some day use to prevent and relieve the sufferings of his fellow-beings. We see that the physical sciences are making great progress, and it is our duty not to allow Medicine to lag behind. We must avail ourselves of every kind of knowledge which tends to disclose to us physiological and pathological truths."

ST. GEORGE'S HOSPITAL.

THE Introductory Address was delivered by Mr. BRODHURST.

The lecturer began by welcoming his audience, and congratulated the new students on having selected St. George's Hospital. It offered many and great advantages, and to it belonged some of the names most famous in medical science. Mr. Brodhurst then referred briefly to the Medical Bill and to the present large number of licensing boards. Speaking of the latter, he said: But what can the public know of the relative value of these several licenses? It is known that the candidate has obtained a license to practise, but it is not known what test has been applied to ascertain the amount of his knowledge; and whether the license has been obtained in London, Oxford, Cambridge, Edinburgh, Dublin, Lambeth, or elsewhere; it is alone known that a qualification has been obtained, but it is not known what are the respective merits of these various diplomas. Further, it is found that a certain number of students are educated in one division of the kingdom, and that they obtain their qualification in another division. This happens especially in the English and the Irish schools. Now, it is obviously unfair that the same privileges should be extended to the idle as to the diligent student—that he who fits himself only to pass an inferior education should be placed by the public on the same footing with him who has perhaps competed for and gained honours in the highest examination.

The subjects of which a knowledge was required were many: but the students were assured that they so dovetailed one into another that knowledge already acquired assisted greatly in the acquisition of that which followed. They were strongly advised not to waste time, but to acquire knowledge by taking up the subjects in their proper order. In speaking of relaxation and amusement, the lecturer advised his hearers to abstain entirely from general society during student life. Such a course was followed by Napoleon Buonaparte while studying at the Military School in Paris. The student must not depend on genius to ensure success, but on such constant and continued work as leaves the subject indelibly stamped on the mind. There must also be unity of purpose. "He who acts as though there were but one thing in the world to be done, and does it well, is certain of success; while he who has many irons in the fire fails." As examples of industry and great variety of acquirements, Michael Angelo Buonarrotti and Leonardo da Vinci were referred to; but these were exceptions, proving the general rule. "Genius," said the lecturer, "is the lot of few; it falls to no more than one in a million. Not only so, but it is rare indeed to find any one gifted with supereminent talent for the employment he may undertake. The resolute man, however, fits himself for the work which is ordained for him, accustoms himself to it, perfects himself in it, and determines to carry it out vigorously; and whether it be a trade or a profession to which he devotes himself—whether his work be in the eyes of the world lowly or reputable, he spends his whole strength in doing that which is set before him to the best of his ability, and thus to

the honour of God—he masters the difficulties which surround him; he does not evade them. If we could but recognise our condition here as a state of pilgrimage in which a certain amount of work had to be performed and accounted for—work, however agreeable or disagreeable, which, having fallen to our lot, had to be done to fit us for citizenship elsewhere—if every man could view the work imposed upon him in this manner, we should never hear of listlessness, idleness, or *ennui*. It rarely happens that success attends those who, having been placed in a certain position, change their purpose and embrace some new undertaking. They have already expended a certain amount of brain-work in their first calling, and they arrive later than their fellows with much toil and disgust at their second. Consider this; and if your minds are not fully made up, pause and reflect while there is yet time. If you determine to throw in your lot with us, then with brave and earnest hearts set to work, and you shall have all the help that we can give you. Never faint; but remember that the more difficult the task, the more noble it is to overcome it. They will succeed who deserve success. Bring, then, with you *earnestness of purpose*, and it shall compensate you for defects, whether personal or of mental culture, and for the want of genius. Earnestness is the talisman which overcomes every impediment, and opens the door to success. If it is, then, success in life which you seek, and for which you come here to prepare yourselves, study with earnestness, and rouse yourselves to a sense of the dignity of labour. And yet be not too ambitious to secure the good things of this life. Work on honestly and modestly, and doubtless competence will be added to you."

Mr. Brodhurst then referred to the very sparing distribution of honours among the medical profession; he believed, however, that an amendment in this respect would take place. He urged his hearers to cultivate sympathy with the sufferings of others, and reverence, which was necessary for every man. "Goethe," he said, "speaks of three kinds of reverence; namely, reverence for what is above us, reverence for our equals, and reverence for what is beneath us—to recognise in pain, sorrow and contradiction—even in these things, odious as they are to flesh and blood—to learn that there lies in these a priceless blessing. This he defines as being the soul of the Christian religion—the highest of all religions; a height to which man was destined and enabled to attain, and from which, having once attained it, he can never retrograde."

After some further remarks, Mr. Brodhurst referred to the loss which the school had sustained in the removal of Mr. Power to St. Bartholomew's Hospital. Mr. Holmes had resigned his office as Dean, and had been succeeded by Dr. Wadham. A great calamity had befallen Mr. Holmes, in the loss of the sight of the eye from violent inflammation. It was to be hoped, however, that the school would continue to receive the advantage of his labours. "Every one," said Mr. Brodhurst, "connected with St. George's sympathises most truly with him; and not only by those of his own school, but wherever his name is known sympathy is expressed; and his name is known wherever surgery is practised."

WESTMINSTER HOSPITAL.

THE Introductory Address was delivered by Dr. STURGES.

The lecturer commenced by remarking that it was the business of these Addresses to expound, in the simplest and frankest manner, the duties, aims, and rewards of medicine. Assuming that it was the object of the student's search to discover the work best fitted for his capacity, it was of the utmost importance that the sentiments which inclined him towards the study of medicine should be founded on a correct conception of its scope and object. If the students entered the profession led away by the loose expressions current in society with regard to it; if, for instance, they supposed that the end of their labours here was the acquisition of certain rules and formularies, whereby sickness was to be cured, or that the lecturer's duty was to indoctrinate them in a series of dogmas built up out of ages of experience, they would misconceive both the powers and the objects of the medical art. It was contended that a mere belief in systems of drugs argued nothing in their favour, since each system in its turn had had its period of approval, while all those that had gone before it had fallen into ridicule. The faith of one age was called credulity by the next. Yet the medical art is continually changing its ground in restless anxiety to find itself in conformity with a principle. The modern theory of the change of type in disease was alluded to as illustrating the ill-defined nature of our knowledge of the action of drugs. It is at least ingenious to suggest that the ever-changing aspect of medical practice is explained and justified by a corresponding change in the nature of the material to be practised on. For the dignity of therapeutics it is better to assert that each age in its turn gets the medicine best suited for it, rather than that men

should believe that all these phases of practice represent nothing more than a series of rude attempts to influence the fixed course of disease by medicinal agents. The lecturer proceeded to urge that a consideration of the nature of disease would, but for the vicious teaching of the past, hardly lead us to suppose that it was within the province of drugs to influence it. On the other hand, the mere observation was directly beneficial to the community. Personal acquaintance with it conferred a power which could never be reached through the experience of another. Therapeutics as a science was regarded as yet in its infancy, or even in a less advanced stage of development. Pathology, on the contrary, was described as having made definite progress. While there were difficulties and differences of opinion in pathology (as shown especially in the views of Rokitsky and Virchow), yet this offered no real discouragement to the practical student. It was possible to gather knowledge from the many aspects of disease without being able to recognise the immutable law which each of them should serve to illustrate. In the actual progress of morbid changes, in the manner in which an organ was apt to influence the rest, in the correspondence between altered function and structure—in all these things we must be content to learn something of the *habitus* of disease, to become gradually familiar with its changing moods. It by no means followed that we apprehended these phenomena in their actual relations, or found in them all the material for general conclusions.

The evils of hasty generalisation in medicine were alluded to. It was very easy, by restating a fact in transcendental language, or by translating its terms into a general expression, to make a show of explaining it. Far better than this seemed the honest labour of merely collecting specimens, adding day by day to the vast pile of dead material without much thought as to the use which was to be made of it. But, best of all, for us at least, is the habit of regarding morbid changes strictly in connection with their clinical phenomena, seeking by observation to eliminate the accidental from the essential symptoms, and so, at length, by sheer force of experience, to found a knowledge of the real nature of disease, which, so far as it goes, shall be available for all future time.

The business of the modern physician was shown to be rather to ward off disease than to contend directly against it. His duty to the community is to persuade them how rare a thing was the cure of disease, and so to urge upon them the means of its prevention. Duties like these are far less brilliant than the old weapons of fire and steel, with which disease (before it changed its type) was wont to be annihilated.

The lecturer then pointed out some of the qualifications necessary for the practitioner of medicine. The duty of perfect sincerity was urged, and of using much care to avoid a cumbrous and unmeaning phraseology. If, for instance, ignorance of drug-action is confessed and notorious, surely it is worth even the sacrifice of some profitable routine to proclaim the fact of such ignorance with perfect frankness. It was insisted that much of the loose talking, and wild theories, and false logic carried into practice, may be traced to a vicious mode of learning in student days. There is a way of getting up subjects by means of set phrases without ever realising to the mind the facts thus expressed. Moreover, in the phrases of an absolute pathology, the memory may be burdened with frightful names without adding anything to real knowledge. And thus an unreal mode of knowledge becomes a habit of the mind; and the habit of forming a distinct conception of disease almost wholly dies away. The lecturer then proceeded to show how the pupil should fortify himself by the diligent observation of disease in the wards and in the *post mortem* room. He recommended especially that practical study should begin at once; and, at first, with as little assistance as possible from books.

Disease must be regarded as a condition to be studied afresh in each individual. Its treatment could not be learned out of books, nor could it be cured with a stroke of the pen. The practitioner must often set his face altogether against drugs, and, with much labour, survey all the surroundings of his patient, seeking to interpret little signs for his benefit, unable, perhaps, even then to do more than suggest. This is far harder than writing prescriptions, and it is far less telling. As in the case of the Syrian leper, the very simplicity of the advice may give offence.

The lecturer cautioned his hearers against that spirit of noisy scepticism, which is never so offensive as when aimed against the honest beliefs of those who have access to the same sources of information with yourself. Many a man says "I don't believe", when, in fact, he ought to say "I don't understand".

In concluding, Dr. Sturges said it is not the least among the advantages which this profession offers that, unlike some others, it leaves the mind perfectly free and unfettered in the search after truth. "We know nothing here of views propounded and enforced quite apart from the

proper convictions of the speaker. We bind you by no fixed dogmas which a riper age may render irksome and intolerable. Only seek the truth, and remember that, though the way may be rough, and the prize far off, there is ever in the pursuit a keenness of pleasure which is lost in the possession. And not only so; but, in preparing to exercise this high profession honestly and well, you are doing what you can to secure the happiness of your own future; to realise, as age approaches, and the objects of vulgar ambition fade away, the pleasures of a life spent in doing good."

CHARING-CROSS HOSPITAL.

THE Introductory Address was delivered by Mr. HANCOCK, Vice-President of the Royal College of Surgeons.

In commencing his address, he said: "Who that has bestowed one thought upon what has been going on abroad during the last few months—who that has read the sickening details of the revolting battlefields, the devastation of the country, the destruction of homes—will not admit that science may be rendered a curse to mankind? Happily—however dark and revolting to every feeling of our nature this view may be—science is still capable of presenting a fairer, a more pleasing aspect. According to the universal law of nature, it is capable of affording alike the bane and the antidote. True it is, that in the hands of the unscrupulous and ambitious it may become a curse—a cruel curse; equally true it is, that by teaching and enabling man to alleviate the misery and suffering of his fellow-man it is doubly blessed—blessing him that gives, as well as him that receives. It is for the purpose of acquiring this godlike science that you are about to enter upon your course of studies."

He then pointed out to the students the responsibility which they had undertaken, and expressed the hope that as the boy is father of the man, so every student present would be the father of the upright, respected, and prosperous future practitioner. The lecturer next referred to the Medical Bill and its withdrawal. He had no doubt, however, that important changes will take place. With regard to the preliminary examination, the year 1870 had proved very eventful. The last examination at the College of Surgeons was most disastrous. Of 229 who went up, only 106 passed; 123 were deficient in the amount of knowledge required, and were rejected, being thrown back in their professional studies for above six months, and subjected to no slight addition to the expense of their education. This result appeared to Mr. Hancock so lamentable and unsatisfactory, that he had taken some pains to ascertain the cause, in the hope that, by pointing out the subjects of failure, he should do good service, by directing the attention of those engaged in tuition to the matter, that they might take measures that an occurrence so unfortunate should be prevented for the future. The compulsory subjects of examination embraced reading, dictation, arithmetic, geography, grammar and composition, history, Euclid, algebra, and Latin. Of the 123 who failed, 71 failed in algebra, 52 in Latin, 31 in Euclid, 21 in history, 17 in grammar and composition, 12 in arithmetic, 6 in geography, 1 in dictation, 1 in reading. The class of optional subjects comprised Greek, French, mechanics, chemistry, botany, zoology, and German. Two failed in Greek out of 69; 15 in French, out of 84; 11 in mechanics, out of 28. In chemistry, botany, zoology, and German there were no rejections, although 93 went in for chemistry, 5 for botany and zoology, 5 for German.

"Undoubtedly several among these unfortunates may have been idle and neglectful; but, on the other hand, when so large a proportion as 54 per cent. were rejected, it is scarcely possible to arrive at any other conclusion than that the existing system of education in many parts of the kingdom is below the requirements of the age, and that, in neglecting to make themselves acquainted with what is required from pupils at these examinations, teachers are guilty of dereliction of duty, and of great injustice to those entrusted to their care.

"As might readily be supposed, every attempt to raise the standard of education had been followed by a diminution in the number of medical students and, consequently, of medical practitioners.

"From the year 1831 there has been a regular increase in the population of England and Wales—say, in round numbers, of 2,000,000 every ten years: hence, in the ten years from 1831 to 1841 the increase was 1,983,000; from 1841 to 1851, 2,019,000; from 1851 to 1861, 2,174,000; and it will not be unfair to calculate a similar proportion of increase for the ten years between 1861 and 1871. It may not be uninteresting to inquire how far the profession of surgery has kept pace with this increase; and for this purpose I propose to take the average number of diplomas issued by the College of Surgeons during each of these decades. To begin with the decade 1831-41, the average was 520 *per annum*. In the next, or between 1841 and 1851, although the population had increased by 2,000,000, the average of diplomas issued by the

College fell from 520 to 430 *per annum*. In the next decade, between 1851 and 1861, the average rose from 430 to 501; whilst in the decade about to close it has fallen as low as 371. Hence, notwithstanding an increase in the population of 8,000,000, and taking the College of Surgeons as the standard, the average of men entering our profession is 149, or nearly one-third less *per annum* at the present time than it was forty years ago. Undoubtedly the development of railroads, the still greater development of engineering, professional and otherwise, in all its branches, and the state of the mercantile world during this period, have greatly influenced this result; but there is no denying that it has also been influenced in a great measure by the higher standard of education required by the examining bodies."

Mr. Hancock then made some remarks on the subjects of study—especially Anatomy, Physiology, and Surgery. He pointed out strongly the necessity of Anatomy to the surgeon. "It is," he said, "impossible to overrate its importance. During the last year, 586 students presented themselves for examination on anatomy and physiology; of this number, 192, one-third, or close upon one-third, were referred for three months; and I am informed upon the most reliable authority that in by far the majority of instances the cause of rejection was ignorance of the anatomy of the bones. Men have gone up who could not tell a clavicle from a first rib; others might have guessed at a femur, but as to which side of the body it belonged was a problem quite beyond their powers to solve. I am well aware that the mere systematic detail of dry bones, as taught in the schools, is necessarily extremely dry work, but it cannot be helped. But, dry and uninteresting as this study may at first sight appear, it in reality presents an almost inexhaustible field of interest and instruction, if you will only look below the surface. Do not rest satisfied by being taught, but endeavour to teach yourselves, and in the quietude of your own rooms take any one bone—I care not which—and, having mastered the several details, ask yourselves the questions, In what part of the body is this bone placed? what has it to do in that situation? and how is it adapted to perform its functions? Study not the external configuration of a bone only, but its internal structure also, and see how admirably that internal structure is designed to fit it for its uses. You will thus convert a mere dry routine study into an interesting and instructive amusement. You will thereby so firmly impress the shape, structure, and uses of the bones upon your memories, that in the hour of trial you must succeed; and upon this subject, at all events, rejection will be an impossibility. You will the better appreciate this advice when you learn that, in accordance with the new regulations of the College of Surgeons, your examination upon the skeleton will not be confined, as heretofore, to the point of insertion of such and such a muscle, the attachment of a ligament, or the groove for an artery or nerve, but you will be exercised in practical details, especially with reference to the application of anatomical facts to surgery, and the methods of proceeding, and the manipulations necessary to detect the effects of accident on the living subject; and I may well ask how you can possibly expect to be able to undergo such an ordeal if you do not, by careful study of the shape and peculiarity of the dry bone, acquaint yourselves with the influence it exerts on the configuration of that region of the body in which it is placed?"

Mr. Hancock referred to the exertions made at Charing Cross Hospital to meet the demands of the examining boards, especially the College of Surgeons.

"I have already alluded to the recent date at which the new regulations were passed or decided upon; and, although no time was lost in the matter, it is barely ten weeks since Mr. Few, the respected treasurer of the hospital, was first informed of the position in which our school and hospital were thereby placed, and of the inadequacy of the then existing arrangements. The number of beds has been increased to 150, accommodation for additional nurses has been supplied, a new chemical laboratory has been built, a new and large dissecting-room, a new museum, an enlarged *post mortem* room, a special room for microscopical studies, and convenient rooms for the lectures have been provided. Nor have the comforts of the students been neglected, since the alterations comprise a new and enlarged library and reading-room, locker-rooms, lavatories, etc.; so that the school-department of the Charing Cross Hospital, from having been most inadequate and inconvenient, may now fearlessly assert its own position among the similar competing establishments of this metropolis. In making this observation, I would guard myself from the supposition of being guilty of the folly of comparing this hospital, for architectural beauty, wealth, or magnitude, with such splendid institutions as Guy's, St. Bartholomew's, or the new St. Thomas's Hospitals; neither do I here intend to enter upon the disputed question whether a student can learn his profession better at a large or a small school. What I would assert—and most conscientiously assert—is, that at the Charing Cross Hospital School of Medicine you have as good opportunities of learning your profession as at any other

school in the kingdom. You now have adequate and well-arranged school-buildings, and you have a most painstaking, conscientious, and talented staff of teachers, unsurpassed by those of any other institution in London.... During the last year, the percentage of rejections of students from this school in the primary examination on anatomy and physiology was smaller than that of any of the schools in England, save in one solitary instance. Whilst the percentage of rejections in some schools was as high as fifty, and the average of all was thirty per cent., that of this school was only seventeen per cent., whilst at its more successful rival it was sixteen per cent."

Mr. Hancock next referred to the interest and energy displayed by the architect, Mr. Thomson, and concluded with offering some good advice to the students.

MANCHESTER SCHOOL OF MEDICINE.

THE opening lecture was delivered on October 3rd by Mr. LEO GRINDON.

The lecturer adverted to the grandeur of the privilege and prerogative of the medical man. In the hands of the physician lay all the conditions of the world's happiness and wealth. The proximate basis of everything which supplied life with amenities and solace was the *mens sana in corpore sano*. It was not simply of blood and brain that the grand forms of wealth were born. They came of vigour, that proud and patrician quality of the human frame of which the medical man was the conservator and the trustee. The great inventions or discoveries of modern times were not originated and developed to their perfection by invalids, by men with headache, rheumatism, and gout. Vigour laid the Atlantic cable. Vigour devised the microscope; vigour investigated the sunbeam. Vigour was only a synonym of nature; but, then, nature meant faithfulness and implicit obedience to hygienic principles, such as constituted the kingdom of the medical man. Disease was not to be regarded as an evil inseparable from human existence. Did it not bear to the sum total of the bodily functions the relation which "accidental lesions" bore to the organs themselves? Both were due to some rudeness, or to some unjust and unkindly treatment of the frame or of the organs, inflicted possibly long before—perhaps in a previous generation. It was no more an original and integral portion of the economy of nature than was a broken arm or an injured eye. The popular superstition regarding the medical man was that he was a species of conjuror, armed with an antidote to every possible form of malady. His high and essential duty was to preserve things in the condition intended by nature for them; aiming, indeed, to mitigate suffering *per se*, but holding at the same time to his first and highest principle, which was to give no opportunity for disease and suffering to enter. The *beau idéal* of medicine was the perfecting of vitality, so ordering the household that disease should find no point of entrance. Nature always acted the Trochu for her beautiful, though it might be for a time unhappy Paris. Medicine had the illustrious task deputed to it of furnishing such supplies as should compel the attacking force to raise the siege and withdraw discomfited. Without wishing to underrate drugs, he contended that if every drug in the *Pharmacopœia* were taken away, the medical profession would still be powerful for good, falling back on man's primitive relations with benignant nature. Now-a-days nature was helped to regain her sovereignty, not unfrequently through the adoption of formulæ of treatment quite independent of what was popularly styled medicine. He commented on the opinion of Professor Huxley that both chemistry and botany should be omitted from the curriculum of study in medical schools. It might be that Professor Huxley objected rather to the particular portion of botany to which the student was too often required to give his first attention. The student who was wishful to learn how to distinguish *dulcamara* from *belladonna*, and to possess clear notions of the general aspect of deleterious plants as contrasted with harmless ones, could not be expected to feel gratification or encouragement from the study of phyllotaxy and bothrenchyma. He did not believe that Professor Huxley, or anyone else, could deem it superfluous that the medical student, in addition to receiving a good groundwork of structural botany, with its complement of physiology, should be shown specimens, or other intelligible illustrations of every plant mentioned in the *Pharmacopœia*, and of every plant the name of which cropped up periodically in connection with deaths by accidental poisoning. The position which, he contended, should be that of the medical man, would be attained exclusively by his becoming a man of science. It was a part of the dignity of the profession of medicine that it stood on the middle of all the sciences, and, like the forum of ancient Rome, to which converged roads from every principal part of the empire, had relation with all that was brilliant in human knowledge. After some practical advice, he urged the students to sustain the dignity of their

profession, and on entering upon practice to be distinguished by their kind, delicate, and gentle treatment, as that was one of the best indications of the good physician.

LEEDS SCHOOL OF MEDICINE.

THE Introductory Address was delivered on October 3rd, by Mr. E. ATKINSON.

The lecturer began by offering a welcome to the students, old and new. The occasion was a privileged one; and the lecturer might, if disposed, dilate on a variety of subjects. He regarded it, however, as a higher privilege—indeed, a duty—to review the scope and aim of the work which both teachers and students had before them. He assumed that the object of the students was to seek that instruction which should prepare them for the practice of a noble profession; and that they or their parents and guardians were convinced that that profession was suited to their natural capabilities and their tastes, and that they had, in coming to that school, made choice of the best within reach. On the last point, he trusted that they might never have reason to change their opinion. The motive of the teachers was not emolument or mere honour; it was a desire to take part in the onward movement of medical science—a desire that the profession should maintain its ground in the advancement of accurate knowledge—a sense of duty and responsibility in assuring to those entering the profession the best possible training. Teachers and students had their certain mutual and relative duties; there was an interdependence between their parts which rendered necessary a mutual understanding. It was the duty of the teachers to draw out the students' latent powers of observation, of thought, of reasoning, of induction; to encourage them by example, and to point the way in which they might observe facts for themselves, and acquire habits of careful and exact reasoning. On the other hand, the student's part of the compact was equally stringent. According to the proverb, "One man may lead a horse to water, but ten cannot make him drink." Unless the student brought with him an earnest and steady resolve to avail himself to the utmost of his advantages, no effort on the part of his teachers could make him what he ought to be. He must consider his position as a responsible one, his duties as relative, and himself as an intelligent part of a living and working machinery.

Mr. Atkinson next addressed specially the new comers. In entering a public school or college devoted to special studies as distinguished from previous general education, a young man took his first responsible step in life. From this time, he must trust more and more to his own exertions. The responsibility incurred should be considered both in its retrospective and its prospective bearings. The students were therefore exhorted to prove, by the honest use of their great advantages, how well they appreciated what had been done for them by their parents and guardians. In their student-life, they should aim at a high standard of character and principles of conduct, taking for example those men who had made their mark in their generation, whose lives testified to the singleness of their aim, the earnestness of their purpose, the purity of their motives, and the unwavering consistency of their practice. They should also have a plan of study, taking as fixed points the hours of attendance on the lectures and the stated visits to the hospital and dissecting-room. The lecturer advised that notes should be taken in the class-room, and afterwards read up and compared with the class-books; this should be done at certain times, and not delayed. Physical exercise was commended as useful in its place; recreation being a necessity for all.

Speaking of preliminary education, the lecturer did not regard the present tests required by the examining bodies as a sufficient gauge of the acquirements which the student ought to possess. The value of a knowledge of Greek was pointed out; and it was urged that the student should, on entering the study of medicine, be thoroughly grounded in all that preliminary knowledge which would be required in dealing with special subjects. If Chemistry, Botany, and the elements of Zoology, were universally made parts of a liberal education, the transition from the general to the special would be much more easy. The standard of preliminary education must be raised; and a hope was expressed that in due time more would be heard of the wish expressed by Dr. Stokes "that the young men coming to medicine shall be educated in everything besides medicine."

The lecturer commented on the over-haste which characterises the present age. Aspirants for fame seek a reputation *per saltum*. As an illustration of the principle of "slow and sure" advance followed in the "good old days", Mr. Atkinson referred to two interesting documents recently presented to the school—the indenture of apprenticeship of the first William Hey, dated 1750, and his college diploma, dated 1768. The interval of eighteen years was not time wasted; for Hey in due time reaped a full reward, and left a name.

Mr. Atkinson advised his hearers to read the article entitled "Plain Truth to Medical Students", published in the BRITISH MEDICAL JOURNAL of September 10th, and quoted with strong approval the remarks there made on "common sense" and "experience". The first portion of Dr. Rolleston's address delivered in the Biological Section of the British Association was also described as well worthy of perusal. Although it was impossible for the student to become perfect master of all the various subjects laid down in the curriculum of study, he might, with steady systematic application, attain a thorough knowledge of the most essential matters, and a practically useful knowledge of those which are accounted of secondary importance. The means for and the method of teaching the various subjects in the school were noticed. Speaking of written examinations, the lecturer noticed two points of some importance. Answers should be clear, precise, and not too long; and they must be correct in orthography. The bad spelling too often found in examination-papers, not only in technical terms, but even in common words, spoke volumes as to deficiency in early training. Answers should also be to the point; they should satisfy the questions, and no more. In speaking of the hospital practice, Mr. Atkinson urged the necessity of patient and cautious watching of a number of similar cases. Students should not trust to memory, but take notes; and they should not omit attendance on clinical lectures. In conclusion, he warned them that they would not cease to be students at the termination of the *status pupillaris*. "A life-long campaign of self-denying work will be before you. But let not this discourage you. It will be your glory to do good in your generation. You will not be content with a humdrum mediocrity on the one hand, or with a barren fame on the other. You will strive, as thoroughly equipped scientific medical men, to do your duty; to be useful members of society; to deserve the esteem of your brethren and the confidence (if not the gratitude) of your patients; and, better than all, to have always a conscience void of offence towards God and towards men."

"Let us then be up and doing, with a heart for ev'ry fate,
Still achieving, still pursuing, learn to labour and to wait."

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE.

DR. T. C. NESHAM delivered the Inaugural Address.

Having referred to the marvellous increase of knowledge in the present day, the thirst for knowledge, which is stronger than ever, and the benefits derived to man from knowledge, he went on to say that there was no knowledge so ennobling to the human mind, no power so rich in benefit to the human race as that of the skilful surgeon and accomplished physician. The lecturer had not time to look back on the history of medicine nor to trace its gradual development, but proceeded to speak of medicine as we find it to-day, and of the means of acquiring a knowledge of it. It was necessary, in the first place, that the mind should be properly trained for its acquisition; and education was not only the teaching of the mind to receive what was already known, but also to regulate and strengthen the faculties that they might discover further truths for themselves. Dr. Nesham spoke of the great improvement in the system of teaching even in his own time, and then passed to the course of study which the students might best pursue. The scientific investigation of diseases must not cease with the gaining of the diploma; it must go on through life—the grey-haired physician who had gained honour and distinction in his career being more a student of medicine in his old age than when he first walked the wards of the hospital. Medicine must be studied scientifically and practically; all the aid which philosophy and logic could give must be applied, and, whether the inductive or the deductive method were used, every step must be verified, or the completed theory will be but a source of danger. He cautioned his hearers against the error of mistaking symptoms for disease, and advised them never to prescribe for a patient without first examining all the functions. There was much to be learnt from the examination of the dead, which should be entered upon with feelings of reverence and awe, the mind bent upon scientific investigation for the benefit of the living. He also spoke of the means of obtaining a knowledge of drugs. It was rather the action of medicines than their manufacture that should be investigated; and he looked forward to the time when the medical practitioner would be paid for the work of his brains and not for the number of his bottles. In order to be true students must be practical, and in order to learn their profession they must trust in every stage of their education to their own individual work, assisted, not driven, by their teachers. Dr. Nesham then referred to the changes in the Newcastle College, especially its recent incorporation with the University of Durham. The students were no longer obliged to divide their time between Durham and Newcastle, but could work

out their professional knowledge in the midst of the institutions absolutely necessary for practical instruction. In conclusion, he asked them on the threshold to consider well the undertaking upon which they were about to enter. He could not promise them any chance of high state distinction, or any great access of worldly riches; but they must have a higher aim than the statesman's ambition, and a nobler object than the merchant's fortune. They must love knowledge for her own sake, and wield the power she confers for the benefit of their fellow-men.

QUEEN'S HOSPITAL, BIRMINGHAM.

THE session at this hospital was opened with an Address by Dr. FLEMING, the Senior Physician. In the course of his address, the lecturer pointed out that medicine is a difficult study, from the extreme complexity of its phenomena, both as a science, and still more as an art. This he endeavoured to make clear by entering rather fully into the relative position of the several sciences, and their bearing on medicine; and by pointing out the important relation between medicine as a science and medicine as an art, or, in other words, wherein consists the connection between the theory and the practice of the profession.

"The sciences do not constitute an anarchy, nor even a republic, but a strict and well-ordered hierarchy—every intermediate science building on the results of the preceding, and becoming in turn a foundation for the next in order. Mathematical science stands first, as an introduction to all science. There is no existing body that does not admit of being numbered and measured; there is, therefore, none whose phenomena are not complicated with mathematics. To it succeeds astronomy—being the first which treats of real existence. Then follow physics and chemistry, which close the list of those sciences which occupy themselves with the laws relative to inanimate matter. The higher sciences are those which discuss the phenomena peculiar to living beings. Physiology stands at the base of this series, and serves as a fitting introduction to the great sciences of medicine, sociology, and morals. Therefore, as every problem in medicine involves for its successful analysis, a knowledge of the physical and chemical phenomena which are blended with and inseparably associated with the living functions, a greater or less complete acquaintance with the wide range of knowledge indicated above, is necessary to every well-informed medical student."

After a brief allusion to the variety of views advanced on the subject of medical education, Dr. Fleming addressed those who would soon complete their collegiate education.

"Medicine comprises two kinds of knowledge, the theoretical and practical, or, in other words, the science and the art. The science knows, the art does. The science embraces all our knowledge bearing on the nature and treatment of disease; the art of medicine detects, cures, and prevents it. For example, the science of consumption teaches all we know of the causes, seat, symptoms, and progress of tubercular disease of the lungs; the art says, give cod-liver oil in phthisis. In chlorosis, the science informs us of all we know of its causes, symptoms, and morbid changes. The art of medicine says, give iron as a remedy. The art of medicine thus consists of a series of rules of action directing us how to cure or prevent the disease, which the science has enabled us to understand.

"But we are reminded that there are many arts which are followed daily with much success, where the practitioner is in part or even wholly ignorant of the science or sciences on which they are founded. For example, the photographer uses certain chemical solutions and employs certain optical instruments, in accordance with rules founded upon the sciences of optics and chemistry; but he may, and does, for the most part, succeed in his art, though perfectly ignorant of the sciences on which it is founded... That the like cannot be done with safety in medicine, is obvious from the following considerations.

"When the science on which the art is founded is perfect, the rules which form that art are certain, and admit of universal application; and the more nearly the science approaches perfection the fewer exceptions do we find to the rules in the arts dependent on it. Thus, astronomy furnishes a fixed code of rules to the art of navigation. A like relation obtains between the science of physics and the art of mechanical engineering; between the science of chemistry and the arts of electroplating and photography; and he who desires to practise any one of these arts has only to commit to memory its rules, and to follow them accurately to ensure success. He may meantime be quite ignorant of the science; and this is, in truth, the position of the great majority of those who profess these arts. But it is far otherwise in medicine. At present the science of medicine consists of a number of groups of biological facts, often unconnected by any known fundamental laws; therefore, though, in the greater number of cases, certain effects follow the employment of certain remedies, there are always sufficient excep-

tions arising from complications impossible to foresee, which serve to remind the practitioner that he has to deal with vital phenomena of very complex and uncertain nature, and compel him to fall back constantly for help and guidance on the science from which his art springs...

"It is the recognition of the complex and varied nature of every pathological condition to which man is subject, which makes us regard with suspicion the majority of so-called specifics. There are, doubtless, certain drugs which neutralise certain poisons, or correct certain unhealthy conditions of the human body; but, unfortunately, in the hands of the ignorant or inexperienced, these may be as powerful for evil as for good, from the want of that enlightened and educated power of observation which enables the watchful physician to detect and provide for each unforeseen complication as it arises. Were the public more cognisant of this truth, it would put a stop to a large amount of evil which now exists. The ignorant and inexperienced would be roused to some sense of the danger of advising their friends to use some medicine, or undergo some mode of cure from which they may have derived benefit, being all the time probably in total ignorance of the complex nature of the ailments which they are more likely to aggravate than relieve; and amateur doctoring would be looked upon as too dangerous a pastime even for the most adventurous.

"It is a sincere conviction of the great value of this physiological truth that induces the man of science, experience, and principle earnestly to warn his patients against the dangers of those 'infallible cures' and 'universal remedies' with which the charlatan and the knave delude the weak and the unwary."

Dr. Fleming then referred to a few points relating to the kind of knowledge which students should strive to attain, and explained wherein lay the difference between living knowledge ready for instant application, and that which was practically dead for useful purposes. Besides the acquirement of knowledge by the student, there was something more requisite in the practitioner.

"You must have the art of getting, and the tact and power of keeping the patients on whom to exercise the knowledge you have acquired. It is here that good sense, knowledge of the world, kindness of temper, self-control, and general culture assert their value. We often see the genuine student, by a too exclusive attention to professional studies, and the neglect of those equally important moral and social qualities, lose ultimately the reward he so well deserves. The world is very exacting in its estimate of what a medical man should be, and in the 'fierce light which beats' about his position, little errors, weaknesses, and peculiarities (not to speak of graver faults) stand out with a startling prominence. I would, therefore, urgently remind the young aspirant not to forget that his future and his success will be found in the world, and that he must study its healthy ways, and conform in some measure to its conventional rules, if he would gain that vantage ground from which the highest success can alone be reached. I do not mean by this that he should practise the cunning and wiles of common men, much less that he should condescend to the unmanly position of him who, from motives of interest, is ever 'All things to all men.' But, while perfectly maintaining his own self-respect, he should cultivate the art of making friends, and of gaining their esteem and confidence, a faculty which may be carried, even to the highest perfection, by him whose cheek would burn at the mere thought of stooping to the unworthy artifices of the toady and the time-server. Gentle forbearance with the selfish and irritable, ready sympathy with the suffering and unhappy, quiet firmness exercised over the weak and vacillating, command not only the esteem and confidence of men, but may be, and often are, associated with the conscientious discharge of the highest duties.

"Again, in your relations with your professional brethren be always fair and honourable to their interests and their good name. Avoid earnestly that jealousy of the labours and of the success of others, that disposition to misconstrue good, and to suggest bad motives, which so often embitters professional life; it is cowardly, unmanly, and poisons the very springs of that 'charity which thinketh no evil.' Generous habits of thought and action, in relation to other men, give proof of true wisdom, and are among the noblest results of a refined culture.

"Carefully avoid a cavilling and sceptical spirit. Honour your profession; believe earnestly in its great and acknowledged truths. The study of no profession can begin with scepticism, much less should it end with it. Of all blighting influences it is the worst, not only withering and destroying belief in the first principles of our art, but paralysing every power of inquiry, and corrupting at its very source the well-spring of knowledge... As sensible would it be to despise and question the advantages of telegraphy, because the laws of electricity are not yet completely defined and understood, as to throw away the assured and unquestionable benefits of medical art, because its fundamental principles have as yet eluded the grasp of the philosopher.

"But, while warning you against the danger of a carping scepticism

and the shallow folly of indulging in a contempt for the labours of others, it must not be forgotten that a heedless acceptance of, and a facile belief in, every plausible theory that presents itself to your notice, is equally unwise. As a rule, all new truths gain practical acceptance only after a considerable length of time, and after having undergone the keenest criticism and the most searching inquiry. . . . An impulsive and hasty opinion given on insufficient observation, and without due caution and reflection, even in the every-day affairs of life, is the characteristic of a fool, and meets with deserved contempt. How much more unworthy, then, is it to give a thoughtless and blind adherence to every fair-seeming innovation in the art of medicine, which, as I have before stated, is from its very nature liable to so many sources of fallacy.

"Do not be saddened and disappointed if success be long in coming, and not so brilliant as you had once expected. It is not given to every man to be honoured, courted, and raised above his fellows. Nor is such an one necessarily happier than he who cheerfully does 'the duty that before him lies', however simple and humble it may seem.

"In conclusion, I desire for each and all of you a strong clear mind, a heart full of courage and of kindliness, and a deep sense of your responsibility both to God and man—so

"——— falter not—'tis an assured good
To seek the noblest : 'tis your only good
Now you have seen it ; for that higher vision
Poisons all meaner choice for evermore."

QUEEN'S COLLEGE, BIRMINGHAM.

MR. BERRY delivered the Introductory Address.

He referred to the progress of the College, and expressed himself hopefully of its future. He believed that the progress of the provincial schools was an encouraging proof, not merely of the general diffusion of high cultivation among the profession, but also of advance in middle-class education. The legislature had given an act for national education, which, the lecturer hoped, would be efficient in its operations, and beneficial in its results. But there was also the want of a good middle-class education in public and grammar schools, so as to fit the pupils for any and every sphere of life. It was not merely requisite that the classics and mathematics should be taught, but super-added to them were required the modern languages, and the elements of the arts and sciences, to prepare our youth either for professional or commercial pursuits. To show that grammar schools are capable of such an extension of education, Mr. Berry referred to King Edward's School in Birmingham. As far as medicine was concerned, the profession had a right to demand that our Medical Council shall be properly constituted ; that the various grades of our profession shall be truly represented ; that the education in the three kingdoms shall be more uniform ; and that the members of our profession shall have perfect freedom to practise untrammelled by mediæval privileges. Mr. Berry said that his special object was to show that, whilst practical science has been making during the present century great and rapid advances, medicine has achieved results as striking, and advanced with strides as rapid as in any one department of science. Whilst she willingly acknowledges the advantages and benefits which she derives from the discoveries in the sister sciences, she uses them, as well as her own, only as a means of, and subservient to, the alleviation of suffering and prolonging the existence of the human race. He spoke of, and gave some illustrations of, the progress made in medicine and its accessory sciences during the present century. He referred to the more clear and correct views of the pathological doctrines of inflammation, as exemplified in the more modern and simplified management of wounds and injuries, in the improvement of individual operations ; the introduction of new operations ; the inestimable advantage derived from chloroform, which permits the surgeon to recommend operations which before its introduction the voice of humanity would have rejected as too painful and horrible. The advance in medicine had been as remarkable as in surgery. Physicians had, among other things, learnt to know more precisely when they ought to strike in to aid nature with the resources of art, and when they ought to leave nature to her own unassisted efforts. Every step of true progress in this knowledge formed, undoubtedly, a step of true advancement in practical as well as scientific medicine. He then addressed himself to the students, and told them that their feelings were not unknown to him, for they must be similar to what he himself experienced when he occupied the situation which they did. They had chosen a profession beset with early struggles and difficulties, but a profession in which anyone using the means proper for the purpose, and persevering, would rarely fail to succeed in gratifying a reasonable and lawful ambition ; and, in conclusion, he assured them that no man ever reached, and that no man ever

could reach, great reputation and great excellence without great exertion.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

THE Introductory Address was delivered by Dr. J. C. BROWN, on October 3rd.

The address began by welcoming new and old students and those who, though not students, showed by their presence that they took an interest in medical education. The practical tendency of reform in medical education was referred to ; and the student was urged to pay more careful attention to the systematic courses of lectures which he attended, with the view of seizing upon the principles and laws of each branch of science which he studied, and learning such facts as either illustrated those principles or had some special bearing upon the art of healing, rather than make himself profoundly versed in all the details of one particular science. "Your knowledge," said the lecturer, "must be acquired with a view to the cure of disease ; you must not only know, but act ; and you must know in order that you may act."

The evils which arise from the multitude of examining and licensing bodies were noticed ; and students were advised to aim at the highest degrees in medicine and surgery, not so much on account of the honour and position which they would bring, but rather on account of the stimulus which they give to the acquisition of a sound and liberal education. The great facilities which the Liverpool School affords for gaining a high class education, both in practical and theoretical subjects, were pointed out ; and the improvements which have been made during the last year were enumerated. The Materia Medica Museum has been entirely renewed, and a series of beautiful specimens have been arranged alphabetically in convenient cases ; while duplicates are open to the closer inspection of students.

The Library has been largely increased ; and the Pathological Museum has been increased by the transfer to it of the collection which belonged to the Liverpool Medical Institution ; a catalogue has been drawn up and printed in order to facilitate reference and increase the usefulness of this valuable museum, which is an ornament not only to the school, but to the town of Liverpool. A new room has been built to increase the laboratory accommodation, and new pieces of apparatus are continually being added to the chemical department. In connection with the Chair of Physiology, a Demonstrator of Practical Physiology was appointed early last session, to give regular instruction in histology ; and the hope was expressed that ere long a Physiological Laboratory would be obtained ; and that the accommodation and appliances for teaching would continue to be increased year by year.

But whatever facilities are afforded for gaining knowledge and practical experience, the progress of himself and the School rests with each individual student ; for the most important part of every man's education is that which he gives himself. The first requisites to successful study are : steady application and concentration of the mind on the subject studied, and a retentive memory. The latter may be acquired by (1) repetition ; (2) by associating new facts with old ; and (3) by referring facts to the principles which they illustrate.

The student was urged to exercise great discrimination in the choice of amusements. Recreation, in order to benefit, must either be such as will exercise the physical powers, and develop the bodily frame, or it must sharpen the intellect and stimulate the mental activity. Finally, the lecturer pointed out that success in alleviating suffering is the great aim of a medical practitioner's life ; and that it is by keeping this aim constantly in view, that activity will be best aroused, mental power quickened, and the heart strengthened for struggles.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PATENT SURGICAL SILK-CORD.

A NEW kind of surgical silk for sutures and ligatures has been submitted to us. It is manufactured expressly for Arnold and Sons, 35 and 36, West Smithfield, London. It is free from all dressing or colouring matter, being the pure silk only. Its recommendations are that it does not twist or curl when used like the ordinary silk ; it is of a plaited texture, which considerably increases its strength. It can be supplied either in hanks, or wound on a neat tablet in case, containing four assorted sizes, so as to suit the pocket-case. It is sold at a moderate price.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 8TH, 1870.

THE INTRODUCTORY LECTURES.

THE subjects chosen this year by the introductory lecturers show the usual range, and are of quite the average standard of interest and ability. Some orators select special subjects of medical interest; others address the new students on the responsibilities, excellencies, and difficulties of their chosen career, with much eloquent comment and excellent advice thereon. We heartily hope that it will be utilised; and we can only express the wish that these ornamental discourses will not be considered to dispense individual lecturers from more practically and continuously introducing the student to proper modes of study and conduct in each subject and class. Among the addresses which select topics of the day for discussion, that of Mr. Berkeley Hill at University College Medical School has the merit of choosing one of absorbing interest just now—aid to the sick and wounded on the field of battle. Mr. Hill has given further actuality to the subject by visiting the ambulances at the seat of war, and describing what he has seen there. We have selected this address for publication at length. There are others which are not without special interest from their selection of subjects. Mr. Wood at King's College, and Mr. George Gascoyen at St. Mary's Hospital—both experienced teachers of anatomy, and many years versed in the ways and manners of medical students—have much of interest to say concerning medical education. Mr. Wood is "aware that an opinion has been spread to some extent that, with the great facilities now afforded by admirable books upon all the subjects of a medical education, lectures are a mistake, schedules an abomination, and marking a totally unnecessary restriction upon freedom of action." The result of such a liberty for procrastination, even with yearly recurring pass-examinations, would, he feels sure, "be a general postponement of all serious application until within a few months of the examination, and a resort to charlatan grinders who profess to put men up to passing in all the 'ologies' as deftly and easily as a conjurer dupes his admirers." Mr. Wood probably refers to the well known Minute on Education prepared by Mr. Simon, Dr. Russell Reynolds, Mr. De Morgan, and Mr. Ernest Hart, for the Medical Teachers' Association, and adopted with modifications by that Association. He somewhat overstates the first "opinion", and is evidently unaware, from the frightful picture which he draws of the results of a greater freedom in the system of education, how little such prophecies have been verified in the not altogether benighted medical schools and universities of Germany and France. Mr. Gascoyen adopts the conclusions of the Teachers' Association much more unreservedly; unless, indeed, as may very probably be the case, he states throughout the result of his thoughtful observation and experience, unaware how much it accords with those conclusions. He dwells on the deficient general education of the majority of medical students, and the excess of collateral subjects of study

crowded into a short time. To meet these difficulties, the lecturer proposed that the preliminary examination in Arts should be made at least equal to the matriculation examination of the London University, as anything short of this would be insufficient to obtain an educational superiority on the part of the profession; that every student should be required to pass an examination in chemistry, botany, comparative anatomy, and natural philosophy, before he joins a medical school; and that he be at least eighteen years of age; that he should pass four full years at the school and hospital, and at the expiration of these pass one other year in active professional work, as assistant to a practitioner, house-surgeon at a hospital, etc., before he be allowed to register his diplomas and practise on his own account. A clinical examination was also insisted upon as a *sine quâ non*. The waste of time, money, and energy, caused by the support of many schools of medicine, was commented upon, and Mr. Gascoyen advocated their amalgamation into two medical colleges, where the professors should be paid such incomes as would ensure the best available teaching-power, and attach them permanently to their Chairs; whilst the several hospitals could still be used for clinical purposes. No one can doubt that the suggestions which Mr. Gascoyen here pithily summarises would materially raise the standard of medical education. The objection has been raised, that practitioners so well educated would disdain the ill-paid work of attendance in dirty town districts and poor rural places among the lower classes. There is a better hope in bringing the remuneration up to the standard acceptable to a class of well-educated gentlemen, than in lowering the grade of gentlemen employed to suit the remuneration offered. Mr. Gascoyen's solution offers the preferable alternative.

ENGLISH WATERING-PLACES.

No. II.

YARMOUTH, LOWESTOFT, and CROMER.—This group of watering-places, lying on the extreme eastern coast, has many attractions for those to whom a "bracing" air is a desideratum. The large increase of population observed at the last census to have taken place in the two towns first named, is attributable partly to the extension of the fishing trade, and partly to their growing popularity with the multitude of annual holiday makers as health and pleasure resorts.

YARMOUTH is one of the exceptional instances where a registration subdistrict is coterminous with the old parish and the new local board boundary; the areas for mortality statistics and for sanitary purposes are therefore uniform. Yarmouth also is a municipal and parliamentary borough, the limits of which include not only the parish of Yarmouth, but also the adjoining parish of Gorleston, which latter forms part of the registration subdistrict of the same name. The coincidence above noted between the registration and sanitary areas appears to have been disregarded by the Registrar-General, who has elected to give for Yarmouth, in his return, the mortality of the two subdistricts which form the entire parish of Yarmouth *plus* the subdistrict containing the parish of Gorleston. The area which he has taken is, therefore, not in accordance with the sanitary area; and it is larger by 8,000 acres than the area for municipal purposes. The effect of including this large tract of rural district seems to have been just what we should have supposed, namely, to give a death-rate below the true mortality of the town of Yarmouth. For we find, in one of the Registrar-General's previous reports, that the average annual death-rate of the district (*i.e.*, parish) of Yarmouth in the ten years 1851-60 was 25 per 1,000, while the corresponding rate for the Registrar-General's watering-place area was not quite 24 per 1000. It is so far satisfactory to know that there has been a decreasing mortality in this latter area from 23 to 21 per 1,000 annually, on comparison of the last quarter with its predecessor of 1869.

LOWESTOFT subdistrict comprised, in 1861, a population of 12,952, occupying 13,927 acres of ground, and experienced in the June quarters of both 1869 and 1870, an annual death-rate of 15 per 1,000. The town within the limits of the Lowestoft Improvement Act of 1854 con-

tained 10,663 persons in 1861, its area being about 2,000 acres; it includes parts of two registration subdistricts.

CROMER is one of twenty-two parishes forming the subdistrict of the same name; but, as its population (in 1861) was only 1,367, while that of the whole subdistrict was 7,145, we have no means of arriving at even an approximate death-rate for the town. The subdistrict appears to have been very free from epidemic disease last quarter.

Passing now to the group of south-eastern watering-places on the coasts of Kent and Sussex, we come first to that spot consecrated above all others to the use of London citizens and their families—MARGATE. Its proximity to town, its facilities of access, and its own intrinsic merits, have combined to invest Margate with a popularity which, however much it may be derided by “superior” persons of aristocratic proclivities, at least shows no signs of being on the wane. Rather there are indications of great progress, as appears from the following statement quoted from a recent number of the *Builder*.

“A great start is to be made at Margate westward, the Hartsdown estate having come into the market. Two hundred new houses will shortly be added to the town in this direction, close to the two railway stations; and a large hotel, communicating with the London, Chatham, and Dover Station by a covered way, somewhat after the style of the Lord Warden Hotel at Dover, is about to be erected. The rapid increase of the town during the last five years, and the great success of the large Cliftonville Hotel, on the Fort, show that the new enterprise, the land being so much more easily reached, is a promising one. Margate jetty is to be enlarged and improved; and the directors have offered three premiums to a limited number of engineers for the best plans for effecting this at the cost of about £11,000. The jetty has become such a favourite place of resort—a remarkable feature of the town, in fact—that money well spent upon it will bring a good return, and benefit the place.”

Thus far the outward and visible marks of prosperity are sufficiently manifest. But what is the sanitary condition of the town? We observe that the mortality returns for the subdistrict, which is coterminous with the parish of (St. John's) Margate, were high (annual death-rate 23 per 1,000) in the June quarter of 1869, and higher still in the last June quarter (mortality, 30 per 1,000); out of 76 deaths in the latter period, 9 were returned from scarlet fever, and 3 from fever; and a note in the quarterly return states that 19 visitors and 9 hospital patients were among the deceased. A high death-rate in Margate has often been the subject of remark in the Registrar's reports; and Mr. Mottley has devoted much ability and labour to the demonstration that the normal population of the town enjoys a remarkable degree of health, the unfavourable results only appearing when the inhabitants are (so to speak) handicapped with visitors whose ailments, contracted elsewhere, are brought to Margate for their fatal issue. We profess ourselves unwilling to embark in so complicated an inquiry as this attempt to discriminate between the normal and exceptional population of a watering-place, the difficulty of arriving at a satisfactory conclusion as to the length of sojourn which should be held to constitute citizenship being to our minds considerable. If it can be shown that visitors do not contract disease at Margate, but bring it with them from some other place, of course it would then be held unfair to charge their deaths to the mortality account of the town. If there be evidence upon this point, it has escaped our notice. As regards site and what may be called natural hygienic conditions in general, there is no question that Margate is most advantageously placed. “The whole town”, says Mr. Mottley, “is exposed to the influence of the prevailing winds; the air is pure, clear, and temperate; the soil is dry, antiseptic, percolative, and absorbent; the vast substratum of chalk affords an inexhaustible supply of excellent water.” If our memory is not treacherous, we have seen statements which raise a doubt whether the absorbent nature of the soil is a fact as well understood and appreciated by the local authorities as it ought to be. With a well ordered and complete system of sewerage, a porous soil is an undoubted advantage; but where there are cesspools, an absorbent soil becomes a source of the utmost danger. We should be glad to learn that cesspools in Margate are now numbered among the things that have been, but are not. Thoroughly sewered, and provided with

good water, Margate ought to be one of the most healthy spots in the kingdom.

RAMSGATE, with its fine sands, bathing accommodation, and abundance of amusements, deservedly enjoys an enormous amount of popular favour, as the increasing number of yearly visitors testifies. Building is going on extensively, and the easy access from the metropolis which it shares with Margate, will no doubt sustain its popularity. Ramsgate has a local board whose jurisdiction embraces the whole parish, with a population, in 1861, of 11,865. The registration subdistrict comprises the parishes of Ramsgate, St. Peter, and St. Lawrence, with a total population, in 1861, of 18,007; the subdistrict mortality in the June quarter of 1869 was at the annual rate of 27 per 1,000, while last June quarter the ratio was 20 per 1,000. The death-rate of the parish appears to differ greatly from that of the subdistrict, for it was stated last year by Mr. Hicks, surgeon, of Ramsgate, that the parish mortality was only 18 during the same period that the subdistrict mortality was 27. The average annual death-rate of the parish is, according to Dr. Canham, about 17 per 1,000, correction being made for visitors, sailors, etc.

DEAL is one of eight parishes forming the subdistrict of that name, with a total population, in 1861, of 12,105, the parish of Deal containing 7,531 out of that number. A subdistrict death-rate, therefore, would convey no information as to the salubrity of Deal proper.

DOVER.—The population of the municipal borough in 1861 was 25,325, and the limits are the same for sanitary purposes. The nearest approximate registration area is made up of the two subdistricts of St. James and St. Mary, with a population in 1861 of 23,333; this area, however, includes seven parishes which are not in the borough, and excludes one parish which is within the borough. The death-rate in the two subdistricts averaged 18 per 1,000 annually during the 10 years 1851-60; in the June quarter of 1869 and 1870, the average annual rate was a little over 16 per 1,000.

HASTINGS and ST. LEONARDS.—Called by different names, and professedly enjoying different classes of patronage, these twin sister bathing places, as regards the evidences of salubrity, call for no distinction here. They are both comprised within the subdistricts of All Saints and St. Mary in the Castle; whereas, for municipal and sanitary purposes, the parish of Ore in another subdistrict is included. The average annual mortality (1851-60) of the two subdistricts was 17.8 per 1,000, while the annual death-rate in the June quarter 1869 was 15.4, and in the same quarter this year 20 per 1,000.

EASTBOURNE.—The subdistrict of this name comprises eight parishes, with an aggregate population in 1861 of 8,127, of which 5,795 formed the parish or town proper of Eastbourne. The subdistrict death-rate averaged 17 per 1,000 per annum in the ten years 1851-60; but it would be only misleading were we to quote the calculated mortality for more recent periods, inasmuch as the present population of Eastbourne town is said to be 10,000, while the official estimate for the whole subdistrict barely exceeds that number. We know from Dr. Thorne Thorne's report that from defective sewer-ventilation and other causes, typhoid fever prevailed in parts of the town during the autumn of 1868; but the defects were easily remediable, and, as they have been wholly or in great part remedied, we may conclude that the town is now in a healthy condition. From the last quarterly return, it appears that Eastbourne had been signally free from scarlet fever; and if this immunity continues, so fortunate a circumstance should prove one of the strongest recommendations of the place to visitors.

WORTHING.—This town is stated in the census returns to have had a population of 5,805 in 1861, but so rapid has been its progress that it is said now to number 10,000 inhabitants. The South Downs effectually keep off the north and east winds, and the general mildness of the atmosphere renders Worthing a desirable autumnal resort. The sanitary arrangements are described to us by a local correspondent as excellent, so far at least as regards the two important matters of drainage and water-supply are concerned. We regret that we cannot test the efficacy of these arrangements by the death-rate; forasmuch as the Registrar-General, in his table of watering-place death-rates, has, in the

case of Worthing, taken for his unit of area the registration district, consisting of some twenty-four parishes, and having an aggregate population of 18,921 in 1861. The object appears to have been to give the approximate death-rates of Worthing and Littlehampton, though what sort of approximation could have been expected to result from swamping these two towns with the town of Arundel and a host of country villages scattered over 40,000 acres of area, we cannot conceive.

With this last glaring example of the uselessness of our present mortality statistics as guides to the health condition of towns, we close for the present an inquiry which thus far we venture to think has been conclusive as to the imperative need for a reform which shall provide for the exhibition, at frequent intervals, of death-rates for towns.

THE subscriptions up to this date towards the funds of the British Society for the Sick and Wounded amount to nearly £235,000.

THE next annual meeting of the Medico-Psychological Association is to be held in London under the presidency of Dr. Maudsley.

MR. HAMMOND has resigned the office of Surgeon to Addenbrooke's Hospital, Cambridge.

THE first meeting of the session of the Medical Society of London will be held on the 17th instant, at 8 P.M.

IT is expected that at least £6000 will be handed over to the Birmingham General Hospital, as the profit of the late Musical Festival.

DR. GUNNING S. BEDFORD of New York died on September 5th. He had a high reputation as an obstetrician.

THE new ophthalmic wards at St. Bartholomew's Hospital, which we have previously described, were opened on the 1st October.

THE Philadelphia *Medical Times* says that it is reported that there are more than fifty vacancies in the list of assistant-surgeons of the navy, and very few candidates waiting to fill them.

DR. LOCKHART ROBERTSON having retired from the Editorship of the *Journal of Mental Science*, Dr. Sibbald, lately Superintendent of the Argyleshire Asylum, and now Deputy Commissioner in Lunacy for Scotland, has been associated with Dr. Maudsley in the office.

ACCORDING to the *Bombay Gazette*, the 15th Hussars and 59th Regiment at Mhow are suffering much from fever, brought on chiefly by the damp state of the barracks. These are on the double-storied plan, and have only lately been finished; but the inmates complain bitterly of the unwholesome leakage from roof and walls.

Nature states that in addition to the Professorial Chairs already instituted at the University of Otago, New Zealand, the Council of that University have resolved to institute a Chair of natural science, the salary of which will be £600 *per annum*, besides class-fees, etc., commencing from the day of embarkation.

YELLOW FEVER IN BARCELONA.

THE outbreak of yellow fever in Barcelona has caused a great panic among the inhabitants. It is reported that about 80,000 have left the town. Senor Rivero has visited the place, and has ordered measures to be taken for destroying the focus of infection; among these are the closing of the port, the evacuation of the maritime suburb of Barceloneta, the formation of cleansing works on a large scale, and the removal of the prisoners, the Custom House, the hospital patients, and the inmates of the Houses of Mercy. A number of army surgeons who have had experience of the disease in Cuba have been sent to Barcelona. During the five days from September 20th to 24th, there were respectively 33, 36, 55, 35, and 29 attacks; and 23, 25, 24, 24, and 28 deaths. The Spanish Government is blamed by some of the Madrid papers for tardiness in adopting precautionary measures; and it is said that, in consequence of this tardiness, other ports, such as Carthagena, Malaga, and Seville, have been acting on their own account, and adopting precautions without order or concert. The disease is said to have appeared at Alicante.

FEVER IN LIVERPOOL.

THE following is the report of the Liverpool Fever Hospital for the week ending October 1, 1870:—Remaining per last report, 1116; admitted since, 326; discharged, 242; died, 9; remaining October 1, 1870, 1191.

FIGHTING NEUTRALS.

THE *Revue de Thérapeutique Médico-Chirurgicale* of September 15th states that at the battle of Sedan five hundred surgeons and hospital nurses took part in the fight, and left more than two hundred of their number dead on the field of honour. If this statement be accurate, it will furnish M. de Thile ground for further comments on the singular manner in which some of our French colleagues interpret the conditions of the Convention of Geneva.

A NEW AMERICAN MEDICAL JOURNAL.

WE have received the first number of a new semi-monthly medical periodical which has been started in Philadelphia under the name of the *Medical Times*. The number commences with a lecture by Professor Gross on the Treatment of Strangulated Hernia, which is followed by a clinical lecture by Dr. Stillé on a remarkable case of Dilatation of the Veins of the Trunk and Upper Extremities. Dr. Hunter McGuire of Richmond describes three cases of Excision of the Os Calcis; and Dr. Bartholow of Cincinnati has a note on the Constant Current in Chronic Metritis. There are also an interesting letter from a Vienna correspondent, some notes of hospital practice, reviews of books, and gleanings from the journals. If the new journal can go on as it has begun, it will prove a very creditable addition to American medical literature.

THE ALKALOIDS OF OPIUM.

PROFESSOR ROSCOE, in commenting at the meeting of the British Association on the interesting researches of Matthiessen and Wright on morphine and codeine, observed that they have thrown a new light on the constitution of these opium alkaloids. Treated with hydrochloric acid, morphine loses one molecule of water, and gives rise to a new base, called apomorphine. This differs in a remarkable manner from morphine, both in its chemical and physiological actions; being soluble in alcohol, ether, and chloroform, whereas morphine is nearly insoluble; and acting as the most powerful emetic known, one-tenth of a grain producing vomiting in less than ten minutes. Codeine, which only differs from morphine by CH_2 , also yields apomorphine on treatment at a high temperature with hydrochloric acid, methylchloride being at the same time eliminated.

INORGANIC AGENTS OF DISEASE.

IN commenting upon the present tendency to trace the etiology of diseases to organic germs, Professor Rolleston observes that many diseases, though possibly enough not the majority of the strictly infectious diseases, are due to material agents quite distinct in nature from any self-multiplying bodies, cytoid or colloid. To say nothing of the effects of certain elements—and elements, it will be recollected, in their singleness and simple atomicity have, as the world happens to be constituted and governed, never been honoured with the office of harbouring life—which when volatilised, as mercury, arsenic, and phosphorus may be, or indeed which, when simply dissolved, may be most ruinous to life, there are, no doubt, animal poisons produced in and by animals, and acting upon animal bodies, which are neither organised nor living, neither cytoid nor colloid. Dr. Charlton Bastian is not likely to underrate the importance of such agents, howsoever produced, in the economy, or rather in the waste of Nature; yet, from his very careful record of his own very closely observed and personal experience, we can gather that he would not demur to conceding that non-vitalised, however much animalised, exhalations may be only too powerful in producing attacks, and those sudden and violent and fever-like attacks, of disease. Dr. Bastian tells us that whensoever he employed himself in the dissection of a particular nematoid worm, the *Ascaris megalocephala*,

he found occasion to observe, and that in himself, and very closely, the genesiology of a spasmodic and catarrhal affection, not unlike hay-fever as it seems, but under circumstances which appear to preclude the possibility of any living organisms being the cause of it, as they have been supposed, and by no less an authority than Helmholtz, to be of the malady just mentioned. For in Dr. Bastian's case this affection was produced, not only when the *Ascaris megaloccephala* was dissected when fresh, but "after it had been preserved in methylated spirit for two years, and even then macerated in a solution of chloride of lime for several hours before it was submitted to examination." Could any microzyme or megalozyme have survived such an amount of antizymotic treatment—such a pickling as this?

ETHNOLOGY OF THE IRISH.

DR. JOHN BEDDOE of Clifton, who is well known for his researches into the physical characteristics of the inhabitants of the British Isles as bearing on their ethnology, has published in this month's number of the *Journal of Anthropology* an article on the Kelts of Ireland. He arrives at the following conclusions. The Kelts known to the Greek and Latin authors, though they were a light-haired race as compared with the Italians, were darker than the Teutonic tribes; and their physical type differed in other respects. The Irish are, generally speaking, a dark-haired but light-eyed race; and wherever there is much light hair it may be accounted for by a Danish or English cross. The dark hair of the Irish may, partly at least, be attributed to the Gaelic Kelts. There is less resemblance between the Irish, taken as a whole, and the Basques, who are generally considered to be the purest Iberian extant, than between the South Welsh and the Basques. Any Basque or Iberian element in Ireland is probably small, and can have only partially contributed to the prevalence of dark hair among the Western Irish. Ugrian or Ligurian elements may also be present there.

THE CHEMICAL COMPOSITION OF BONE.

M. F. PAPILLON has lately communicated to the Academy of Sciences in Paris the results of some experiments on the composition of bone; from which it appears that strontian, magnesia, and alum, can be, to some extent, substituted for the lime normally present. Among his experiments was one in which he fed a pigeon, confined in a cage, with distilled water in which chlorides, carbonates, sulphates, and nitrates of potassium and sodium were dissolved, in the proportion of $1\frac{1}{2}$ gramme to the litre (about 13 grains to the pint); and with wheat rolled up in a fine paste by means of pure phosphate of strontian and the water above described, with a little hydrochloric acid. The bird suffered no inconvenience from this diet; and was killed at the end of seven months. The bones being calcined and the ashes tested, the following was found to be their composition in 100 parts: lime, 46.75; strontian, 8.45; phosphoric acid, 41.80; phosphate of magnesia, 1.80; residue, 1.10. Similar results were obtained with alum and magnesia as well as with strontian. It appears, then, that the lime normally contained in bones may be replaced by similar oxides, without impairing the general health. M. Papillon does not, however, say whether the physical properties of the bones—their solidity and power of resistance—remain unchanged.

THE ASSOCIATION COMMITTEE ON POOR-LAW MEDICAL RELIEF.

AT the annual meeting of the Association at Newcastle, it was proposed and unanimously agreed to by the meeting, "That a committee of the Association appointed at Oxford in 1868, for the purpose of considering the subject of medical relief to the poor of Great Britain and Ireland, and of co-operating with the Poor-Law Medical Officers' Association, be reappointed, with power to add to their number." We learn that the undermentioned gentlemen have already intimated their intention to become members of the Committee:—W. H. Smith, Esq., M.P., F. S. Corrance, Esq., M.P., Donald Dalrymple, Esq., M.P., Spencer Wells, Esq., Fairlie Clarke, Esq., Dr. Sansom, Dr. W. H. Farr, Dr. Carr (Blackheath), Dr. Maunsell (Dublin), Dr. F. Anstie,

Drs. Webb and Sedgwick of London, Dr. Rumsey (Cheltenham), Dr. Heslop (Birmingham), Dr. Ransome (Manchester), Randolph Robinson, Esq., Leslie Stephen, Esq., James Lewis, Esq. (Registrar-General's Department, Somerset House), Dr. Gibbon, Dr. Aldis, Dr. Barclay, Dr. Sutton, Dr. Corner (Medical Officer of Health, London), Dr. Robert Fowler, etc. It would add much to the weight which this influential body would carry with the Government and the public, if the Medical Officers of Health and leading medical gentlemen of such large towns as Bristol, Liverpool, and Newcastle co-operated in the movement; especially as we learn that it has been decided, by the originators of the conjoint committee, to strive (*inter alia*) to amalgamate the hygienic services of the state under one central control, of which the more efficient and uniform treatment of the sick poor, in England and Wales, would form an essential and important feature. Gentlemen willing to join the Committee, should forward their names to Dr. Joseph Rogers, 33, Dean Street, Soho.

ANÆSTHETICS IN HERNIA.

THE distinguished American surgeon, Dr. S. D. Gross, in a lecture on the treatment of strangulated hernia, published in the *Philadelphia Medical Times* of October 1, says: "As to anæsthetics, I give a decided preference, in this form of affection, to chloroform over ether. While, with proper care in its administration, it is equally safe, it possesses the important advantages of greater promptness of action, and much less liability of unpleasant and protracted secondary effects, as nausea, vomiting, headache, and mental and bodily depression. Vomiting, in particular, should be sedulously guarded against in the treatment of strangulated hernia, on account of its injurious effects upon the constricted bowel, and the danger of a recurrence of the protrusion. Chloral promises to be a most valuable remedy in the treatment of strangulated hernia, rapidly inducing sleep, and thus aiding powerfully in the relaxation of the system. It should be given in full doses, as thirty grains; and, if much pain exist, its beneficial effects will be greatly promoted by the co-operation of a hypodermic injection of morphia."

MEDICAL RELIEF OF THE POOR.

IN an address delivered before the Section of Economic Science and Statistics in the British Association, Professor Jevons said that, as regards medical charities, no one could for a moment propose to abolish hospitals and numerous institutions absolutely necessary for the relief of accidental suffering; but no working man was solvent who did not lay aside so much of his wages as would meet the average amount of sickness falling to the lot of the man and his family. So it was not easy to determine this amount. There were, or might be, sick clubs which would average the inequalities of life. Hospitals need not be self-supporting; and, in cases of severe and unforeseen suffering, they might give the most lavish aid; but they ought not to relieve slight and ordinary disease without a contribution from those benefited. With respect to the Poor-law medical service, every one admitted that where medical aid is given it ought to be good and sufficient; but, on the other hand, the better we make that service the more do we tend to increase and perpetuate that want of self-reliance and providence which is the crowning defect of the poorer classes. In this and many other cases we ought to regulate our human impulses by a stern regard to the real results of our action.

THE BRITISH ASSOCIATION AND THE SPONTANEOUS GENERATION QUESTION.

A WRITER in *Nature* remarks that the subject of spontaneous generation was undoubtedly the question of the meeting of the British Association for 1870. The title of the paper by Professor Huxley in the department of zoology and botany did not appear to bear directly upon it, and yet it was generally understood that it would reopen the subject. The President's discourse—for he had scarcely a note before him—was a popular account of the mode of development and form of those minute structures which the microscope reveals in such prodigious numbers in

infusions containing organic matter—*Penicillium*, *Torula*, *Bacterium*, and *Vibrio*. He adduced arguments in favour of the theory that these various bodies are not distinct organisms, but are different modes of development of the same substance. In the course of his remarks, Professor Huxley took occasion to explain the difference between the "Brownian" motion of the molecules of inorganic matter and the vital motions of living matter, and expressed his conviction that the motions observed by Dr. Bastian in the infusions which had been subjected to long-continued high temperatures were referable to the former and not to the latter cause. During the discussion which followed, Dr. Bastian entered the room; but, when called on by the President of the Section, preferred deferring his reply till the following day. Next morning, Dr. Bastian gave an account of his experiments on the contents of hermetically sealed cases of preserved meats, and reiterated his conclusion that the facts he had elicited were such as to throw on the Biogenists the burden of proof that life did not really, as was apparently the case, originate *de novo* from lifeless materials. A somewhat sharp passage of arms took place between Dr. Bastian and Professor Tyndall, each maintaining his well-known view respecting the atmospheric germ-theory.

SCOTLAND.

DR. A. D. DAVIDSON has been appointed Ophthalmic Surgeon to the Aberdeen Royal Infirmary, in the room of Dr. A. Ogston, who has been appointed Junior Surgeon.

HIS Royal Highness the Prince of Wales has, we learn, promised to visit Edinburgh and to lay the foundation-stone of the new Edinburgh Infirmary on the 13th of this month. The Princess of Wales will probably accompany him.

UNIVERSITY OF EDINBURGH.

PROFESSOR ALLMAN has definitely resigned the Chair of Natural History in the University of Edinburgh. Dr. Alleyne Nicholson and Dr. Wyville Thomson are mentioned as candidates.

DISSECTION BY LADIES.

SIX ladies are, we understand, now busy dissecting a female subject in Dr. Handyside's Practical Anatomy Room. The male students are hard at work in the same department. One of the principal difficulties in the way of women obtaining a complete medical education in Edinburgh has thus been removed.

RELAPSING FEVER IN GLASGOW.

THE numbers still continue to increase, and the hospital accommodation has for some time been used up. A new temporary pavilion is in course of erection at the Fever Hospital. It will accommodate about thirty-five cases. So far as we are aware, no site for a permanent fever hospital has yet been fixed on; but a committee has been appointed to search for one, and is at present engaged in this work.

GLASGOW UNIVERSITY: THE APPROACHING SESSION.

THE works at the new building are already in a much more advanced state than one could have expected six months ago. The rubbish is to some extent getting cleared away, and roads in different directions are being formed. Many of the class-rooms are also completed, with the exception of the reading desks, and those which we have seen are certainly perfect models of chasteness, solidity, and airiness. We are sure the students will feel a comfort in sitting in such rooms, after being accustomed to the dingy theatres of the old college. The medical school will labour under a very serious disadvantage during the present, and probably another, session, in respect to hospital teaching. As already remarked, the new hospital cannot be ready for use for some time to come, and the only available hospital, the Royal Infirmary, is more

than two miles distant from the University. The University authorities, we understand, intend to try to get over this difficulty by providing a service of omnibusses to carry the students west to the University, after the morning visit at the Infirmary. We feel sure that the students, with their accustomed good nature, will, as much as possible, aid the professors in overcoming this unavoidable inconvenience. It has been the custom for some years to begin the medical session a week before that of the other faculties; and this year it was announced that the medical classes should meet on the 25th of the current month. It has, however, since been arranged that there should be a common opening day for this session—namely, November 1st. Dr. Young, Professor of Natural History, will give the usual address to medical students at the beginning of this session.

ABERDEEN ROYAL INFIRMARY.

WE have already adverted to the anomalous position assigned to the newly appointed Junior Surgeon in the Aberdeen Infirmary. It will be remembered that his duties are to attend on operation days, and to take the charge of wards in the absence of any of the surgeons. For these services he was to receive no remuneration. At a recent meeting of managers, a disinterested attempt was made to remove the anomaly. The charter of the hospital was quoted to the effect that all the officers were to be salaried. This, however, was set aside on terms not worthy of imitation. Other obstacles of a technical nature were thrown in the way, and the motion was negatived by "an overwhelming majority." We observe with pleasure that an apparatus is to be introduced which will improve the dietary department of the hospital—a desideratum already asked for in these columns. The heating of the bath-rooms is also to be undertaken. In our recent report we remarked on their comfortable character. The managers have apparently resolved to "indifferently reform all that." We can only add, "Oh! reform them altogether."

IRELAND.

THE death of Dr. Barter of Cork, to whom, we believe, belongs the credit of having first introduced the Turkish Bath into Ireland, has been announced.

IRISH AMBULANCE CORPS.

A CORPS, consisting of four surgeons and about forty surgical dressers, has been thoroughly organised and despatched to the seat of the war from Dublin during the past week.

QUEEN'S UNIVERSITY.

THE examinations for the degrees of M.D. and M.Ch. are at present proceeding, thirty-five seeking the former and eighteen the latter. The clinical examination in Medicine has been conducted in the South Workhouse Hospital, and that in Surgery upon patients selected from various hospitals.

THE WINTER SESSION.

THE dissecting rooms of the six Dublin schools are already open, and the introductory addresses will be given during the first week in November. Mr. Morgan opens the session in the College of Surgeons on the 31st instant. In this school, Dr. Edge replaces Mr. Kelly as Demonstrator of Anatomy.

RARE ZOOLOGICAL SPECIMENS.

AMONG rare animals brought from America to the Dublin Gardens by Dr. Mapother are several of the eyeless fish of the Kentucky Caves, of which specimens have not been before seen in Europe. The body of the creatures being blanched and transparent, the heart, vertebrae, and brain, can be readily seen. In the situation ordinarily occupied by the eyes, dark spots have been developed since exposure to light.

NOTES OF THE WAR.

AN ambulance has been formed at Lyons. It is under the management of the well known surgeon, M. Ollier. The sum of 35000 francs has been voted towards its equipment.

COLONEL LOYD LINDSAY is now, we believe, on his way to the head-quarters of the King of Prussia before Paris. The Committee of the British Society propose to place a sum of £20,000 at the disposal of the Commanders of the French and Prussian forces respectively, if arrangements can be made to insure its utilisation for the sick and wounded in such a manner as will realise the humane intentions of the subscribers, and will not compromise the neutral attitude of this country.

THE GERMAN WOUNDED.

THE *Staatsanzeiger* publishes an official summary of the number of sick, wounded, and cured in the German armies since the commencement of the war. The number of sick and wounded registered by the proper department is 54,450. The convalescents who have returned to their regiments, or have been sent into the interior, number 4,597. The wounded who were discharged cured, including a few invalided soldiers, number 3,868. 518 wounded and sick have died in the hospitals. The proportions per cent. are—8.44 convalescent, 6.90 cured, 0.08 invalided, 0.95 deceased.

AMBULANCES AT SEDAN.

WE regret to learn from Dr. John Murray, who has to-day (Thursday) returned from Sedan, that pyæmia and dysentery have committed frightful ravages in these ambulances. Notwithstanding the indefatigable exertions of Dr. Frank, nothing could ward off these plagues. The air and ground are infected. The results of the operations in the Anglo-American ambulance have been sadly marred by the intervention of these hospital pests. The wisdom of the German policy of rapid evacuation of the ambulances is amply proved. Those patients who could not be removed, and who are still in the ambulances, meet fearful obstacles to recovery. The number of patients at the Anglo-American Hospice d'Asfeldt is now reduced to forty. The American portion of the ambulance staff have left for Brussels. The services of Mrs. Capel and of the English sisters of St. John, at the ambulances of Balan and Bazeilles, have been invaluable. A large amount of stores will need to be returned to Arlon.

AID TO THE SICK AND WOUNDED.

MR. SAMPSON GAMGEE of Birmingham, who has been exerting himself in conjunction with a Committee in that town for procuring surgical necessities for the sick and wounded in the war, reports that the following supplies have been sent out: 588 tourniquets, 307 pairs of artery-forceps, with 285 bull-dog forceps; 282 dozen assorted surgical needles, 281 reels of suture silk, and 292 reels of metallic suture; 40 bullet-extractors, 191 pairs of scissors, 35 amputating cases, and 8 trephining cases, 2000 yards of adhesive plaster, 300 pairs of blankets, 600 perfectly cleansed sponges, 19,200 doses (two grains each) of quinine, 14,000 doses of morphia (each $\frac{1}{4}$ grain), chloroform enough for 7640 operations (on an average of half an ounce for each); 2000 quarts of assorted antiseptics and styptics; 150 water pillows, 2000 yards of fine gutta percha, 400 yards of water-proof sheeting, 600 bottles of Preston salts, 1538 yards of Christian's elastic bandages, and nearly 10,000 flannel and calico bandages (rolled by the patients in the General and Queen's Hospitals). The whole stock has been so subdivided and arranged as to be easily distributed on the spot; and the packing material has been chosen so as not to be wasted, but directly useful to the surgeons and nurses in their work. The bottles of disinfectants are packed in picked oakum; the chloroform, quinine, and cases of morphia in fine cotton-wool; every packet being labelled in English, French, and German, on the decimal system.

NOTES FROM THE HOSPITAL AT FORBACH.

THE *Weiner Medizinische Wochenschrift* has the following extract from a report by Professor Fischer of Breslau, director of the field-hospital at Forbach.

We received a fresh number of wounded after the battle before Metz on September 1st. A hospital in the neighbourhood, containing seventy French and Germans severely wounded in the fight at Spicheren, has been delivered over to us by the French army surgeons; and Dr. Waldeyer performs duty there. Altogether, we have treated above 800

wounded in the hospitals under our management. A number of the younger doctors are also located at the railway stations, and afford medical and surgical aid on the arrival of the trains, which have already carried above 20,000 wounded from our station to more distant hospitals.

As the French shoot from a long range and awkwardly, most of the wounded have several injuries of nearly equal severity. Single wounds are of rare occurrence in this war. A non-commissioned officer had five gun-shot wounds, three bones being fractured. Another man had both his humeri shattered by one ball, while another ball penetrated both feet, crushing the tarsal bones. It cannot be denied, that the Chassepot bullet inflicts quite as severe wounds as the German: it strikes on the bone, flat or in several pieces, and causes extensive and very severe injuries. Deviation of the ball, so as to take a course round the body, was seldom met with. There were a large number of penetrating wounds of the cavities and of wounds of the joints. We had at Forbach alone twelve perforating wounds of the skull. We endeavoured to save injured joints without operative interference, but succeeded in very few cases, and were obliged to perform resection in 34 cases: viz., shoulder, 13 cases; elbow, 15; ankle, 3; knee, 1; hip-joint, 1; scapula, 1. To our great delight, the favourable results of these operations have exceeded all expectation; so that up to the present time there have been only 4 deaths in the 34 cases. We have scarcely had an opportunity of performing primary amputation; and consequently have done the operation in eleven cases only, in which it was unavoidable: of these, seven died. Secondly, hæmorrhage has caused us much trouble. Three patients bled to death before we could be called to them; and in five cases we had to tie large arteries. Two patients were shot through the larynx: in one of them, tracheotomy was necessary on account of impending suffocation. In gunshot fracture of the femur—a difficult injury to treat—we have used plaster of Paris bandages; and the result has been extraordinarily favourable. Most of the cases of gunshot wound of the knee-joint have been treated on conservative principles, in accordance with the advice of Bernhard von Langenbeck, but the result has been very unsatisfactory. These cases afforded most of our secondary amputations. The result in shot-fractures of the leg, foot, and upper arm, has been very favourable. Our hospital has not been quite free from suppuration fever; but this has been a very rare visitor. Hospital gangrene broke out, but was at once arrested by evacuating the lazeareth. There were many cases of diarrhoea. Small-pox was not rare among the French wounded: the cases were treated in a special hospital under the care of Dr. Richters. One of the civil hospital attendants has unfortunately died of the disease. Typhus has been rare, but the cases have been of a very severe type.

TREATMENT OF THE WOUNDED.

WE have received the following from Dr. Geissé of Ems.

I will endeavour now to give you a general account of the kind of wounds treated in the hospitals situated at a distance from the localities where war is raging. You will perhaps be astonished to find that very severely wounded soldiers were conveyed so far. The murderous battles fought round Metz and Sedan, after which most of the French wounded fell into the hands of the Germans, made it imperative to remove large numbers of wounded as quickly as possible. I have seen soldiers shot through the head, lungs, pelvis, and joints, who came after a five days' journey into our hospitals. During the first thirty-six hours, they were driven on common carts; they then had to remain during a rainy night in the open air near the railway station before the luggage-vans were ready to receive them. They were laid on plain straw, covered with their cloaks, and sent off. I have not seen one who was the worse for his journey. One large battle being fought after another, I am fully convinced that it was by far the best thing to transport as many wounded as possible far away into good hospitals, where airy rooms, good beds, excellent nursing, and plenty of surgical help, united to save as many lives as possible. History has never known such carnage as the present war shows. The war of 1866 is considered child's play in comparison with the butcheries now passing under our eyes. I have seen Saarbrücken after the battle at Spicheren, and know the bad effects on the wounded of an overcrowding, which was actually unavoidable, because there were not railway carriages enough to move all who could have been moved. At the larger stations, the wounds were dressed, the wounded refreshed, and they went on to their destinations. On arrival in the hospitals, they were washed and put to bed—a great many for the first time for a month. The poor wounded fellows called this a luxury. Neither opium nor chloral was wanted the first night; the great fatigue was a splendid hypnotic. Most of the wounds were caused by the Chassepot and the needle-gun; of sabre or bayonet wounds I have seen only very few. The weight of a Chassepot ball is three-quarters of an ounce; the weight of the ball of the needle-gun is

an ounce and a quarter. The wounds caused by the Chassepot balls are smaller than those caused by the Prussian rifles. The latter shivers the bone to a greater extent than the former; the difference of form explains this sufficiently, the Chassepot bullet being nearly cylindrical, and the Prussian somewhat egg-shaped. The material for dressing the wounds in general use is charpie, which perhaps is inferior to the excellent English lint, but much cheaper, because it is given gratis in quantity which would be sufficient for a thirty years' war. For cleaning the wounds the "*irrigateur* of Esmarch" is used in all hospitals. The water used is generally warm; and to it is added a little carbolic acid or a solution of hypermanganate of potash. To clean deep wounds sufficiently we insert the caoutchouc points of Windler, which are very flexible and soft, and into which the point of the tube fastened to the *irrigateur* enters easily. Sponges are never used for the cleaning of wounds. After the wounds are well cleaned with the *irrigateur*, we dry them well with clean charpie, and then cover them with charpie moistened with carbolic acid solution; a compress fastened by a linen bandage finishes the dressing. Charpie and compresses are never used twice; the bandages are washed in a solution of chloride of zinc. In most cases one dressing in twenty-four hours is quite sufficient; a gunshot-wound is always combined with contusion, and as such is not to be disturbed too often. To ease the flow of the secretions, a suitable position, drainage, incisions, etc., are properly applied. When the parts surrounding a wound are inflamed, tender, and swollen, I use cold water dressings in preference to any kind of poultices; they are always at hand, are clean, and have at least as good an effect as cataplasms, if not better. Great care is bestowed on good diet. "La diète est une arme meurtrière," says Follin. I do not think that I recommend anything new in advising, not an antiphlogistic, but a restorative, diet for nearly all the wounded soldiers who are exhausted for want of food, fatigue, mental shock, and bodily suffering, as well as by great losses of blood. Under this treatment wounds do well, and far better than when smeared over with all kinds of plaster, lotions, embrocations, etc. Caustics are not often necessary when carbolic acid is applied; in a few cases, where granulations grew too exuberantly and had a pale watery look, an energetic application of quicklime mixed with vegetable charcoal made a satisfactory change. These are, however, well known surgical proceedings; and I do not know anything worth mentioning as regards the treatment of flesh-wounds.

In my next letter I will describe the treatment of complicated wounds in our hospitals.

THE MEDICAL SCHOOL DINNERS, ETC.

ST. BARTHOLOMEW'S HOSPITAL.

THE annual old students' dinner was held in the great hall of the Hospital on Monday, Dr. Paget of Cambridge in the chair. Upwards of one hundred old students and friends of the Hospital were present, amongst whom were Sir Trevor Lawrence, Professor Humphry of Cambridge, Dr. Burrows, Dr. Bell (Principal of Christ's Hospital), and the members of the staff. After the usual loyal toasts, Dr. Paget proposed the toast of the evening, "Prosperity to the Medical College," which was responded to by Dr. Black. The toast of "The Visitors and Guests" was proposed by Mr. James Paget and responded to by Dr. Humphry; that of "The President" by Dr. Burrows. The meeting was in every way a success.

THE MIDDLESEX HOSPITAL COLLEGE DINNER.

ABOUT eighty old pupils and friends of the Middlesex Hospital Medical College dined together at St. James's Hall on Monday evening, after the excellent address of Dr. Cayley. Professor Flower, F.R.S., presided. After the usual loyal toasts, the chairman, in proposing that of the Army, Navy, and Volunteers, referred to the increased attention now bestowed in war on the sick and wounded, as exemplified in the present war. The toast of the evening, "The Middlesex Hospital Medical College," was proposed from the chair, coupled with the name of Mr. De Morgan, and received very warmly. Amongst the other toasts were those of "Professor Flower," who responded in an excellent speech, "Dr. Cayley," "Mr. Ross and the Governors of the Hospital." The meeting altogether passed off most successfully.

ST. MARY'S HOSPITAL.

THE members of the staff and the old and present students of this School dined together at Willis's Rooms on the evening of Saturday, October 1st, Dr. Sibson taking the chair upon the occasion. The dinner was largely attended, and the meeting of old friends and associates most agreeable and successful. The presence of a large number of

former students, now engaged in professional work in different parts of the country, afforded a gratifying proof that the pleasant recollection of old times still remained fresh in their memories. Among the company present were Mr. Lane, Dr. Handfield Jones, F.R.S., Dr. Sieveking, Dr. Morgan of Manchester, Mr. Mivart, F.R.S., and others well known in the world of science and of medicine.

WESTMINSTER HOSPITAL.

AFTER the admirable Introductory Address given by Dr. Sturges, the old students and friends of the Medical College were entertained at a *conversazione* by the medical officers. A number of surgical instruments and other objects of interest were exhibited. There was a good attendance of old pupils.

ASSOCIATION INTELLIGENCE.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Royal Clarence Hotel, Bridgwater, on Thursday, October 13th, at 5 P.M.; J. CORNWALL, Esq., of Ashcott, President, will be in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, September 13th, 1870.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE first general meeting of the Session (1870-1871) will be held at the Midland Institute, on Thursday, October 13th, at 3 P.M.; THOMAS UNDERHILL, Esq., President, in the Chair.

T. H. BARTLEET, *Honorary Secretary*.

Birmingham, September 27th, 1870.

SOUTH MIDLAND BRANCH.

THE fourteenth autumnal meeting of the above Branch will be held at Stony Stratford, Bucks, on Tuesday, October 18th.

Gentlemen who intend reading papers or cases, are requested to furnish the names or titles, as early as possible, to

J. M. BRYAN, M.D., *Honorary Secretary*.

Northampton, September 20th, 1870.

CUMBERLAND AND WESTMORLAND BRANCH.

THE autumnal meeting of the above Branch will be held at the Keswick Hotel, Keswick, on Wednesday, October 19th, 1870, at 1 P.M. THOMAS F. L'ANSON, M.D., of Whitehaven, President of the Branch, will take the Chair.

Gentlemen intending to read papers, or be present at the meeting, will greatly facilitate arrangements by communicating with the Secretary without delay.

HENRY BARNES, M.D., *Honorary Secretary*.

Carlisle, September 28th, 1870.

SHROPSHIRE SCIENTIFIC BRANCH.

THE autumnal meeting of the above Branch will be held in the Museum of the Natural History and Antiquarian Society, Shrewsbury, on Thursday, October 20th, at 2 P.M. President for 1869-70, Dr. OAKLEY; President-elect for 1870-71, J. D. HARRIES, Esq.

Gentlemen intending to read papers or report cases, are requested to communicate with the Honorary Secretary.

The dinner will take place at the Lion Hotel, at 4.30 for 5 exact time: J. D. Harries, Esq., in the Chair.

SAMUEL WOOD, F.R.C.S., *Honorary Secretary*.

Shrewsbury, September 26th, 1870.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting of the above Branch will be held at the White Hart Inn, Reigate, on Thursday, October 20th. Dr. HOLMAN will take the Chair at 4 P.M.

Papers, etc., are promised by Dr. Murray, Dr. Holman, Dr. Carpenter, and the Honorary Secretary.

HENRY T. LANCHESTER, M.D., *Hon. Secretary*.

Croydon, October 3rd, 1870.

BATH AND BRISTOL BRANCH.

THE first meeting of the above Branch for the session, will be held on October 27th, at the Royal Hotel, College Green, Bristol.

The following papers are expected. 1. The Position of Medical Men receiving Resident Nervous Patients. By Horace Swete, M.D.—2. Case of Recovery from General Dropsy. By Charles Steele, Esq.—3. Case of Pyelitis from Injury. By R. W. Tibbits, M.B.—4. The Treatment of Ulcers by Transplantation of Skin. By Nelson C. Dobson, Esq.

EDMUND C. BOARD, *Honorary Secretary*

CORRESPONDENCE.

THE ORIGIN OF SPECIFIC DISEASES.

SIR,—In Professor Huxley's address at the British Association on the subject of spontaneous generation, he rightly includes in the large field of nature over which he casts his eye some matters pertaining to pathology. His own opinion clearly leans towards the old and prevalent doctrine, *Omne vivum ex vivo*; and he endorses by the weight of his name the experiments of Pasteur and his followers. Knowing what the normal mode of production is, he would leave the burden of proof of the spontaneous production of living matter with his opponents; and I think we may be well satisfied to witness it in the hands of such an able "abiogenist" as Dr. Bastian. Similar arguments the professor would apply to the case of the contagious or specific diseases; and accordingly the *onus probandi* lies with those who believe that such affections can arise *sui generis*. I cannot at this moment lay my hands on the writings of any author who distinctly asserts the truth of the doctrine; but, judging from the observations of many in our profession, it might be thought that such does extensively prevail. I believe, as regards typhus fever, that an opinion of its spontaneous origin from overcrowding does exist largely amongst medical men; and, as regards scarlatina, the importance attached to bad drainage at Guildford and elsewhere would lead to the belief that not a few in the profession consider that some of the ordinary circumstances around us are sufficient to develop it. If I remember rightly, this was asserted in a public paper by a surgeon at Croydon, who stated that he had seen the disease arise in an isolated cottage, and induced by a neighbouring cesspool or dunghill. Even syphilis, I have heard stated by two gentlemen examined at the Admiralty Committee, will spring up spontaneously from promiscuous sexual intercourse. I do not know that any medical man has assented to the strongly expressed opinion of Miss Nightingale that small-pox can arise from bad sanitary arrangements.*

Let us see what are the arguments for the existence of a specific poison in this class of diseases. The term poison is used, because a person affected with a specific contagious disease has that in his system which, if transplanted, will produce in another as certain and definite effects as if the latter had swallowed an animal or a vegetable poison. At well defined periods, results are seen in the body so characteristic that the nature of the infecting cause is at once recognised. Seeing that the matter or blood from a variolous or a scarlatinal patient is capable of producing exactly the same effects in a healthy person, we must feel sure that a something having specific qualities has been conveyed from the one to the other. Whether this something will be found to consist of living germs, as Dr. Burdon Sanderson's observations tend to show, is now a question of opinion; but there are many who think that the day will shortly come when we shall be capable of seeing the typhine or choleric poison enclosed in a bottle. In the case of every weed found in a newly made garden, we believe that the seed was first implanted there; and so, from all analogy, we consider that in every instance of a specific disease a microzyme must have been introduced from an extraneous source. Dr. Huxley evidently thinks that the analogy holds good; and thus we should be content to rest upon the conviction that, in every case of so-called specific disease, the complaint has been "caught"; and, if we are not able to prove it, we ought to assume it, and let the *onus probandi* lie with those who deny it. Since all reasoning would lead us to assume the origin of living

matter from germs, we are content to believe in the commonly accepted parentage of all animal and vegetable forms which surround us. That they ever have any other origin, or can arise spontaneously, must be shown to be true by those who have reason to be not satisfied with the current opinion. So it rests with the abiogenist in our profession, or the man who believes in the spontaneous origin of scarlatina or such-like disease, to act with as much care as Dr. Bastian has done, and be sure, when he thinks he sees an example of the complaint spontaneously arising, that every possible source of contagion has been excluded. Until he shows this, the universally contagious theory must still be held. The question, then, of the spontaneous origin of the usually called specific contagious diseases, ought to be no more an open one than the more general *questio vexata* of spontaneous generation. As regards the latter, the world is content to hold a certain opinion until it be found to be false; and so in like manner the medical profession may safely hold to the idea of only one parentage of the exanthemata and other specific diseases, until facts are forthcoming to prove their spontaneous growth. If the analogy holds good (and I believe it does), between these diseases and the phenomena of animal and vegetable life, we must assume that in every instance the complaint has been "caught"; and we shall be then in a better position to discover what we understand by the influence of bad drainage and other defective sanitary arrangements.

I could have wished that Professor Huxley had not included in the question the subject of cancer, which has no analogies with the diseases to which I have been alluding. It cannot be inoculated; it does not run a definite or specific course; and, indeed, has no qualities which deserve it to be considered as foreign to the organism of the body. It is known that a variety of morbid growths may be produced in the tissues; and that, between the one which is styled cancer and that which is identical with healthy material, all grades may exist. They are but modifications of normal tissues, show only altered nutrition, and can by no means be considered as foreign to the system.

Grosvenor Street, W.

I am, etc.,
SAMUEL WILKS.

OBITUARY.

WILLIAM ALLEN MILLER, M.D., F.R.S.

WE regret to learn that Dr. Miller, Professor of Chemistry in King's College, died at Liverpool, of apoplexy, on September 30th. He was born at Ipswich in 1817. At the age of 24, he was appointed assistant to the late Professor Daniell, of King's College, at whose sudden death in 1846 he succeeded to the professorship of Chemistry. He was the author of a well known and valuable treatise on Chemistry, in three volumes, and of numerous contributions to chemical science. He was a graduate in Medicine of the University of London.

AUGUSTUS WALLER, M.D., F.R.S.

DR. AUGUSTUS WALLER died at Geneva on September 18th. He held a high place among those physiologists who have enriched their science by original research. He is best known for his important contributions to the physiology of the nervous system, and especially for the introduction of a new method of investigation applicable to various important objects of neurological inquiry, which, not only as used by himself, but in the hands of others, has tended materially to advance the knowledge of that department. We owe also to Dr. Waller original and valuable observations on various other physiological questions. In acknowledgment of his scientific labours, he twice received the Monthyon Prize of the French Academy of Sciences: first, in 1852, for a research, in which he was assisted by Professor Budge, of Bonn; and again, in 1856, for experiments, exclusively his own, showing an important relation between the nutrition of nerve-fibres and their connection with nervous centres. For these and other researches in Experimental Philosophy, the Royal Society awarded him one of the royal medals for 1860. Dr. Waller began professional life as a general practitioner in Kensington, but his growing passion for original inquiry in science led him to devote himself to it entirely, and, with the exception of a short time that he was Professor of Physiology in Queen's College, Birmingham, he resided abroad, and enjoyed the intimacy of the most celebrated Continental physiologists, who thoroughly appreciated his merits. Latterly, he went to reside at Geneva, and commenced practice as a physician, still, however, continuing his physiological pursuits. He died quite suddenly in a fit of angina pectoris, to which complaint he had been for some time subject. [This notice is taken from *Nature*.]

* "I was brought up both by scientific men and ignorant women distinctly to believe that small-pox, for instance, was a thing of which there was once a first specimen in the world, which went on propagating itself in a perpetual chain of descent, just as much as that there was a first dog (or a first pair of dogs), and that small-pox would not begin itself any more than a new dog would begin without there having been a parent dog. Since then, I have seen with my eyes and smelt with my nose small-pox growing up in first specimens, either in close rooms or in overcrowded wards, where it could not by any possibility have been 'caught', but must have begun. Nay, more, I have seen diseases begin, grow up, and pass into one another. Now dogs do not pass into cats."—*Notes on Nursing*.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

ANATOMY AND HISTOLOGY.—The Professor of Anatomy gives notice that the Lectures on Practical Anatomy (the human skeleton) will commence in the Old Anatomical Schools on Wednesday, October 12th, at 1 P.M., and will be continued daily.—The Lectures on Anatomy and Physiology will commence in the New Museums on Thursday, October 20th, at 1 P.M., and be continued on Tuesdays, Thursdays, and Saturdays, at the same hour.—Instruction in Practical Histology will be given in the Old Anatomical Schools on Saturdays, at 11.30, commencing on October 20th.—Microscopical Demonstrations will be given in the Old Anatomical Museum on Mondays, at 6 P.M., commencing on October 30th.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, September 29th, 1870.

Chittenden, Charles Peirce Downey, Lee Park, S.E.
Collier, William Henry, Sheffield
Greaves, William, Great Easton, Leicestershire
Newman, Ashwin Conway, Cheltenham

The following gentlemen also on the same day passed their first professional examination.

Atkinson, Walter Mark, Charing Cross Hospital
Hartridge, Gustavus, King's College
Wall, Abiathar, St. Bartholomew's Hospital
Winterbottom, Augustus, St. George's Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

ADDENBROOKE'S HOSPITAL, Cambridge—Surgeon.
BALLINA UNION, co. Mayo—Medical Officer, Public Vaccinator, and Registrar of Births, etc.: 12th.
BIRMINGHAM GENERAL HOSPITAL—Resident Medical Officer: applications, Oct. 27th.
BLYTHING UNION, Suffolk—Medical Officer for District No. 8.
BOGNOR, Sussex—Surgeon to the Coast-Guard.
BRIGHTON and HOVE DISPENSARY—Physician for the Western Branch.
DELTING, Shetland—Parochial Medical Officer.
DONEYAL LUNATIC ASYLUM, Letterkenny—Consulting and Visiting Physician: 12th.
DORSET COUNTY HOSPITAL, Dorchester—House-Surgeon: applications, 19th; election, Nov. 5th.
EAST DISPENSARY, Liverpool—Resident House-Surgeon.
GREAT OUSEBURN UNION, Yorkshire—Medical Officer for the Green Hamerton District.
HOSPITAL FOR WOMEN, Soho Square—House-Physician: applications, 21st.
KING'S COLLEGE, London—Professor of Chemistry.
LEICESTER PROVIDENT DISPENSARY—Medical Officer: applications, 17th; election, 20th.
MIDDLESEX HOSPITAL—Assistant-Physician.
MORPETH DISPENSARY—House-Surgeon: applications, Nov. 25th; election, Dec. 9th.
ONGAR UNION, Essex—Medical Officer for District No. 2.
QUEEN'S HOSPITAL, Birmingham—Resident Surgeon: applications, 20th.
ST. BARTHOLOMEW'S HOSPITAL, Rochester—Assistant Surgeon: 13th.
ST. MARY'S HOSPITAL and DISPENSARY FOR DISEASES OF WOMEN AND CHILDREN, Manchester—Resident Medical Officer.
ST. SAVIOUR'S UNION, Surrey—Two District Medical Officers: applications, Oct. 20th.
STRATTON UNION, Cornwall—Medical Officer for District No. 2.
TOWER HAMLETS DISPENSARY—Medical Resident Officer: applications, 10th; election, 19th.
WEST KENT GENERAL HOSPITAL, Maidstone—House-Surgeon.
WHITECHAPEL UNION—Resident Medical Officer at the Workhouse: applications, 10th; election, 11th.
WISBEACH UNION, Cambridgeshire—Medical Officer for one Division of the Wisbeach St. Mary District.
WORCESTER AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION—Medical Officer: applications, 11th; vacancy, Christmas.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*PEARCE, W. H., Esq., appointed Demonstrator of Anatomy in the Sheffield School of Medicine.
*SAUNDERS, Thomas Dudley, Esq., appointed Medical Officer to the Fourth District of the West Ashford Union, *vice* John Chapman, Esq., resigned.
THORPE, G. E. K., Esq., appointed Demonstrator of Anatomy in the Sheffield School of Medicine.

THE Lord Bishop of Lichfield will preach the anniversary sermon in aid of the funds of the Derbyshire General Infirmary, Derby, on the 27th instant.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY—Clinical Society of London, 8.30 P.M. Dr. John Harley, "A Case of Injury to the Liver"; Mr. Spencer Watson, "Four Cases of Parenchymatous Keratitis associated with Acute Rheumatism"; Dr. John Ogle, "A Case of Tetanus treated with Ice and Belladonna"; and other papers.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ENGLISH WATERING-PLACES.

DR. J. MACPHERSON (Curzon Street).—There is a remarkable deficiency of accurate information on the subject of English watering-places, and the materials at hand are singularly defective. In the absence of local information from trustworthy medical sources, we have not attempted to do much more at present than analyse and explain existing statistics, and demonstrate the need of better. The appeal which was made in our columns to members and associates at watering-places for information has not been responded to.

MEDICAL ETIQUETTE.

REFERRING to the recent comments in the JOURNAL on a correspondence in which he took part, Mr. G. P. Heyward of Englefield Green writes a letter in which he says: "I submit for your further consideration—first, whether the family attendant is bound, against the will of the patient, to surrender a case which, under pressure of a serious emergency, a rival practitioner has been invoked to treat; and, again, whether a gentleman who ostentatiously parades an Irish title of M.D., and not possessing the diploma of the Apothecaries' Company (England), is justified, according to your code, in encroaching upon the domain of the legally qualified practitioner, and then, forsooth, babbling of breaches of 'medical etiquette'." * I. Any practitioner, called in a serious emergency to treat a patient, should surrender the case to the usual family attendant, unless specially requested by the patient or the friends to continue his attendance; and he should do nothing to obtain the expression of such a wish. This clearly results from the ordinary rules of ethics to which we have adverted.

II. An Irish diploma of M.D. confers a full legal title to practise in any part of the United Kingdom, and is not to be spoken of with disrespect. It clearly entitles its owner to discuss questions of etiquette as much as any other medical title whatever.

THE First Commissioner of Works gives notice that he intends to distribute this autumn, amongst the working classes and poor of London, the surplus bedding-out plants in Battersea, Hyde, and other Parks. An opportunity is thus afforded for the Committees of the various London Hospitals to make application for a share of the spoil.

METHYLATED SPIRIT FOR EXTERNAL USE.

SIR,—In the JOURNAL of August 20th, some one inquired whether it was permitted to use methylated spirit in compounding liniments and other applications for external use. From a considerable observation, I am persuaded that this spirit is far preferable for such uses than the pure spirit. Wood-spirit has in itself soothing and stimulating properties. Its addition to spirits of wine increases the solvent power of the spirit; so that iodine, camphor, and other components of liniments, are much more readily dissolved in methylated spirit. One objection to the wood-spirit is, that it is very irritating to the eyes. While applications containing it are used, the head should be averted or the eyes should be closed, to avoid the sharp stinging pain which is caused by its action on the conjunctiva. I find all liniments much more efficacious when made with the methylated spirit.

Marlborough, September 1870.

I am, etc., WALTER FERGUS, M.D.

POSTAGE OF THE JOURNAL.—In consequence of the alterations in the rates of postage and conditions of transmission of newspapers, the postage of the BRITISH MEDICAL JOURNAL will be one halfpenny; which must be paid each time the JOURNAL is retransmitted by post. In order to retain the privileges of a newspaper, the JOURNAL must not be stitched.

A CASE OF PROFESSIONAL EQUITY.

SIR,—I venture to state a case to you, and shall, in the interest of the profession as well as of myself, feel greatly obliged by your opinion thereon.

October 1870.

I am, etc.,

A.

A surgeon, X., takes Y. into partnership, and subsequently disposes of the whole practice to Y. for a sum agreed upon. X. enters into an agreement, whereby he binds himself with Y., his heirs, executors, administrators, and assigns, not to practise within four miles of the town, under a heavy penalty.—Y. takes into partnership Z.; and, after a few months, Y. retires from the practice, Z. giving a sum for Y.'s share in the stock-in-trade, moneys, and effects; Y. entering into an agreement not to practise in the town for six months.—About four years after X. had retired from the business, he suddenly returns to the town, and commences to practise within a quarter of a mile from his old place of business.—Z. protests against the return of X. to practice, but the only reply that X. gives is virtually "go to law".—Z. has not the inclination to spend money in proving what is legally expressed in documents, the conditions of which, he considers, ought to be honourably observed.

* * We think that X. is in the wrong. He has perhaps overlooked the comprehensive nature of the clause restraining him from practice; which mentions not only Y. himself, but his "executors, administrators, and assigns". Z., having purchased the practice of Y., is his assign. Legal proceedings it would be well to avoid. Cannot some satisfactory arrangement be come to between X. and Z.; such as permission for X. to practise on condition of paying a portion of the penalty, to be agreed on mutually, as final compensation? Unless something of this kind be done, we do not see how X. can honourably return to practise in the town.

J. B. (St. Thomas's Hospital).—Inquire of Mr. H. Searle, of 170, New Kent Road, who has vacancies for two pupils. We should say, from our knowledge of that gentleman, that you will find it a very comfortable home.

DISTRESS CAUSED BY THE WAR: AN APPEAL.

The following letter has lately appeared in a contemporary.

"Sir,—It has come to my knowledge that a physician (whose name, for obvious reasons, I would rather not publish, but one who has in his day done much for the advancement of medical science) is in great distress at this moment, in consequence of the disastrous war now raging on the Continent. Ill-health compelled him some time ago to relinquish practice, and his wife has been receiving pupils in France. She and her husband are now locked up in a small town not far from Paris, into which the Prussians are daily expected to enter. Dr. and Mrs. — are the only English left in the place, and they are scarcely able to obtain the commonest necessities of life. The school was to commence last Monday, and the pupils, each bringing money with her, would have provided the means requisite for maintaining the establishment till Christmas. As it is, I can see nothing but ruin and beggary before my poor friends, unless an effort is made to save them. If their landlord and the few tradesmen left were assured that they had means to pay, they might get on somehow for a while; but if not, they must starve. Surely there will not be wanting among the members of our profession some to help a poor brother in such distress.

"I will commence a subscription with £5; and my friend, Dr. Stocker, has offered a similar sum. Any subscriptions sent to me, or paid into my account at Messrs. Coutts', for the O. W. Fund, will be thankfully acknowledged.

"I am, etc.,

JOSEPH S. LAVIES.

"11, Warwick Square, S.W., September 16th, 1870."

* * The gentleman referred to in the preceding letter was some years ago an active and highly esteemed officer of one of the Branches of the British Medical Association. Subscriptions will be received by Dr. A. Henry, 16, Great Coram Street, W.C.; or by Mr. T. Richards, at the office of the British Medical Journal.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

THE SULPHOCARBOLATES AND OTHER ANTISEPTICS.

SIR,—The report of the discussion upon my paper at the late meeting at Newcastle-upon-Tyne, which appears in the BRITISH MEDICAL JOURNAL for September 17th, is capable of causing an impression which I am desirous to correct. I am reported to have said: "Dr. Wiltshire had spoken of another antiseptic; but highly valuable as it might be, it could hardly take the place of the sulphocarbols." It might be inferred that I claimed for the sulphocarbols such a position *par excellence* among antiseptics of all kinds and under all conditions as I never intended. The antiseptic alluded to by Dr. Wiltshire in the course of his valuable remarks, was the chloride of aluminium, long known as such, but lately more prominently advocated by Mr. John Gamgee. That this substance is a valuable means of preventing putrefaction, there can be no doubt; though the researches of Dr. Angus Smith seem to show that it holds a lower place than common salt. (*Disinfectants and Disinfection*, page 97.) This, however, was not the question. I quite agree that the chloride of aluminium is a far more potent direct antiseptic than are the sulphocarbols. My object in employing those agents was to introduce by means of an extremely soluble salt a powerful factor, carbolic acid, which might act antiseptically on the body. One of the virtues claimed for the chloride of aluminium is its great astringency. This is just the faculty which would prevent its own absorption. While, therefore, it would be highly valuable for the local and direct treatment of putrescible material, it would not accomplish that which I believe the sulphocarbols do—the diffusion into the blood and the projection throughout the system of a substance capable of staying those processes of decomposition which accompany disease.

I am, etc.,

29, Duncan Terrace, September 20th, 1870.

A. ERNEST SANSOM.

NOTICE.—It is requested that all Letters, etc., intended for the Editor or the Publisher of the BRITISH MEDICAL JOURNAL be addressed solely to the Office, 37, Great Queen Street, London, W.C.

DR. RUMSEY'S ADDRESS.

SIR,—There is one remark made by Dr. Rumsey in his excellent Address on Public Medicine that I think requires some comment. It is as follows:—"We are often tempted, perhaps unfairly, to apply the term 'quackery' to the practice of medical novelties or heresies. Now, I would suggest that the utmost freedom of judgment and action in the selection of means for the prevention or relief of sickness may be allowed by the authorities, and may be enjoyed by members of the profession, without incurring an unmerited or degrading nickname. There are quacks, as regards their conduct, who may be most orthodox as regards their theories of medicine. On the other hand, there are learned medical sectarians, to my knowledge, who, in the exercise of their calling, are honourable and upright."

In my opinion, Dr. Rumsey is here taking a mistaken view of "quackery". No individual member of the profession or collective corporation can object to every and any latitude of opinion and practice of an art on the part of another practitioner; but what we can object to is the assumption of title and superior wisdom of the quacks themselves. This very latitude should be the ground of opposition to quackery in general; for when a man is free to choose from all the resources of science what weapons he prefers in his battle with disease and death, what need is there for him to assume other title than the one given him by his College, the honour of which he has sworn to maintain? Let us take a homoeopathic practitioner as an example. Dr. Rumsey might cite him as a learned medical sectarian, honourable and upright in his calling; but at the outset his position belies him; he does, in fact, assert before the public at large, to his clients in particular, that his College or University education is unsound and false, and that, contrary to the folly of all his *confrères* who are content with the title and position there bestowed upon them, he, in his superior wisdom, must assume other title and other doctrine and other practice. Now what could better remedy this state of things than one uniform state title to practise? Here it could be made law that, to assume other distinctions than the one granted, or such honorary ones as might be superadded by Schools or Universities, should be punishable by withdrawal from the Register of licensed practitioners: whereas now what is every body's business is no body's business, and every unprofessional conduct and assumption of title goes unchecked. We have members of the Apothecaries' Company keeping open shops, and selling treacle and bees' wax; and many of the members of the Royal College of Surgeons have set up as herbalists, their front windows looking like a market-gardener's seed warehouse, not to mention a hundred other such discrepancies. How can we, under such circumstances, be respected as a body, notwithstanding the high moral and professional tone of our leading men? Neither are these free from blame, quietly to look on and see such turpitude in operation unchecked and unchallenged. May that glorious day soon arrive when we shall show our unbroken front to friend and foe, and attain to the simple necessity of having a medical man to attend to and prescribe for his patient, and a druggist to compound his nostrum; and of course a physician to consult.

Birmingham, September 1870

I am, etc.,

PERCY LESLIE, M.D.

"CRAMP" IN DUCKS.

SIR,—The following curious fact may be interesting to some of your country members. An acquaintance of mine and his wife, while walking round a farm-yard, were shown some young ducks (seven or eight in number) suffering from the "cramp": they were apparently dying, all the usual methods of restoration having failed. The lady, having a small bottle of chloroform in her pocket, "for a joke" administered some in the usual way on her pocket-handkerchief. When the duck was under the influence of the drug, its legs were straightened. She did the same to all the ducks; and, after a short time, they gradually recovered from the effects of the chloroform: no symptoms of "cramp" have since appeared, and the ducks are perfectly healthy. This occurred about a month ago.

I am, etc.,

T. DUDLEY SAUNDERS.

Smarden, Kent, September 26th, 1870.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, Sept. 5th; The New York Medical Gazette, Sept. 17th; The Parochial Critic, Oct. 6th; The New York Medical Record, Sept. 22nd; The Boston Medical and Surgical Journal, Sept. 22nd; The Madras Mail, July 25th; The Shield, Oct. 1st; The Birmingham Daily Post, Oct. 3rd; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Philpots, Poole; Dr. H. T. Lanchester, Croydon; Dr. R. Gee, Liverpool; Mr. L. H. Grindon, Manchester; Dr. Joseph Rogers, London; Dr. Kelly, Taunton; Mr. W. H. Pearce, Sheffield; Mr. C. W. Cooper, Leicester; G. H. S.; S. T.; Dr. J. Braxton Hicks, London; Dr. J. Althaus, London; Mr. Wesley, London; Dr. Cayley, London; Mr. E. C. Board, Bristol; Dr. Sansom, London; The Secretary of the Clinical Society; Dr. Geissé, Ems; Mr. T. D. Saunders, Smarden; Dr. D. Brodie, Liberton; Dr. Martin, Manchester; M.D. Edin.; Dr. Wilks, London; etc.

LETTERS, ETC. (with enclosures) from:—

Mr. Berkeley Hill, London; Mr. Wm. Fairlie Clarke, London; Dr. Protheroe Smith, London; Mr. John Wood, London; Dr. Aveling, Rochester; Dr. E. J. Tilt, London; Dr. R. T. Manson, Witton-le-Wear; Mr. Hulke, London; Dr. J. H. Bennet, London; Dr. George Johnson, London; Dr. Fleming, Birmingham; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Mr. Gascoyen, London; Dr. Gervis, London; Mr. E. Atkinson, Leeds; Dr. Sturges, London; Dr. J. C. Brown, Liverpool; The Medical Officers and Lecturers of the Westminster School of Medicine; Dr. W. J. Cleaver, Liverpool; Dr. C. Bader, London; Dr. A. D. Davidson, Aberdeen; The Secretary of State for India in Council; Mr. T. R. Jessop, Leeds; Mr. A. F. M'Gill, Leeds; Dr. Nesham, Newcastle-upon-Tyne; Dr. H. G. Sutton, London; Dr. Cheadle, London; Mr. Berry, Birmingham; Dr. Mapother, Dublin; Mr. Wanklyn, London; Dr. H. C. Bastian, London; Mr. C. J. Denny, Malvern; Dr. Foster, Birmingham; Mr. Heyward, Staines; Dr. Macpherson, London; Dr. Vintras, London; Mr. Flower, Guildford; Dr. Shettle, Reading; etc.

LECTURES ON THE HISTOLOGY OF THE EYE: (BEING THE ARRIS AND GALE ANATOMICAL LECTURES.)

Delivered at the Royal College of Surgeons of England, June 1870.

BY

JOHN WHITAKER HULKE, F.R.S., F.R.C.S.,

Assistant-Surgeon to the Middlesex Hospital, and Surgeon to the Royal London Ophthalmic Hospital.

LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—Having gone over the normal anatomy of the eyeball in man, and noticed the structural modifications of the organ in other vertebrata, I would now invite your attention to the anatomy of disease, and, to-day in particular, to the histology of the new growths which originate on or in the eyeball. No other organ offers the same opportunities for observing some kinds of tumours in their early stages, of noting the changes which attend their growth, and of marking the alterations to which they give rise in the parts invaded by them.

Here, as elsewhere, it is natural and convenient to group the tumours in two primary divisions: cystic and solid. The latter are the more common, and by far the more important.

Cystic Tumours.—Excluding the not infrequent cyst-like bulgings of the iris, consequent on exclusion of the pupil and retention of accumulated inflammatory exudation between the iris and lens, and the vacuities filled with serum, which are sometimes present in solid growths of a distinctly inflammatory origin, such as those occurring in the solid fibrous mass which sometimes fills the space between a strongly coarcted retina and the choroid, and is a product of long-continued choroiditis (neither of which kinds of spaces has distinct sacculi of new formation), true intraocular cysts have come under my own observation only in connection with the iris and in the retina; and this, I think, accords with the experience of others. Retinal cysts are extremely rare. I am indebted to Mr. Lawson for the only opportunity which I have ever had of examining them. In dissecting an eye which had been excised on account of a chronic painful condition depending on choroid inflammation, eleven cysts were found in the retina, the largest of the size of a small pea. One which I examined microscopically had a distinct membranous sacculus, lined with a pavement-epithelium, composed of a single layer of flat polyhedral cells. The retina was slightly separated from the choroid by a thin stratum of serum, into which the cysts projected, protruding more from the outer than from the inner surface of the retina.

Three similar cases were communicated by Ivanoff to the Ophthalmological Congress held at Heidelberg in 1864, but the cysts differed from that which I examined in the absence of a distinct sac. They appear to have been simply cavities formed by the separating of the retinal tissues by an inflammatory exudation. Cavities like these I have more than once found in coarcted retinæ, but I did not regard them as true cysts.

The development of cysts in the iris and ciliary process is much less uncommon than in the retina. Wecker some time since published a summary of all which had been recorded at that time, and I myself published, in the *Royal London Ophthalmic Hospital Reports* in September 1867, a *précis* of twenty collected from various sources, with an account of two new cases which had then been recently under my notice. To these I can now add two others which I have since seen, making a total of twenty-four cases. Most of these were plainly developed in the iris, but a few appear to have arisen in the ciliary processes, and thence to have advanced through the iris into the anterior chamber.

Cysts originating in the iris (and I myself have seen such only) form a semi-transparent bladder, slightly pearly or reflecting in a faint shadowy manner the colours of the iris in which it arose. The growing cyst projects from the plane of the iris towards the cornea, spreads across the pupil, and fills the anterior chamber. Before or by the time this happens, it generally provokes iritis. After simple evacuation of their contents by puncture, these cysts soon refill, and they do not less

certainly form again after incomplete excision. The chances of a successful removal are therefore greatest where the cyst is small, and when its connection with the iris is limited, because these conditions are most favourable for its complete extirpation. In the case which I have tried (with very imperfect success) to illustrate by this diagram, these conditions were present, and the cyst never returned after removal. This, and also a second iris-cyst which I have microscopically examined, had a distinct sacculus, composed of a delicate structureless membrane, lined with a delicate pavement-epithelium of flat polyhedral cells, varying greatly in size and in form in different parts of the cyst. Externally, the cyst was overlaid by the stretched and unravelled tissues of the iris. I could not doubt that in both these instances the cysts arose in the iris, and this agrees with the origin of a similar cyst described several years ago by Mr. Bowman, in his *Lectures on the Parts concerned in the Operations on the Eye*, which, he says, was developed between the muscular stratum of the iris and the uvea.

Wecker gives a different explanation of the origin of such cysts (Knapp's *Archiv für Ophthalmologie*, etc.). He looks upon them as sacculations of the iris, placing them, as it appears, in the same category with the bulgings of the iris caused by the accumulation of exudation behind it, when the posterior chamber has been shut off from the anterior one by the adhesion of the iris to the lens. He assumes, as the first step in their development, an annular adhesion of the uveal surface of the iris to the anterior capsule of the lens. This is followed by distension of the piece of iris thus circumscribed, until it forms a sacculus, the interior of which is lined by an epithelium, which is the modified uvea. I venture, however, to submit that this view of their origin is not borne out by their true anatomy; and I think, also, that their clinical history sharply separates them from the localised bulgings of the iris consequent on pupillary synechiæ. With a single exception, so far as my knowledge of them reaches, all the recorded iris cysts have been simple, and their contents generally serous. The exception to which I refer is a proliferous one, described by Professor von Graefe in the *Archiv für Ophthalmologie*, Bd. iii, S. 212. It contained a pultaceous substance, consisting of squamous epithelium mingled with short stiff hairs. Its contents agreed, therefore, with the dermoid cysts so common about the orbit. We have yet much to learn about the etiology of cysts of the iris. In eighteen of twenty cases, I found that the appearance of the cyst followed an injury. This held good, not only of the serous cysts, but also of this proliferous one, which is the more remarkable, because the clinical history of the periorbital dermoid cysts, and also that of those in other regions, always points to a congenital origin. They may remain dormant for a long period, scarcely increasing until something rouses them to a more active growth. I have more than once seen this enlargement of a dormant cyst of this kind coincide with the accession of puberty. It may be that this dermoid iris cyst was also congenital, and that the wound supplied the stimulus which roused it from latency into activity.

Solid Tumours.—Most of the solid tumours of the eyeball arise inside it. Those which spring up on its exterior are few compared with those having an internal origin. I have seen a very small number of melanotic and unpigmented sarcomata begin upon the ciliary region and extend along the surface of the sclera and cornea; but invasion of the eyeball by continuous infection by sarcomatous and cancerous tumours arising in the caruncle or eyelids, and about the optic nerve behind the eyeball, is more frequent. The least infrequent of the tumours arising on the outer surface of the eyeball are, I think, those called dermoid, from their resemblance to skin. I have seen several such—most of them had a simple hemispheric form, and none of them exceeded the size of a split pea. Most of them were seated on the junction of the cornea and sclerotic. These little tumours have a dry surface like skin, rather than conjunctiva, and some of them bear a few hairs. In a vertical section they are seen to have an external skin enclosing a little mass of areolar tissue containing a few fat-cells. A lobulated variety of this kind of tumour is rarer. It is softer, it contains more fat, and in this approaches to a lipoma. All of this kind which have come under my notice have been seated wholly on the sclerotic, but loosely attached to it, and easily dissected off it. The overlying conjunctiva was less skin-like than in the first form, indeed scarcely altered. From their structure it might be predicted that these tumours would not return after excision, and experience corroborates this.

All the commoner intraocular tumours fall into three groups; they are gliomata, sarcomata, and cancers. I must premise, in order to avoid being misunderstood, that I use these terms in the restricted sense in which Virchow employs them in his lectures on Morbid Growths, the most valuable contribution to onkology in recent times.

By *glioma* is meant a soft vascular tumour, originating in the neuroglia—the delicate interstitial connective tissue of nerve. A *sarcoma* is

a tumour having for its type the commoner form of growing connective tissue, and it differs anatomically from cancer, chiefly in the presence of a true intercellular substance. A *cancer* is a tumour the active elements of which are cells referable to an epithelial type, packed in the spaces of an areolated or alveolar stroma, without a true intercellular substance. The definition of these terms rests on the bases of origin and structure, and it has not any reference to clinical history. Glioma, sarcoma, and cancer each have a characteristic structure, and cancer is not convertible with malignant tumour. Measured by their power of infecting near and also distant parts, glioma and some sarcomata of the eye are as malignant as the most virulent cancer.

Gliomata are soft vascular tumours, often formerly, and still sometimes, confounded with medullary cancer, and in one of their phases with tubercle. The rough appearances of a tumour are not always an infallible clue to its firm structure. Hirschfeld, who has written an excellent monograph on glioma of the eyeball, and Knapp, whose treatise on intraocular tumours is a model of laborious clinical study and of exact histology, have only observed glioma of the eye in children. The oldest child mentioned in Hirschfeld's tables was thirteen years old, and all Knapp's cases were children under five years. This is also my own experience. I do not remember to have seen a retinal glioma in a child more than ten years old, and I have seen more in children under five than between this and ten. It is not very infrequently observed in infants a few weeks old, and in some cases the growth had already made such progress that there was a strong presumption in favour of its having begun *in utero*. Such cases have also come under my own notice. Although often restricted to one eye, it occasionally attacks both. In the few examples of this which I have seen, the glioma was more advanced in one eye; in one instance it protruded as a fungating tumour from the right eye, while the left eye had not yet burst. As it is commonest in very early childhood, when slight visual defects are seldom soon discovered, and as it does not betray itself until it has attained some size, the earliest stages of retinal glioma have been rarely observed. In one case only, I saw it begin in the form of small, opaque, white raised spots, which grew, ran together, and became two large knots. Usually, after a short time, the retina becomes separated from the choroid by a serous effusion, the vitreous humour wastes, and the retina, transformed into a solid gliomatous mass, occupies the axis of the eyeball. Continuing to grow, it thrusts the lens forwards, produces a glaucomatous condition of the eyeball, and escapes in front, either by the cornea sloughing, or, which is less frequent, by its becoming infected and involved in the gliomatous mass. After this, the tumour grows very rapidly, and soon forms a large ulcerating and fungating mass, which projects between the eyelids, and often attains a very great size. The choroid and sclerotic are infected and destroyed in a similar manner, and tuberos masses form outside the eyeball around the optic nerve. The nerve itself is usually infected at a very early stage, and the gliomatous growth spreads along it inside the skull, infecting the optic commissure and neighbouring parts of the brain. If the child survive long enough, secondary tumours spring up at a distance from the primary source. I have seen them in distant parts of the brain and in the diploe of the skull; the lymphatic glands become infected, and secondary deposits have been found by Knapp in the liver. I formerly thought that glioma spread only by continuous infection, and that this was one of the features in which it differed from true cancer; but increased experience has shown me my error. (Fig. 5.)

Occurring at an age when growth is rapid, and being abundantly vascularised, these retinal gliomata often make quick progress, and death occurs seldom later than at the end of the second year, and usually, I think, much earlier. They are very prone to fatty and earthy metamorphoses, which produce small yellow and earthy specks. These are sometimes very abundant, and they give the glioma a rough resemblance to caseous tubercle.

In the living eye, a glioma, when it has attained some size, attracts the attention, even of the unobservant, by a peculiar yellow brightness of the pupil, which is often compared to that of a cat, and it is for this the children are often brought, the visual defect being unnoticed. With the ophthalmoscope in the earlier stages, and under focal illumination with a collecting lens at a later period, the projection of the tumour into the vitreous humour and its vascularity are easily detected. Histologically they consist of small cells, about the size of a blood or lymph corpuscle, scattered through or densely crowded in a homogeneous or very firmly fibrillated intercellular substance. Numerous observations have placed their retinal origin beyond doubt, but we still need information respecting the precise situation in which they begin, and the particular retinal tissues out of which they are evolved. Knapp refers them to the outer granule-layer, while Hirschfeld relegates them to the inner granule-layer. I am unable myself to speak on this point, for I have not had an opportunity of microscopically examining a glioma in the

very early stage. In the orbital part of the optic nerve, and also in its intracranial course, I have observed the diffusion of glioma along the neuroglia, and the evolution of its corpuscular elements out of the corpuscles of this connective substance. The histology of the secondary tumours closely resembles that of the primary, only the corpuscles are often rather larger.

Sarcoma.—Most of the intraocular tumours occurring in adults fall into the group of sarcomata, and these, in my experience, without exception, originate in the choroid. They are soft, vascular, mostly pigmented, and less often pigmentless. When devoid of pigment they

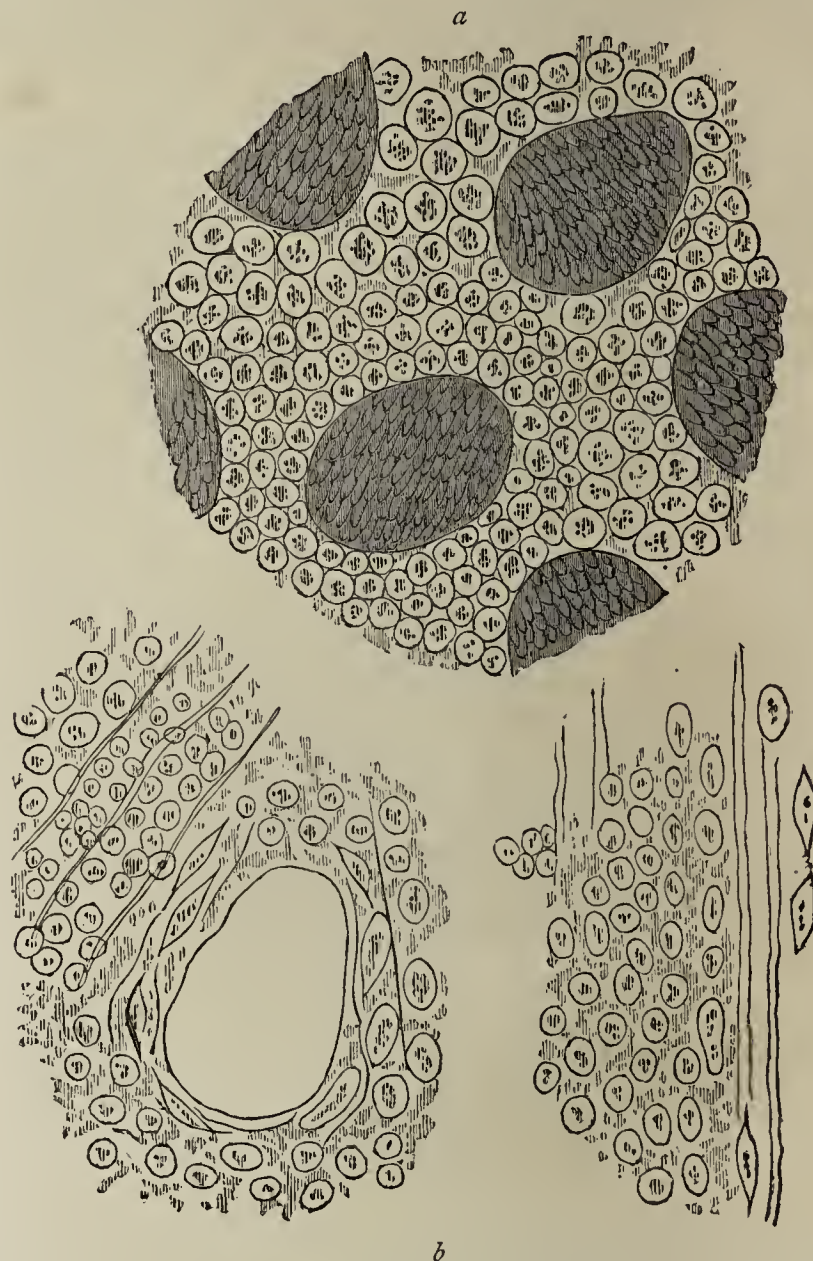


Fig. 5.—a. Cross section of the Optic Nerve in a case of Glioma Retinæ. The neurilemma is filled with glioma-cells. b. Section of a Retina affected with Glioma.

have often been mistaken for medullary cancer, and when pigment-bearing they are very often confounded with melanotic cancer. Under the common name *melanosis*, I have met with very few examples of the pigmentless form. They all occurred in young adults, and were all composed of spindle-cells. In most of the melanotic sarcomata of the eye, spindle-cells also predominate. The pigment is granular, and lies within the cells; it is as it were a something superadded, apparently not essential to the sarcoma, for the amount of it varies extremely, some cells being choked with it, while it is wholly absent from neighbouring cells, and it is not a very unusual appearance for some parts of a tumour to be black and others white.

Melanotic sarcoma of the eye, and also melanotic cancer, are, I believe, unknown in childhood. No instance of a large, round, cell sarcoma has yet come under my notice. Both varieties of sarcoma fill the eyeball, and soon cause coarctation of the retina; they burst forth in front, then grow rapidly and fungate, infect the other ocular tissues, and break through the sclera into the orbit and fill it, destroying its bony walls by infecting them and by pressure; they extend along the optic nerve into the skull; and they give rise to secondary tumours in near and remote parts. I have been so often able to trace the remains of the choroid on

both surfaces of intraocular sarcomata, that I have no sort of doubt that they usually arise in its stroma. I have long been disposed to regard the lymphoid cells, which are always present here, as their starting point.

Cancerous tumours form a very small group. I have myself seen very few; most of them were melanotic, and where I had the opportunity of examining them before they had infected the other tissues, and before they had filled the eyeball their origin within the choroid could not be doubted. They manifest the same diffusibility by continuous and remote infection as cancer does when it arises in other organs. I do not know any better illustration of the truth of Virchow's aphorism, that a necessary connection by no means always exists between the external form and the inner nature of a morbid growth, than that afforded by the intraocular sarcomata and cancers—both are soft vascular tumours, both have a melanotic and unpigmented variety. If we cannot always distinguish them by their rough appearances on coarse dissection, neither are there any ophthalmoscopic signs by which we can differentiate them in the living eye. The unpigmented forms of sarcoma and cancer alike beginning in the choroid, project from the plane of its inner surface, and, soon advancing in front of the posterior principal focus of the eyeball, reflect in divergent pencils the light which falls upon them, and make the pupil to shine with a bright metallic glow. The colour is a dirtier and less pure yellow than that of glioma. While the media remain clear and the retina overlying the tumour continues transparent, we are in some instances able to distinguish the blood-vessels belonging to the tumour from those of the retina by their different distribution, which is



Fig. 6.—*a*. Cross section of an Optic Nerve in Cancer of the Eyeball. The interstitial tissue between the inner and outer sheaths is infiltrated with Cancer-cells. *b*. Sclera infiltrated with Cancer-cells.

a valuable aid in diagnosis. Unfortunately the retina soon becomes, in many cases, detached from the choroid, and coarcted. In some cases, the retina is detached throughout its entire extent and coarcted, forming a slender funnel, the point of which is tied to the sclerotic foramen, and

the wider end is applied to the back of the lens. When this has occurred, the detached retina may mark the tumour concealing the true nature of the case, and this is the more likely to happen when the retina has become opaque, and when the choroidal tumour is small. (Fig. 6.)

In such cases as these the tensile condition of the eyeball may, as Von Graefe has pointed out, give a valuable clue. In uncomplicated detachment of the retina, the tension of the eyeball is seldom excessive; the eyeball is seldom hard; while, with a detached retina complicating a postretinal tumour, excessive tension of the eyeball, shown by undue hardness, is often present. Unnatural softness of the eyeball, which is not uncommon with detached retina, does not often go together with intraocular tumour. On the other hand, hardness of the eyeball is not peculiar to intraocular tumour, but is one of the signs of a disease common in and after middle life—I mean glaucoma. So in a soft eyeball, the presence of tumour is not likely, while in a hard eyeball its presence is, so far as concerns this sign, not improbable. I have known many experienced surgeons enucleate neuralgic eyeballs, spoiled as was thought by uncomplicated glaucoma, in which on dissection tumours were found. Indeed, I once fell myself into this error. In several cases I have found only a partial detachment of the retina, and in some of these the separated portion was that which originally overlaid that part of the choroid from which the tumour sprang; but in other cases (and I think these were more numerous), the retina adhered to the surface of the choroidal tumour, allowing it to be seen with the ophthalmoscope while the rest of the nervous membrane was separated. Melanotic tumours, in proportion to the intensity of their pigmentation, absorb the light which falls upon them; and, under the ordinary illumination of unconcentrated daylight, are not, when small, observable by an untrained person, as a glioma is, unless they spring from the front of the choroid. Under the more intense illumination of the ophthalmoscope, while the media are clear, their diagnosis is not more difficult than that of unpigmented tumours.

To sum up; there are three common kinds of intraocular tumour, of which one, primarily seated in the retina—glioma—is restricted to childhood, and two originating in the choroid—sarcoma and cancer—almost exclusively occur in grown persons. Sarcoma is generally of the spindle-cell variety. It and cancer occur in two forms—one pigmentless, which is rare; the other melanotic and common. All three kinds of tumour manifest in varying degrees by spreading into near and remote parts, irrespectively of differences of tissue, that destructive diffusibility which constitutes them, in surgical parlance, malignant. The colourless sarcomata are, according to my experience, the least hurtful in this respect.

In conclusion, Mr. President and gentlemen, let me thank you for the kind consideration you have shown me. I am too fully aware of my own imperfections not to be sensible how much your kind indulgence has lightened my labours.

[FIGURES 3 and 4, shewing a section of the optic nerve and the changes which it undergoes in inflammation, were accidentally omitted from the second lecture. They illustrate the description of the sheath of the optic nerve, page 243, column 1, of the JOURNAL for Sept. 3rd.]

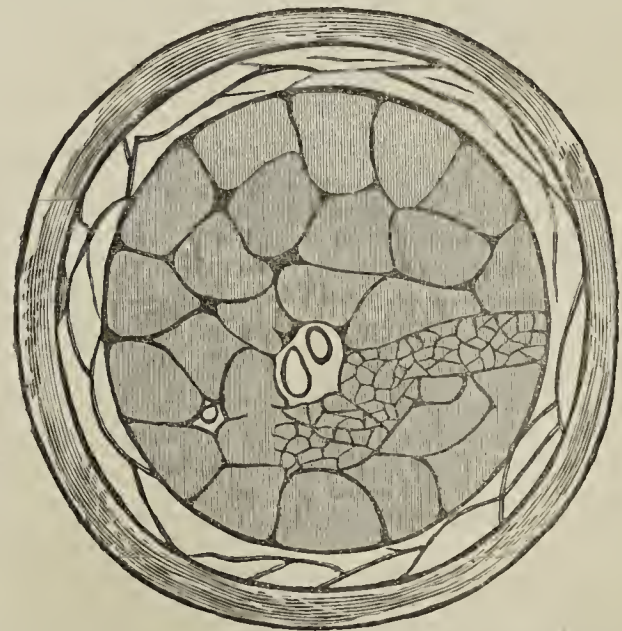


Fig. 3.—Cross section of the Optic Nerve, shewing its double sheath and internal neurilemma.]



Fig. 4.—*a*. Cross section of an Inflamed Optic Nerve. The interstitial connective tissue between the inner and the outer sheaths is infiltrated with exudation-corporuscles. *b*. Portion of the interstitial tissue with exudation-cells, evolved out of the connective tissue corpuscles. *c*. Granular and fibrillated exudation.

ON STRANGULATION OF THE UTERUS.*

By GRAILY HEWITT, M.D., F.R.C.P.,

Professor of Midwifery in University College; Physician-Accoucheur at University College Hospital; etc.

UNDER the term "strangulation" of the uterus, I propose to describe a pathological condition of that organ of great importance, hitherto, I believe, I will not say absolutely unrecognised, but unexplained as regards the mechanism of its occurrence, and certainly undervalued in regard to the influence which it exercises in the production of uterine suffering and the origination of some of the most troublesome maladies to which women are subject.

It is well known that, if one of the fingers be forcibly kept in a state of extreme flexion for a few hours, the result is, that the finger becomes swollen, congested, and painful; the pressure due to this flexion impeding the circulation and producing these effects. Similarly, a bandage tied round the arm produces congestion and pain in the hand, even when the pressure is kept up for a short time only.

Now, the forcible bending of the uterus is attended with results of an analogous character. Flexion of this organ at its centre similarly interferes with the circulation in its tissues, leading to the effects now to be described under the term "strangulation" of the uterus.

A moment's reflection on the anatomy of the uterus and the arrangement of its vascular supply leads necessarily to the inference that any compressing force applied at or about the middle of the uterus will inevitably lead to obstruction in the circulation of the organ above that point; the result being an engorged congested condition of the body and fundus of the uterus. In a lesser degree, also, such compression will give rise to like results in the cervix and neighbourhood of the os uteri, where the circulation must be also materially interfered with. A reference to the beautifully executed illustrations of the vessels of the uterus in Dr. Savage's work *On the Female Pelvic Organs* (Plate VII, 2nd ed.) will lend force to this explanation. Let it be supposed, for instance, that a ligature were applied, not very tightly, round the uterus at about its middle: the congestion referred to would occur just as certainly as when a bandage is applied round the arm in the operation of venesection.

Now, acute flexion of the uterus produces a result very analogous to that which would occur were a ligature applied round the uterus. If the organ be bent backwards, for instance, a constriction will occur at the seat of the flexion, which will be intense and severe in proportion to the degree of the flexion. The passage of blood to and from the fundus uteri is impeded from the simple fact that the opposite sides of the blood-vessels are brought into contact, and the passage of the blood obstructed. The bending of a tube composed of non-rigid materials necessarily produces more or less occlusion of that tube; and so it is with the vessels of the uterus when that organ is in a state of acute flexion.

Strangulation of the uterus is most intense when the organ is sharply bent backwards and assumes a shape like that of a chemical retort; and the strangulating effects are most marked when such flexion has been rather suddenly brought about. But it exists also, though to a less degree, when the uterus is sharply bent forwards; the reason for the difference residing in the circumstance that the anatomical relations of the uterus allow a more extensive and a sharper degree of flexion backwards.

I maintain, then, that a necessary result of acute flexion of the uterus is a strangulation of the organ, which will be characterised by various degrees of congestion, according to the rapidity with which the lesion is brought about, and which will be influenced by other circumstances too obvious to require special mention.

Congestion of the uterus due to strangulation, and brought about by the mechanism above described, will, and frequently does, aggravate and intensify the flexion, the two mutually increasing as the disease advances. The original cause of the flexion is various; but I do not hesitate to say that, in the numerous cases which have fallen under my notice, a mechanical pressure upon the fundus uteri from above was in almost all cases demonstrable by careful scrutiny of the history of the individual case. An accidental increase in the size of the uterus, such as is present in weakly women for some weeks after parturition, or such as is present during menstruation, or from the presence of chronic congestion of the uterus from any other cause,—under any one of these conditions, an accidental slip, or fall, or strain, or unusual exertion of any kind, will supply the determining and actual cause of the flexion. Increased size of the uterus, then, coupled with a lax, pliable condition of the organ, is, from my point of view, the predisposition; while mechanical pressure from muscular exertion of the walls of the abdomen or other mechanical agent is the exciting cause of the flexion. The flexion, once produced, determines the effects which I describe under the term "strangulation".

Strangulation of the uterus is temporary or permanent, according to circumstances. The more ordinary circumstance is, that the uterus so affected is sometimes in what may be termed a condition of acute strangulation, which lasts for a certain time, but, on the patient taking rest and remaining quiet, the acute state passes off, leaving a less severe degree of congestion present. Undoubtedly, after the lapse of time, the flexed uterus becomes rather less liable to attacks of acute strangulation, if I may so express myself; but a sudden exertion of any kind may, even in cases of long standing, give rise to this degree of the affection.

An account of the symptoms of strangulation of the uterus will at the same time furnish an opportunity for explaining the relation between this condition and inflammation of the uterus.

In acute strangulation of the uterus, the patient complains of an intolerable pain in the back, which absolutely prevents motion. There may be tenderness on pressure over the hypogastric region, which is sometimes very sensitive indeed to the touch. On touching the uterus from the vagina, it is found extraordinarily sensitive; but this sensitiveness is found to be really almost limited to the displaced fundus, which can be felt behind the vagina, swollen, large, acutely sensitive to the slightest touch. The very acute cases are always cases of *retroflexion*.

* Read in the Midwifery Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

Occasionally pains coming and going, like small labour-pains, are observed.

And now I come to certain symptoms which are exceedingly interesting and important in their whole bearing, and which are very frequently present in cases of acute strangulation of the uterus: I mean the nervous and hysterical symptoms.

Clinical observation has led me to the conclusion that, in cases of what may be termed acute hysteria attended with violent paroxysmal outbreaks, the pathological condition which lies at the root of the evil is strangulation of the uterus such as that above described. The truth of this theory, which, so far as I am aware, is a novel one as propounded in this particular way, will, I am convinced, become evident to those who take the pains to investigate and dispassionately inquire into the facts of individual cases. So much attention has been directed to the condition of the os and cervix uteri, to the exclusion, in too many instances, of the condition of the body and fundus of the uterus, that the connexion between these hysterical phenomena and marked flexion of the uterus leading, as I have explained, to strangulation of the organ, has been overlooked. I maintain that the connexion exists, and can be indubitably proved.

The nervous symptoms produced by acute strangulation of the uterus might be accurately described after an *à priori* method. Acute congestion of the body of the uterus, such as is produced by compression of the organ at its centre, must necessarily be accompanied by exaltation of the nervous susceptibilities of the uterus. The trunks of the nerves undergo, together with the blood-vessels, considerable pressure in flexion of the uterus; the result being an acutely sensitive condition of the body of the uterus. But the uterus is not simply unduly sensitive to the touch under such circumstances; its sensitiveness is felt in other organs of the body. Reflex movements and agitations of other parts of the body are excited by this irritation: hence the violent paroxysms seen in cases of acute hysteria. Let the uterus under the pressure of such symptoms be examined by the touch, it will be found extraordinarily sensitive to pressure. This sensitiveness is due to strangulation—to a mechanical pressure, leading, as before explained, to interference with the normal circulation and innervation of the uterus.

No term so well as "strangulation" conveys an idea of the actual condition of the uterus in a patient at once the subject of acute flexion of the organ and liable to occasional severe hysterical attacks.

An acutely painful condition of the uterus does not invariably lead to hysterical attacks, though the converse proposition is undoubtedly true. In other words, the reflex phenomena are not always excited. But, in a chronic form, milder hysterical symptoms are very commonly present in cases where the flexion or displacement is less severe. In other words, hysterical symptoms in a milder form are pretty frequent when the uterus is slightly flexed or so displaced that the circulation is disarranged and partial strangulation occurs.

Anteflexion of the uterus is, according to my experience, a common condition in cases of chronic hysteria; the more severe cases of hysteria being associated with retroflexion of the uterus.

If I am asked for the proof of the truth of the theory now enunciated as to the connexion between these hysterical paroxysms and phenomena of various kinds and strangulation of the uterus, my reply is that, having attentively considered the matter, and having had the idea before my mind for the last three years, I can affirm that I have not yet met with any fact or series of facts which are not in strict consonance with the view now expressed. Did the time permit, cases abundantly illustrative are ready to be cited.

Regarding the connexion between strangulation of the uterus and inflammation of this organ—a part of the subject which I can only briefly allude to—the view which I have taken of the matter involves the conclusion that strangulation, or, as it might be termed, acute mechanical congestion, is the principal element in many cases of inflammation of the uterus; but, on the other hand, it is not to be denied that an inflamed, enlarged, softened condition of the uterus is not seldom the forerunner of strangulation. Further than this also, and to carry the case on to a later period of its history, this strangulation intensifies and increases the strangulation.

Regarding the treatment of strangulation of the uterus, and the important effects and complications often observed, there is necessarily much to be said; but I must limit myself to an indication of the principles which have guided me, and have appeared to be reliable in the management of such cases.

As a general rule—a rule to which I have observed exceedingly few exceptions—this maintenance of the uterus in a proper shape by mechanical means—the restoration, in fact, of the organ to its normal relations, both in regard to the parts of the organ itself and the organs in the immediate vicinity, is attended with an abolition of the symptoms, or, at all events, with their immediate amelioration. In most cases,

the relief is most instantaneous and striking. I could cite case after case of this kind. The hysterical cases are as striking as any in regard to the efficacy of the treatment.

To restore the uterus to its proper shape, and to maintain it in this condition, various mechanical devices, the sound, the intrauterine stem, the Hodge pessary, the "cradle" pessary, which latter is my invention, all prove useful in their appropriate places. It is undoubtedly a question, how far depletion is necessary in these cases of strangulation of the uterus. The good effects of unloading the vessels of a congested loaded uterus must be obvious enough, and leeches would occasionally be useful. But, on the supposition of the accuracy of the explanation above given of the pathological condition present, it must be plain that the first and foremost indication will be to straighten the uterus—to remove that flexion which is all the time operating in such a way as to close the vessels and give rise to continued severe congestion. Local depletion may be beneficial, but leaves, for the most part, the radical evil untouched.

THE SUCCESS OF THE ANTISEPTIC TREATMENT OF WOUNDS EXPLAINED WITHOUT REFERENCE TO GERMS.

By R. T. MANSON, L.R.C.P.Ed., etc., Witton-le-Wear, Durham.

HAVING adopted and found good reasons for continuing to use what is known as Professor Lister's treatment of wounds, I may go on to state that I entertain serious doubts as to the soundness of the theory upon which it is based. These doubts arose from some cases of wounds in which the "germs" had full access for some time, in which no germicide was used to the surface of the wound, and yet in which no pus was formed.

It is difficult to resist the conviction that the ubiquitous impalpable germ, as difficult to capture as the fairies of old, has, like the "good folks", been debited with much mischief of which it is innocent. Professor Lister's theory is so well known that it is unnecessary to recapitulate it. The theory which I propose is, that the success of Professor Lister's treatment is due to the carbolic acid producing on the surface of a wound a stratum of coagulum which protects the germinal cells below from the deleterious action of the oxygen of the atmosphere, just as the epidermis protects the true skin; and, secondly, to the production of an atmosphere or retention of an atmosphere of carbonic acid in and round the wound.

Whether pus-corpuscles be the descendants of nuclear cells or parasites within them, it is known that pus results from an abnormal growth of germinal or nuclear cell-material—that some obstacle to abnormal growth has been removed, and an increased access of pabulum allowed. In the case of a wound it is clear that the barrier, the scale armour of epithelium, is destroyed, and an increased supply of oxygen admitted. The result is the formation of pus. If this be so, it is evident that if we restore, to as great an extent as we can, the normal condition, we shall be doing the best we can as surgeons. This, I take it, we do by applying the carbolic acid lotion to the surface of a wound. Put a drop of albumen, say white of egg, on a glass slide, and beside it a drop of carbolic acid lotion; observe them under a microscope; let the two drops touch, and at the point and instant of junction a thin film, of what we may call "formed material", coats the albumen, and if the two drops are mixed a solid white mass of coagulated albumen forms on the slide; or, put a drop of saliva, containing epithelial cells, on the glass, and add solution of carbolic acid, the outline of the epithelial scale grows clearer, indicating the change produced. The carbolic lotion, then, changes the nuclear matter of each cell on the surface of the wound to which it is applied into an inert "formed material" protective of the vitalities below, as the epithelium does to what it covers. I need only point to the well-known fact that the degree of pus formation, and consequent pitting in small-pox, is in direct proportion to the exposure of the part to the action of the oxygen of the atmosphere, to show that such free access does act injuriously.

The primitive surgery of our boyhood, when properties of great virtue were believed to exist in saliva, and when licking or spitting upon a slight excoriation or cut was understood to be a remedy of undoubted efficacy, may have been founded in school-boy instinct; but its value would be explicable on the same principle.

On the value of an atmosphere of carbonic acid to a wound (and such atmosphere must of necessity be induced by the exclusion of common air), I say no more than to point out that it is the normal atmosphere of all covered tissues, and that the old plan of healing wounds by scabbing is the ancestor of Professor Lister's treatment.

THE PHYSIOLOGICAL HYDRAULICS OF DROPSY, DIARRHŒA, SUPPRESSION OF URINE, AND DIABETES.

By GEORGE JOHNSON, M.D.,

Professor of Medicine in King's College; Physician to King's College Hospital.

A COMPARISON of the facts of dropsy, diarrhœa, suppression of urine, and diabetes, leads to the conclusion that there are certain physical phenomena which are common to these various morbid conditions; and the results of this comparison have both a physiological interest and a practical value.

The kidney is the chief natural outlet for superfluous liquid. A free imbibition of water is usually succeeded by a copious secretion of pale urine. The excess of water entering the blood-vessels finds a speedy exit by the renal waste-pipe. On the other hand, a suspended or greatly diminished action of the kidneys has for one of its most frequent results an accumulation of water in the system—a condition which is designated dropsy.

The physiology of acute renal dropsy is sufficiently simple and intelligible. The tubes of the kidney are choked by the products of acute desquamative nephritis, while the vessels are gorged with partially stagnating blood. The secretion of urine is scanty, and mingled with blood-materials. Consequently, the constituents of the urine, both solids and liquids, begin to accumulate in the blood, whence they are effused into the areolar tissue, and into the serous cavities. The patient has what is called general dropsy; the dropsy being the result of a conservative effort to expel from the blood the excess of water, and of urinary solids, which tend to accumulate there in consequence of defective action of the kidneys. The dropsical effusion is removed by a reversed action of the vessels. The congestion and inflammation of the kidney subside; the circulation through the kidney again becomes free; the inflammatory products are washed from the uriniferous tubes; and thus the function of the gland is restored. Then a copious secretion of urine, mainly excited by the diuretic action of retained urea, quickly removes the excess of water from the blood; the blood-vessels—capillaries and veins—take up the water that had been effused into the areolar tissue and the serous cavities; and, this fluid escaping by the kidneys, the dropsy is removed. This is the natural cure of dropsy. In some chronic cases, the free action of a diuretic upon the kidneys may be made to pump the water from the tissues, and thus remove a dropsical effusion.

Another mode in which dropsy may be artificially removed is by the action of a hydragogue purgative. Thus a dose of elaterium excites copious watery discharges from the bowel; the discharge of liquid tends to deprive the blood of its water; this in its turn leads to the absorption of the dropsical fluid from the tissues; and thus a copious purging may cure a dropsy. Sir Thomas Watson mentions the case of a man in whom a profuse purging, excited by intoxicating doses of rack punch, led to the disappearance of a large hydrocele in the course of one night. Here it is clear, as Sir Thomas remarks, "that the expenditure of serous liquid from one part led to its absorption into the blood from another." We act upon the same physiological principle when we endeavour to promote the absorption of dropsical or inflammatory liquid effusions into the pleura or the pericardium by the hydragogue action of purgatives and diuretics. We know that, if we can partially drain the vessels in one direction, they will strive to fill themselves from another source.

We are now prepared to understand what happens during the progress of choleraic diarrhœa. A morbid poison, having entered the blood, excites copious watery discharges from the stomach and bowels. The blood-poison excites the choleraic discharges from the alimentary canal, as sugar in the circulating blood excites a diabetic flux through the kidneys. The choleraic discharges, however copious, have no appreciable effect in thickening the blood; and the reason is not difficult to find. The soft tissues of the body, the muscles, the viscera, the areolar tissue, etc., contain four-fifths by weight of water—water which is not chemically combined with them; for, when the tissues are exposed to the air, this water is gradually given off by evaporation, and it can be rapidly extracted by pressing the tissues between folds of blotting-paper. Now, when water is drained off from the blood by the bowels, the water of the tissues passes through the walls of the capillaries into the veins; so that the volume and the liquidity of the blood are maintained by this compensatory process of absorption; while the loss of water by the soft tissues is indicated by the fact that, after death from choleraic diarrhœa, the weight of the solid viscera, especially that of the kidneys and the spleen, has been found to be appreciably lessened.

The rapidity with which absorption occurs in the subcutaneous tissue

is shown by the quick and powerful action of morphia and other narcotics when injected beneath the skin; and so rapid is the absorption of water from the tissues when the contents of the blood-vessels are escaping, that the blood which escapes towards the end of the operation of venesection has been found to be more watery and of lower specific gravity than that which flows when the vein is first opened. Here we have evidence that, while the blood is escaping from an open vein, a current of water quickly passes into the vessels from the soft tissues.

We have next to consider what happens when the choleraic discharges from the alimentary canal have ceased. The blood, as we have seen, has maintained its liquidity by borrowing water from the tissues, which are thus left comparatively anhydrous. This borrowed water has now to be restored by a reversed current of liquid. During the stage of active elimination from the blood through the mucous membrane of the alimentary canal, absorption by that surface is prevented by the outward current of liquid; but, when the vomiting and purging have ceased, liquids taken into the stomach are rapidly absorbed into the blood-vessels, and thence transferred to the tissues which have been partially deprived of their water. So great is now the demand for liquid by the tissues, and so strong is the current towards them, that for a period, varying in different cases from a few hours to several days, little or no urine is secreted; the main stream of water being into the dehydrated tissues—an exact reversal of the tide of liquid which flows from the tissues towards the alimentary canal while the vomiting and purging are in active progress.

The stream of liquid into the tissues may carry with it urea and other urinary materials, and thus may contaminate and poison the tissues. This tissue-poisoning is probably in part the explanation of the consecutive fever of cholera. On the other hand, we have evidence that when, in consequence of renal disease, the blood is contaminated with urine, a hydragogue purgative removes not only water, but also some urinary excreta from the blood, and thus counteracts the tendency to uræmic poisoning.

The surest way to restore the secretion of urine after a copious watery diarrhœa is to supply an abundance of liquid to the blood and the tissues through the stomach and through the skin by an occasional immersion in a tepid bath. If frequent vomiting interfere with the introduction of liquid through the stomach, tepid water may be injected into the bowel.

The urine which is first secreted after an attack of choleraic diarrhœa is almost always albuminous. This is a result of irritation and congestion of the kidney, excited by the same morbid poison which caused the diarrhœa. In most cases, the albumen quickly disappears from the urine; but in a comparatively few cases a congested and inflamed condition of the kidney may cause a fatal suppression of urine. This is the more likely to happen if brandy and opium have been freely given during the diarrhœa stage. This form of suppression of urine is best treated by purgatives, by leeches or cupping, and fomentations on the loins.

Here it may be well to remark that suppression of urine results from various causes, and therefore assumes different forms, requiring a varied treatment.

The liquid part of the urine is defective when there is profuse sweating or a copious watery discharge from the alimentary canal, or when after such discharges the tissues are reclaiming the water which they had given up to the blood during the continuance of the discharges. The solids of the urine are defective when, during the collapse of cholera, the circulation of the blood, and consequently the oxidation of the tissues, are greatly lessened. The urinary solids are products of oxidation. Lastly, both the solids and the liquid of the urine may be scanty or suppressed when the secretory power of the kidney is impaired by organic disease.

The copious secretion of urine by a diabetic patient causes thirst and a free imbibition of liquid. The sugar acts as a diuretic, and the kidney excretes the sugar, together with so much liquid as is required to dissolve and to wash out the sugar. The liquid required for this purpose is mainly obtained through the stomach; but it is a well-known fact that diabetic patients frequently pass by the kidneys more liquid than they drink.

Sir Thomas Watson mentions the case of a boy who had *diabetes insipidus*, and who, while restricted to a pint and a half of liquid a day, passed ten pints and a half of urine. Evidence to the same effect was obtained by weighing the boy at short intervals. Thus, on one occasion immediately after he had emptied his bladder, he was found to weigh 3st. 8lbs. 3dr. Three hours subsequently, having taken nothing in the interim, he weighed exactly a pound more. Then he voided a pound of urine, after which his weight was the same as at first, so that he must have absorbed, either through

the lungs or the skin, or both, a pound of liquid in the course of three hours. This rate of absorption would give eight pounds in the twenty-four hours: add to this the pint and a half of liquid allowed as a drink, and we have within a pint the amount of liquid that the boy actually passed within the period of twenty-four hours—namely, ten pints and a half. Now, since we have positive proof that a copious drain of liquid through the kidneys leads to the absorption of water from the air through the lungs and skin, it is probable that the same process of pulmonary and cutaneous absorption of water takes place in cases of profuse watery diarrhoea; and that this is one of the means by which the blood is enabled to maintain the normal proportion of its watery ingredients while water is rapidly escaping by the stomach and bowels.

We have a familiar illustration of the close relationship between the skin and the kidneys in the copious secretion of pale urine associated with suppression of the perspiration by the continuous application of cold to the surface; while, on the contrary, the urine is scanty when free perspiration results either from disease, as in the case of rheumatic fever, or from a high temperature of the air, or from active exercise. Again, the skin is dry and perspiration scanty when, as in a case of diabetes, an abundant stream of water is constantly escaping by the kidneys. In fact, as we have already indicated, the skin of a diabetic patient rather absorbs than secretes water.

It is manifest, from a consideration of the facts which we have now passed in review, that within certain limits, and while the circulation and respiration are unimpeded, the blood has a remarkable power of maintaining the normal proportion of its solid and liquid ingredients. Thus when, in consequence of defective action of the skin and kidneys, water is retained in the system, the excess of water, not being allowed to accumulate in the blood, is thrown into the tissues, which are thus flooded with water, and dropsy is the result. On the other hand, a copious drain of liquid from the blood, either through the alimentary canal or through the kidneys, causes a demand for water, which is met partly by the imbibition of liquids by the mouth, partly by the absorption of water from the tissues and through the pulmonary and cutaneous surfaces. Thus a copious drain of liquid may remove a dropsical accumulation, or temporarily deprive the healthy tissues of their usual proportion of water; the blood meanwhile maintaining its normal composition.

In a paper on "Some Points in the Pathology of Cholera and Apnoea", which I published in the *British and Foreign Medico-Chirurgical Review* (April 1870), I have shown that the dark and treacherous condition of blood which occurs during the collapse stage of cholera is a consequence of the impeded circulation and respiration; this condition of blood being found alike in cases of cholera-asphyxia and in all forms of apnoea.

Thus it appears that, while circulation and respiration are unimpeded, profuse watery discharges tend to dry the tissues, but not to thicken the blood, on the other hand, blood-thickening results from impeded circulation and respiration—from asphyxia and apnoea—even when there has been little or no drain of liquid from the system.

SYPHILITIC INSANITY.*

By H. GRAINGER STEWART, M.D.,

Medical Superintendent of the Borough Lunatic Asylum, Newcastle-on-Tyne.

THE three following cases of syphilitic insanity, which came under my care in the Newcastle Asylum, are, I think, worthy of bringing before you as illustrative of the remote effects of the taint of syphilis.

CASE I.—J. S., a commercial traveller, aged 35, married, with children, was admitted into the Newcastle Asylum on April 16th, 1868. He had fair hair, blue eyes, and fresh complexion. His bodily condition and health were indifferent. He had led a very irregular life many years, and at one time suffered severely from syphilis. During the three months before admission, he had gradually become incapable of conducting business. He now believed himself persecuted by enemies, especially men residing at Bradford, with whom he had had business connexions. He said he heard them conspiring against him and wishing him ill. He was restless and irritable; frequently heard voices talking with him and about him; he understood all their plots. He slept fairly, but awoke much distressed, believing that he had been subjected to the most cruel processes during his sleep.

After residing in the asylum for a short time, he continued to be the subject of the most extraordinary hallucinations. He heard voices

which communicated to him the most foolish and absurd things, all which he firmly believed. He said he underwent nightly a kind of torture, which he called the "cylinder finish", and which he described as an excruciating process, by which his brains were whirled round with extreme velocity, mixed into a pulp, and replaced in his skull just in time for his awaking. This, he believed, was ordered by the doctor, who knew of everything that was done to him, and had the power of regulating the amount of his sufferings. He was also, he said, frequently put upon the wheel and drugged during the night; and, though he really slept well, he averred that all the time he was vividly sensitive to all the tortures which he thought he underwent. Gradually he became extremely irritable, fancied that insults were offered to him by all about him, secluded himself from the society of his fellows, refused food, was inclined to lie in bed, and threatened to commit suicide. He referred to his head as the seat of his sufferings, and complained of pain at the vertex. Occasionally he was persuaded to take the iodide of potassium in two-grain doses three times daily, but never so continuously as to give it a fair trial.

In the second year of his residence in the asylum, phthisis pulmonalis became developed, and then some improvement in his general health took place. He began to occupy himself in the joiner's shop, making toys for his children; and his actual sufferings seemed to obscure the abnormal sensations which so strongly affected him in the earlier period of his disease. Two years after his admission, he died. No *post mortem* examination was allowed by the friends.

CASE II.—D. T., a woman aged 50, married, without children, was admitted on April 10th, 1868. She was said to have led a dissolute life. She was very much emaciated and unhealthy; her nose was marked by cicatrices. She had suffered from syphilis, and had a bad sore on the leg. The circulatory and respiratory systems were healthy. She was of fair hair and complexion, ate well, and was said to sleep well. It was stated that she had been only a week insane.

On admission, she was in a state of dementia. She was perfectly bewildered, and evidently could not understand the events taking place about her. She answered very slowly any questions that were put to her, and seemed unable to understand when she was spoken to.

Shortly after admission, her mind became filled with singular and painful delusions. She fancied herself constantly persecuted by certain individuals, who day and night made it their business to annoy and hurt her. This they did by using the most ingenious machines, which were specially invented to torture. They were introduced into her body and brain, and worked by means of wheels. She averred that they burnt her brain, drew out her inside, cast her into the air, put their fingers into her, and so tormented her. This for the most part took place in the night; but, if she were allowed to remain in bed during the day, she complained of similar though not such severe treatment. At the same time she heard her tormentors talking together, consulting as to which was the most painful process they could invent. She also heard others remonstrating with them for treating the poor woman so cruelly. She as well saw faces which she recognised as old neighbours, and particularly the face of her principal tormentor, whom she supplicated to desist. The head was referred to as the seat of the pain.

During her residence in the asylum, she has every morning bitterly complained of her treatment during the previous night; and sometimes she gets into great excitement, and threatens to destroy herself occasionally. She refuses her food for days together, with that intent; and once, about a year after admission, was found by the night-nurse nearly strangled by a garter which she had twisted round her neck. She has often prayed the doctor to give her poison to end her sufferings.

She now (August 1870) continues to suffer from the same or similar delusions and hallucinations. At night, when the nurse shuts the door on her, the operations of her tormentors commence, and so they continue to persecute her all night. She says she is placed on a table and dissected; that her head is opened; and that all the time she sees and hears her tormentors inciting each other to treat her more and more severely. She occasionally receives her medical attendant with a storm of abuse, averring that he was present during the night, and aided her tormentors. The sores on her legs healed up under treatment by a solution of the bichloride of mercury. There has been no improvement of the mental symptoms of any duration, although she has undergone long courses of the iodide and bromide of potassium. The hydrate of chloral, in forty-grain doses, produces deep and long continued sleep, and seems to relieve the symptoms at the time; but there is no material change in the mental state of the patient.

CASE III.—P. H., aged 58, single, an Irish labourer, a Roman Catholic, was admitted into the Asylum on January 22nd, 1869. He had served some years in Portsmouth, and had led a very irregular life. He has fair hair and eyes, and is ruddy; he is blind of one eye from wound of the cornea. He has suffered from syphilis; but his general

* Read in the Psychological Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

Health is fair. He believes that his brother was murdered in the work-house, and that the assassins are now after himself. He fancies that they are constantly watching him, hiding themselves in the ceiling and under the floors and even suspended in mid-air over head. He heard them constantly plotting how they may kill him. One of their favourite modes of attack is by shooting vitriol, ammonia, and "black poison" at him, besides using to his injury other magic and black arts. These persecutions go on principally at night, and the arrangements which he makes for warding them off are worthy of remark. He secures small pieces of wood in the day-time, by which he wedges the door of his room at night, and places his bed so that, should anyone attempt to enter, he must be awakened. He envelopes his head with his pillow-case, which drops over his face, stuffs his ears and nostrils with cotton-wool and his mouth with a pocket-handkerchief, and thus, he believes, he keeps out any drug or vapour when he is asleep. All the key-holes, ventilators, and open spaces about the doors and shutters are also carefully covered with blankets or sheets. It takes him more than an hour every night to complete these arrangements, and when he lies down under his mattress he considers he is in circumstances of comparative safety. He frequently complains of pains in the head and burning sensations on his skin, which he attributes to his unseen enemies shooting poison on him. He complains during the day, but is worse at night, and every morning recounts some new plan of attack that his tormentors have been attempting. He has been under treatment for eighteen months; but in his, as in similar cases, it is almost impossible to carry out a system of treatment, and no improvement has taken place in the case. He threatens to commit suicide, to put an end to his sufferings; but has never made any actual attempt.

REMARKS.—These cases have several characters in common. 1. They all occur on subjects who have suffered from syphilis.—2. The character of the delusion is similar. They all believe themselves the victims of conspiracy, persecution, and cruelty undeserved.—3. They are all subjects of hallucinations of touch, hearing, and sight.—4. They are all suicidal, two of them having made actual attempts on their own lives.—5. They are all dangerous to others when under the influence of their delusions, and were quite unsafe to be at large.—6. They are all worst at night, which circumstance may be dwelt upon as indicating the syphilitic nature of the disease.—7. They all suffered severely from cephalalgia: their abnormal sensations were in the brain.—8. The treatment produced but little effect, and it is feared they can only be looked upon as incurable; but still, by the relief of symptoms, much of the distressing character of the disease may be assuaged.

ON THE TREATMENT OF GUN-SHOT WOUNDS BY CHLORIDE OF ZINC.

BY CAMPBELL DE MORGAN, F.R.S.,
Surgeon to the Middlesex Hospital.

THE present war affords a great opportunity for testing the merits of the various antiseptics which have of late been recommended and adopted. Carbolic acid has, so far as I can learn, been as yet almost exclusively employed. It would be impossible, amidst such scenes of wholesale destruction, to use this agent with the care and nicety on which its undoubted benefits largely depend. Profuse and foul suppuration, with its constant attendant, pyæmia, is but too common. I should much like, under these circumstances, that a trial should be given to the chloride of zinc—an agent which I still employ, in preference to all others, in a large number of cases, and to which I often return after the use of others.

Like other antiseptics, it often prevents suppuration, and allows the most rapid and quiet healing in cases which would appear at first incapable of running a favourable course. It never acts on the system at large, and it can be used by any ordinary nurse without other qualification than that of attention to orders.

In recent wounds, where the skin is not much thinned, I use a solution of from thirty to forty grains to the ounce of distilled water. I use this freely, especially in the crevices and dark corners of a wound, in the cavities of bone, as well as elsewhere; and I sponge it into the wound until the whole surface is creamy. This causes an exudation of blood for a time. Any large vessels which bleed in consequence of the application may be secured; the small ones need not be cared about. The wound may be put together in the ordinary way; and it should be covered with linen or lint wetted with a solution of five grains of chloride of zinc to the ounce of water. Care should be taken that the covering is kept constantly wet. If the wound be a crushed one, which will not unite, it may be sponged out as before, and then covered with the weak solution.

The wound, which has been brought together, may become in twelve or twenty-four hours filled with fluid. This should be let out by loosening a stitch; it will be found to consist of fluid bloody exudation. The wound may be brought together again, and the weak solution used as before.

With no more care than this, I have had rapid cure without suppuration in crushed and lacerated wounds; perfect union by first intention in large operations, as high amputation of the thigh, etc.; and very commonly union with only slight suppuration in the course of the wound, and this where ligatures have been placed on all the vessels requiring them.

When a wound becomes foul in the interior, it should be syringed out several times a day with the weak solution.

No doubt pyæmia will ensue, in spite of all these applications; but it is rendered much less prevalent. This must be so, when the discharges are kept a great degree free from putrefaction.

RECENT IMPROVEMENTS IN THE PELVIC BAND (AN INSTRUMENT FOR AIDING LABOUR).*

BY PROTHEROE SMITH, M.D.,
Physician to the Hospital for Women, etc.

HAVING fully described the pelvic band in a paper read before the British Medical Association at Leeds last year, and having exhibited it at meetings of the Obstetrical Societies of London and Edinburgh, as well as before the Société de Chirurgie of Paris, etc., it will only now be necessary to mention certain alterations and improvements in the instrument by which the end proposed—viz., to give efficient aid in labour—is better and more readily attained. I stated last year my views as to the dual character of the force employed in parturition: since then, Professor Haughton has demonstrated, by a series of ingenious experiments, that, of the two forces engaged, that of the lumbo-abdominal voluntary muscles exceeds that of the uterus in the ratio of nearly ten to one.

I claim this first principle as the basis of my argument for the expediency of supplying an artificial force to subsidise that of the lumbo-abdominal muscles, when impaired or lost by the constriction of dress or by anæsthetics. My own experience proves that my conclusions from these premises are just. It has enabled me to practise midwifery with infinitely less labour and anxiety to myself, and with greatly diminished peril to my patients. Moreover, it has lessened the duration of parturition and the consequent attendance of the accoucheur. It has relieved the uterus of the undue demands on its powers through absence of the voluntary muscular forces; it has induced efficient contraction of the uterus after speedy expulsion of the placenta; it has prevented and controlled *post partum* hæmorrhage; it has readily rectified the anteverted condition of the uterus when it has depended on laxity of the abdominal walls and want of lumbar curve. It prevents, if worn during the later months of pregnancy, the separation of the sheaths of the recti, and the distressing hernia which follows such separation.

It may be well here to enumerate a few of the advantages claimed for the pelvic band in labour. By it a fixed point is secured for the exercise of mechanical force, from which, by the aid of powerful springs, with a well-adjusted belt, it supplies a power which no circular bandage, whether tightened by springs or otherwise, is able to effect. By these means supplemental expulsive force can be employed during the pains, and relaxed in the intervals or employed permanently, as *post partum* and otherwise is often needed, thus simulating the action of the abdominal muscles in a normal state during parturition. It will readily be seen how, when the voluntary muscular force is wanting permanently from the result of pressure, or temporarily from the abuse of anæsthetics, the want of this paramount force throws the burden of the act of expulsion on the overtaxed uterus. Thus this overworked viscus succumbs to the undue strain, and does not recover itself as do the other muscles after their efforts during parturition. Hence the long period necessary for the "getting up", the risk of subinvolution, prolapsus, and other displacements and disorders of the uterus, which often follow the accouchement of the civilised woman.

It will doubtless be remembered, both from my paper read at Leeds and also from the more complete description which was published this year, together with woodcuts and illustrative cases, in the *Lancet* of June 4th, that the principle of the pelvic band consists in a steel band fitting and grasping the pelvis immovably, and connecting two pads, one on the sacrum, the other on the pubes; and these two antagonistic points of sup-

* Read in the Midwifery Section before the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

port tend further to fix the pelvic band. On each side of the lumbar spine arise two perpendicular springs, crossed by one or more horizontal springs, so attached to the abdominal belt as to offer the means of employing at will depressing, compressing, or uplifting force, as occasion may require. The chief improvements made in the pelvic band are as follows. The fastening of the pelvic springs to the pubic and sacral pads is effected by screws instead of spring-bolts, and is therefore more easily disengaged, thus facilitating the removal of the instrument after the termination of labour. Instead of the belt being strapped to a buckle on each side of the transverse spring, it is now made in three divisions, each division terminating in a long strap, which, passing through a corresponding roller on each side, is tightened or relaxed at will, and fastened to hooks placed in the middle and sides of the belt. This form of belt answers very well, and is easily managed whilst the patient occupies a position on her back; but, as more applicable to the position ordinarily adopted in this country—on the left side—I have made additions to the pelvic band, and so altered the bandage as to offer the advantages of being used with greater ease by the accoucheur, and of affording increased help and comfort to the patient. This, as you will observe, consists of two flat perforated caoutchouc bags, one placed at the back between the instrument and the loins, the other in front underneath the bandage, and extending upwards mesially from the pubes. When inflated and acted upon by the springs and belt, they increase considerably the power of compression, at the same time that they form soft cushions which allow of the necessary force to be employed without discomfort, whilst imparting to the patients a feeling of great support and help. The belt is so constructed that, by running through rollers at the end of the transverse springs, and also through others placed on each side of the belt itself, the straps when thus returned can, one or all, be tightened with the greatest ease, and fastened without difficulty to hooks fixed to the band behind.

By following the movements observed in natural labour, by these appliances the accoucheur is given the power of materially helping his patient in her hour of sorest need by shortening the period of her sufferings and by greatly lessening her perils and those of her offspring; whilst it is not altogether unworthy of remark that it very much curtails the time, toil, and anxiety, of her medical attendant.

THERAPEUTICAL MEMORANDA.

THE TREATMENT OF "HOUSEMAID'S KNEE".

I BELIEVE that the treatment of inflamed bursa patellæ by the plaster of ammoniacum and mercury is not so generally known and accepted as it deserves to be. The following cases are selected from several in which I have used it with success, and require no comment.

CASE I.—June 20th, 1867. E. J., a young carpenter, came to me with a very largely distended bursa over the left patella, as large as half a cricket-ball. It had been so about ten days, with not much pain or inflammatory symptoms. I had it covered at once with the plaster spread on leather. On July 5th, there was great improvement. The hot weather made a fresh plaster necessary. On the 12th, the swelling was entirely absorbed. He had continued to work throughout, and was now cured.

CASE II.—S. S., a labourer, came to me on November 10th, 1869, with the bursa patellæ acutely inflamed. There were great pain, numbness, and heat. I sent him to bed, and had constant hot fomentations applied for two days to subdue the acute symptoms. On the 12th, the plaster was applied. On the 16th, he was covered with erythema, the irritation commencing and spreading from the plaster. A cooling saline draught was ordered. On the 23rd, he walked four miles to see me. The knee was quite cured.

CASE III.—On July 18th, 1868, a housemaid awoke in the night with acute pain at the knee. I found great pain, heat, and tenderness over the patella. The bursa was much swollen. She was feverish and ill, and was ordered to remain in bed and keep the knee covered with spirit lotion. On the 23rd, the acute symptoms had subsided. The bursa was very distended with fluid. The plaster was applied. On the 30th, the swelling was entirely absorbed. She was at work again.

CASE IV.—On June 18th, 1870, W. M., a carpenter, came to me with a large inflamed bursa over the left patella. It was painful in walking, and had kept him awake two or three nights. There was tenderness on pressure. The plaster was applied. On the 27th, I found the fluid almost absorbed; and on February 3rd he was quite cured.

CASE V.—Mrs. C., a coachman's wife, accustomed to scrub a brick floor, consulted me on May 28th, 1870, with great enlargement of the

bursa patellæ, which was also painful and tender. After one night's thorough fomentation, she applied the plaster. On June 4th, there was great improvement; and on the 18th she was cured.

CASE VI.—On July 9th, 1870, Mr. L., an old farmer, a very religious dissenter, and, as he said, "pretty often on his knees," came to me with great enlargement of the bursa patellæ, communicating with a large bursa over the head of the tibia, forming a large double swelling. He found great difficulty in moving about, but had not much pain or tenderness. The plaster was applied at once. On the 16th, the swelling was rapidly diminishing; and on the 21st he was almost cured, and did not attend again.

CHARLES ROBERT THOMPSON, Westerham.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

MIDDLESEX HOSPITAL.

EXCISION OF WENS: CARBOLIC ACID TREATMENT OF WOUNDS.

(Under the care of Mr. HULKE.)

A TIN-PLATE-WORKER, aged 59, was admitted into Pepys' Ward on the 19th of April, 1870, with several wens on the back, and on the scalp. One in the middle of the loins, and another on the shoulder, of about the size of a large apple, gave him so much annoyance that he desired their removal. That in the loins was soft, and the skin covering it slightly red and tender. Both were split and turned out, and the incisions washed with a carbolic lotion containing one part of the acid in forty of water, and then dressed with the oiled silk, lac, and plaster, as recommended by Mr. Lister. That on the shoulder healed *per primam intentionem*; but subsequently the upper angle opened, and discharged a drop of pus. The incision in the loins suppurated freely. It was this wen which was slightly inflamed before the operation.

STRANGULATED FEMORAL HERNIA: HERNIOTOMY: SAC OPENED: CARBOLIC ACID TREATMENT: IMMEDIATE UNION: RECOVERY.

(Under the care of Mr. HULKE.)

A woman aged 36 was admitted from Finchley into Bird Ward, April 19th, 1870, with a strangulated femoral rupture. The strangulation dated from the afternoon of the previous day. She had been ruptured four years, and had worn a badly fitting truss, which had often let the rupture descend.

The taxis under chloroform having failed, the hernia was operated on by an incision along its inner border. The sac was opened; it contained about half an ounce of bloody serum and a small knuckle of claret-coloured bowel. After this was returned, about an ounce of colourless serum ran from the belly. The wound was closed with silk sutures soaked in an aqueous solution of carbolic acid, and covered with a pledget of cotton-wool dipped in the same solution. On the fifth day, when the dressings were removed, it was found healed; and the sutures were quite dry, without any pus around them. The bowels were first moved on the seventh day. Two days after the operation, her breasts became very swollen and tender (she had been nursing when the strangulation occurred); but this was soon relieved by the local use of belladonna. The only medicine internally given was opium, and this only during the first two days. On May 12th, she returned home. The scar was then soft and healthy.

LARGE SCROTAL HERNIA, ACUTELY STRANGULATED: OPERATION WITHIN THREE HOURS: SAC UNOPENED: CARBOLIC ACID DRESSING: QUICK RECOVERY.

(Under the care of Mr. HULKE.)

An Irish labourer, thirty years of age, was admitted into Clayton Ward on June 27th, 1870, with a strangulated scrotal rupture of about the size of a foetal head. It was excessively tender when handled. The pulse was small and weak. The man lay on his back, with his knees drawn up, and his features pinched. He yelled with pain, and he frequently retched. The taxis had already been tried under chloroform without success. A deep incision over the external abdominal ring separated the scrotal swelling from an oblong portion in the inguinal canal. Chloroform was again given, and the taxis repeated for a few minutes, but again unsuccessfully. An incision was made in the axis of the rupture, over the external ring; this, and also some fibrous

bands directly outside the sac, were divided, upon which the contents were easily reduced, without opening the sac. The wound was treated exactly as in the last case. It united by first intention; but, a few days afterwards, the upper end opened, and discharged a few drops of pus. He left the hospital, with a sound scar, bearing a truss without discomfort.

SUDDEN DEATH FROM DEGENERATION OF THE HEART, CHIEFLY OF THE COLUMNÆ CARNEÆ OF THE LEFT VENTRICLE.

WE are indebted to Dr. Robert King, Resident Medical Officer, for the notes of the following case.

A man aged 56, walking along Oxford Street, was seen to raise his hands suddenly above his head and fall heavily upon the pavement. So far as it was possible to ascertain, he neither spoke nor moved afterwards. He was placed in a cab and taken to the Middlesex Hospital, where he was seen by Dr. Robert King. On his arrival it was found that life was extinct. The body was quite warm; the face and lips somewhat livid; no smell of liquor or poison could be detected.

About seventeen hours after death, an examination of the body was made. The general appearance was that of a well-nourished man. There was some lividity of the face, neck, and trunk, but no external marks of violence. On opening the head, the dura mater was found firmly adherent to the calvaria. There was some serous effusion on the surface of the hemispheres beneath the arachnoid. This membrane was very opaque. There was no flattening of the convolutions, and the brain appeared to be otherwise healthy. The right lung was somewhat congested, and a few old tubercular cicatrices were discovered at its apex. The left lung was also congested, and firmly adherent by its whole surface to the thoracic parietes. There was no effusion into the pericardium. The heart was rather large and flabby, weighing thirteen ounces and a half. All its cavities were filled with dark fluid blood. There were a few patches of atheroma on the aortic and mitral valves; but, as far as could be ascertained, not sufficient to produce valvular incompetency. The fleshy columns of the left ventricle were extensively disorganised, the base of each column, or that end attached to the wall of the ventricle, being almost wholly converted into fibrous tissue; while the opposite end, or that attached to the chordæ tendineæ, was of a yellow colour, and fatty. In no part of the fleshy columns was any trace of striation observed; and the line of demarcation between the two forms of degeneration was tolerably well defined. When examined microscopically, the walls of the heart itself were found to be slightly granular, as if in a state of incipient fatty degeneration. The liver was healthy. The other organs were congested, but otherwise healthy.

KING'S COLLEGE HOSPITAL.

OPERATION DAY, OCT. 7TH.

MR. WOOD operated upon a man for Caries of the Right Carpus. The bones of the carpus were irretrievably diseased; the radius and metacarpal bones were, however, intact. The disease had originated, he thought, in the gelatinous synovial membrane, extending thence to the bones. Mr. Wood intended in this case, especially as the right hand—invaluable to a working man—was affected, to remove the disease by a longitudinal incision on each side of the wrist, thus avoiding the tendons. He preferred this plan to the method of Mr. Butcher of Dublin, in which the extensor tendons of the four fingers are cut through, so that the usefulness of the hand is seriously limited, the fingers remaining flexed, the thumb alone retaining the original power of extension. Mr. Wood accordingly made two longitudinal incisions, one on the outside and the other on the inside of the hand, so as to command the joint. The dorsal carpal artery was exposed, cut through, and tied. The external incision was enlarged and the bones gouged as completely as possible. Any particles which might remain would be washed out by the subsequent suppuration. The wound was left open and washed out thoroughly with a solution of chloride of zinc, which had the power of limiting suppuration and sloughing, and kept the wounds clean. It also diminished the danger of pyæmia.

Mr. Wood next proceeded to remove some Sequestra from the upper part of the Tibia of a girl, whose knee had become affected from the dangerously neighbouring disease. There were several cloacæ containing dead bone; these were made continuous one with the other by the gouge and several sequestra were removed. The edges of the cloacæ had in parts lost their vitality, and these also were pared. The wound was here also washed out by the solution of chloride of zinc. Mr. Wood was of opinion not only that the disease of the tibia would be arrested, but that the signs of irritation and enlargement of the knee-joint would now probably disappear and the patient be able to walk tolerably well. Amputation of the limb would thus be avoided, as, had the disease of the

knee-joint increased, the state of the tibia would have contraindicated excision of the joint.

Mr. Henry Smith removed the limb of a young woman aged about 22, at the lower third of the thigh. The case presented one or two points of much interest. She had suffered from extensive Disease of the Knee-joint, for which Mr. Smith had performed excision five months previously. The operation had been followed by good results for three weeks (union of the opposed bony surfaces having occurred) when, unfortunately, an extensive bed-sore formed over the sacrum, and a slough of the size of a cheese-plate took place within three days. From that time the appearance of the wound at the knee changed, much discharge took place, and the neighbouring tissues became infiltrated, and the bony adhesions broke down. Every effort had been made to restore her failing health; but, although the bed-sore was now healing, all without avail; and, to save her life, Mr. Smith determined to remove the limb, the only safe course, he thought, under the circumstances. The limb was accordingly removed at the lower third of the thigh by the ordinary anterior and posterior flaps. The bones at the seat of excision were found to be softened, red, and inflamed, without any attempt at union. The tissues around were greatly infiltrated.

Mr. Smith next removed by his own method some Internal Hæmorrhoids in a man rather advanced in years. Mr. Smith offered a few remarks on the mode of operating, chiefly drawing attention to the necessity of not opening the blades of the clamp too rapidly, as hæmorrhage may occur, and the hæmorrhoid be drawn into the rectum and cause much trouble. By relaxing the blades of the clamp gradually, hæmorrhage will be immediately observed and arrested by further application of the cautery.

Mr. Smith then proceeded to operate in the usual manner with the simple ligature on a young man for Varicocele of some months' duration. He had found this operation produce the desired good effects for at least a few years.

GENERAL INFIRMARY, LEEDS.

WOUNDS OF JOINTS TREATED ON THE ANTISEPTIC PLAN.

(Under the care of Mr. JESSOP.)

WE are indebted for the report of the following two cases to Mr. A. F. McGill, Resident Medical Officer.

CASE I. *Extensive Wound of the Knee-Joint.*—J. S., aged 32, a sober man, unmarried, and enjoying good health, was admitted into Leeds Infirmary on July 3rd last. At midnight, July 2nd, he fell over a brown earthenware pan full of water. His left knee fell through the water and knocked a hole in the bottom of the pan. He bled much at the time. He was brought to the Infirmary by 2 A.M.

On examination, the injury was found to be as follows. A wound four inches long passed obliquely across the thigh one inch above the patella, sloping from within downwards and outwards. The finger could be introduced into the knee-joint through the wound, the posterior surface of the patella being felt. The opening in the synovial membrane admitted two fingers with ease. Besides this wound, there were three others, each about one inch in length, which, if joined, would have formed the segment of a circle round the lower and inner sides of the patella, about an inch from that bone. There was probably some communication with the joint on the inner side; but this could not be ascertained.

The wound was washed with carbolic lotion; and, the edges being brought together by sutures, was covered with two layers of the carbolic lac-plaster. The leg was then placed on an excision-splint. The carbolic dressing was continued for eleven days, being applied with great care for the first three days daily, and afterwards every third day. The wound was then entirely healed, except a small superficial line above the joint. There was not a drop of pus seen throughout the treatment. The temperature, which on the first day was 100 deg. Fahr., by the fourth day became normal, and continued so. The pulse was never above 84. At the end of a month, the splint was removed for the first time, and passive motion commenced, the patient being allowed to walk about on crutches. On August 24th, he left the Hospital, and has lately come to show himself, walking with a scarcely perceptible limp.

CASE II. *Compound Fracture, with Wound of the Ankle-Joint.*—J. B., aged 38, on August 2nd, while at work in a foundry, had his foot crushed by a block of stone falling on it. On admission into the Infirmary, it was seen that there was a wound in the skin, over the internal malleolus, about one inch in length. Through the wound, the lower end on the tibia was felt, broken into several pieces; the joint was also opened. There was also a small wound on the anterior part of the ankle, but not communicating with the joint.

The wound and joint were syringed with a weak solution of carbolic acid (1 in 60), and then dressed with carbolic plaster. The leg was placed in a swing-cage. The progress of the case was very like that of the preceding. The dressing was renewed at first daily, and then at longer intervals, till the tenth day, when, the wound being healed, except at a small superficial sore, red wash was applied. There was no suppuration at all, and no rise of temperature after the third day. At the end of three weeks, he was allowed to get up with a plaster of Paris bandage on; in another three weeks, this was removed; and on September 26th, he was discharged, walking about with a moveable joint.

ROYAL SURREY COUNTY HOSPITAL, GUILDFORD.

TWO CASES OF WOUNDS OF THE KNEE-JOINT.

(Under the care of Mr. EAGER and Mr. TAYLOR.)

WE are indebted for the report of these cases to Mr. Thomas Flower, House-Surgeon.

CASE I.—C. T. H., aged 12, a labouring boy, was admitted under Mr. Eager on November 18th, 1869. Fourteen days previously, he was cutting wood with a billhook, and made a wound on the inside of the right knee, which was sewn up and strapped. It bled and ran a little; but he did not keep his bed, and went to work four days afterwards. After working for four days, he fell down and hit the same knee; and, although he noticed water to run out of the wound, he felt no pain, and continued working for the remainder of the day. By the following morning the knee had become inflamed, and the boy was obliged to keep his bed; he continued there for five days, when he was admitted here.

On admission, there was found to be a wound about one inch in length (suppurating, and discharging synovial fluid) on the inner and anterior aspect of the right knee. The joint was swollen, inflamed and painful, and had lost its symmetry. The patella likewise was raised, and there was considerable effusion into the knee-joint. The face was flushed and hectic. Pulse 100. His bowels had not been open for four days. He was put on milk and beef-tea, and an active purge was given. A splint was applied to the back of the leg, and an evaporating lotion over the whole knee. For a few days he improved, but ten days afterwards the knee had become more swollen and painful; and his appetite was failing. He was ordered three grains of citrate of iron and quinine three times a day, and three ounces of port wine daily. The knee still continued to become more swollen and painful, and a large poultice was applied over it. The knee remained in about the same state, becoming worse one day and better the next, until January 2nd (forty-five days after admission), when a collection of pus was found on the outside of the joint. A free incision being made, a poultice was applied, and the leg put up on a long outside splint, interrupted at the knee in order to apply dressings. From this time the boy's health, which had suffered considerably, improved much; and on February 9th, both wounds having healed, a gum and chalk splint was put on, and he was ordered to get up. He continued rapidly to improve, and went out on March 3rd, when he had some movement of the joint, required no support, and walked fairly well without crutch or stick.

CASE II.—C. L., aged 45, a stout countrywoman, was admitted under Mr. Taylor on July 20th, 1870. Twenty hours before admission, she fell and hit the right knee against a stone, which made a deep wound on the outer side; and there was considerable hæmorrhage. She was seen by a surgeon, who said he put his finger into the joint, and immediately the wound was sewn up, and a pad of lint soaked in carbolic oil placed over it. The leg was put on a back splint, and a dose of opium was given.

On admission, she was in very little pain. The right knee was hot and swollen, but not tender. On its outer side, between the patella and the condyle of the femur, was a wound about an inch and a half long, sewn up, with the edges in good position. She was put on beef-tea and milk. A purge was given, and ice applied to the knee. The heat and swelling gradually subsided; and, six days afterwards, the sutures were removed, when the wound was found to be quite healed. In a few days, the splint was taken off; and on August 5th (seventeen days after the accident) she got up and walked about, and went out quite well on August 11th.

REMARKS.—The above cases are chiefly noticeable for the good ultimate results; for rarely, after a wound in the knee-joint with such severe symptoms as were exhibited by Case I, do we find a moveable joint, and one so useful that neither stick nor crutch is required, so soon after the injury. Moreover, the cases are well worthy of a place side by side, as it is most probable that, had the same care been taken with No. 1 as No. 2 at the time of the accident, the former would have

been spared many days of suffering. Or, from the fact of his doing four days' work almost immediately after the accident, are we to infer that the wound did not originally pierce the synovial membrane, but that, on the boy falling and hitting his knee, the membrane, already slightly inflamed, became lacerated, and so the wound became connected with the joint?

SELECTIONS FROM JOURNALS.

LOCAL APPLICATIONS TO BURNS.—Dr. A. D. Binkerd, writing in the *Philadelphia Medical and Surgical Reporter* (July 9th, 1870), prefers, as an application to burns when first seen, carbolic acid and glycerine, in the proportion of from five to ten drops of the former thoroughly incorporated with two ounces of the latter, spread on with a camel's hair, or other light brush; then a layer of raw cotton, over which a roller-bandage is neatly adjusted. The administration of from a fourth to half a grain of the sulphate of morphia, as early as practicable, has been productive of decidedly beneficial results. For the suppuration following burns, he recommends the following dressing: yellow wax melted and strained, 3i; raw linseed-oil, 3iij; tannin, 5i; subnitrate of bismuth, gr. xx. The wax must be first melted; the oil must then be added, and the whole stirred until incorporated; next, the tannin is added, and lastly the bismuth. The ointment is applied on pieces of lint.

OBSTRUCTION OF THE OS UTERI BY CICATRIX IN A PARTURIENT FEMALE.—A strong and healthy primipara, aged 20, came under the care of Dr. Hayn of Kempen in August 1869. She was in labour; but, in spite of the pains, there was no sign of dilatation of the os uteri. On examination with the finger, the presenting part of the child could be felt, covered by the attenuated uterus, which seemed normal in structure, except at one point below, where it was harder and more rigid. The parts were so moist as to give the impression that the liquor amnii must have oozed through in some way. On examining with the speculum, the uterus was seen to be stretched over the child's head, but no os nor any opening could be found. At the lowest part, between two small folds, was a very small depression. A probe, introduced into this, entered the uterus through an opening scarcely as large as a pin, and reached the child's head. Dr. Hayn cut through the part. The operation was rather difficult, but the hæmorrhage was inconsiderable. In a minute, dilatation commenced; and a healthy child was born an hour afterwards.—The point of interest in this case is the cause of the obstruction. There was an absence of all history of previous disease, such as ulceration, or of the application of caustics on any occasion. The anomalous condition must either have been congenital or the result of inflammation during pregnancy, unattended by pain or other subjective symptoms. Of these two alternatives, Dr. Hayn adopts the latter. The liquor amnii must have escaped through the minute orifice in the site of the os uteri.—*Berlin. Klin. Wochenschr. and Wiener Medizin. Wochenschr.*, July 2, 1870.

NEURALGIA OF THE JAW-BONES.—Dr. Gross of Philadelphia describes, in the *American Journal of the Medical Sciences* for July 1870, a form of neuralgia of the jaw-bones, which, he believes, has not been hitherto described. Its seat is in the remnant of the alveolar process of edentulous persons, or in the alveolar structure, and in the overlying gum; and it is met with chiefly in old subjects. It is more common in the upper than in the lower jaw, and is generally limited to the bone. The gum is nearly always very hard and dense, grating more or less under the knife, and adhering very firmly to the alveolar process. The pain is generally paroxysmal; sometimes it is momentary; occasionally it lasts for hours; and in rare cases it continues indefinitely with but little mitigation. It may be sharp and darting, dull, heavy, aching, boring, or gnawing. Pressure generally relieves rather than aggravates it. In rare cases, when it is very severe, there may be some spasm of the facial muscles. Dr. Gross believes that the affection depends on compression of the minute nerves in the alveolar process by the encroachment of osseous matter on their canals. The disease comes on gradually, and proceeds from bad to worse. The general health is eventually impaired. The pain is aggravated and the paroxysms are prolonged by whatever tends to lower the vital powers. Sometimes the disease appears to be malarious, the paroxysms coming on periodically. Dr. Gross relates five cases of the disorder, in all of which entire relief was obtained by removing the affected portion of the alveolar process by means of cutting pliers. This he regards as the only effectual treatment. A mild course of chalybeate tonics may be required afterwards, when the patient is anæmic or affected with indigestion.

A PIN RETAINED NEARLY FOUR MONTHS IN THE INTESTINES OF AN INFANT.—M. Tillaux, of the St. Antoine Hospital, relates in the *Bulletin Général de Thérapeutique* (July 15th, 1870) the case of an infant aged fifteen months who, while in his nurse's arms, swallowed a large pin with a jet head. The pin was more than two inches and a half long, and the head was about half an inch in diameter. The accident occurred on February 20th; but the child did not appear to feel any ill effects—not even at the time of the accident—till June 12th. It then began to have severe pain in the abdomen, and the abdominal wall was slightly swollen. Two days afterwards, M. Tillaux, who was called to the case, found near the right iliac fossa a swelling of the size of a hen's egg; the skin over it was becoming red and hot, and fluctuation was perceptible. Next day, he made an incision, through which a quantity of foetid pus escaped. The point of the pin, which was readily felt, was seized by forceps; but it was soon found that the head remained in the bowel. M. Tillaux broke the pin, and removed about two-thirds, pushing the remainder back into the intestine. Two days afterwards, the head of the pin with the attached portion was voided *per anum*; and the child recovered perfectly.

INJURY OF THE HEAD BY A FALL: DEAFNESS: LOSS OF EQUILIBRIUM.—A glazier's man, aged 24, came last November under the care of Dr. Fischer of Breslau on account of an injury which he had received two and a half months previously. He was at work at Oppeln on a high ladder, when it began to slip; he sprang quickly back, and the hinder part of his head came into contact with another ladder. He was taken to the hospital of the place, and remained insensible for a time which he could not state; but he said that, immediately on recovering consciousness, he found that he was deaf. He knew nothing as to the occurrence of hæmorrhage from the ears. At the end of four weeks he left his bed, but still remained deaf. When seen by Dr. Fischer, he spoke without difficulty, but very loud; on being interrogated in writing, he gave definite and intelligent answers; his intellect was so good that he could give the minutest details of his previous history. He was quite free from pain, and very cheerful. No abnormal condition could be found in the external ear; the Eustachian tube was quite permeable. The patient was utterly unable to hear any sound. He stood with his legs wide apart, and supported himself with a stout stick; he tottered to and fro, and tried to support himself with the hand, like a drunken man. This unsteadiness was specially marked when he walked. He did this with his legs spread, tottered sideways as well as backwards and forwards, and endeavoured to keep his balance by stretching out his arms. There was no trace of paralysis; the movements of the limbs were of full strength and well directed. Sensation was normal everywhere. He saw distinctly with both eyes, and made no complaint of double vision. The evacuation of feces and urine was normal. The man was treated for a month with iodide of potassium, and was sent home uncured.—Dr. Maas, assistant in Dr. Fischer's clinic, who relates this case, refers to observations made by Flourens, Goltz, Menière, Holsch, and Politzer, on the results of injury of the semicircular canals of the ear. He has no doubt that Dr. Fischer's patient had an injury of these structures. The occurrence of deafness on both sides leads to the supposition that a fissure extended from the occipital to the petrous bone on each side, opening and injuring the semicircular canals. The limits of the fracture were further shewn by the absence of hæmorrhage from the ear, and also of facial or other paralysis.—*Wiener Med. Wochenschr.*, July 23rd, 1870.

RUPTURE OF THE UTERUS.—Dr. T. F. Moses of Glendale, Ohio, relates the following remarkable case in the *Philadelphia Medical and Surgical Reporter* of August 13th. On February 27th, he was called to attend in labour Mary P. V., a German woman of small stature. An examination disclosed a breech-presentation; and, as the labour was proceeding normally, and was likely to be tedious, he went away for a few hours. On his arrival in the evening, the pains were very frequent and violent. The os was fully dilated, the breech firmly impacted in the pelvis, and the presenting part continued to advance slowly. All at once, during a pain, the woman uttered a sharp cry, and complained of intense pain over the lower part of the abdomen. The presenting part immediately receded, and it was evident that rupture of the uterus had occurred. A state approaching syncope supervened, and the friends of the patient sent for a priest. After receiving the last offices, she revived a little. Dr. Moses passed his hand through the rent in the anterior wall of the womb; and, finding the feet in the abdominal cavity, brought them down separately, and soon completed the delivery. Only the lower part of the body of the child had passed into the abdominal cavity. The rent extended from the fundus quite through the os, and communicated with the bladder. After accomplishing the delivery, he introduced the hand again into the womb and removed a

large clot. The child, which was a finely formed boy of more than twelve pounds weight, was dead. Dr. Moses, in order to make the woman as comfortable as possible during the remaining hours of her life, administered at once thirty grains hydrate of chloral in solution, leaving a weaker solution to be given at intervals. Next day, the abdomen was enormously distended and tympanitic; pulse 130; and the face pinched and expressive of great exhaustion. The chloral was continued, and turpentine stupes were applied over the abdomen. The following morning the abdomen was less distended, and the pulse had fallen to 80. Seventy-two hours after delivery, there was such a marked improvement that Dr. Moses considered the patient out of danger. In three weeks she was about her usual avocations, suffering only from debility and the dribbling of urine from the fistulous opening in the bladder. The patient was advised to go to the Cincinnati Hospital and submit to an operation; but she applied to another practitioner, and was treated for a long time for incontinence of urine. Ultimately, however, she entered the hospital. Two things are worthy of note in this case: recovery after such extensive laceration of the uterus, and the seemingly beneficial effect of the chloral hydrate in subduing extensive peritonitis.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SCHWEITZER'S COCOATINA.

A VERY peaceful and useful revolution is in progress in this country, which is likely, we think, to spread widely. The use of cocoa is being popularised by careful attention to the preparation in convenient, wholesome, and cheap forms. No medical man can doubt that the large substitution of really good cocoa for tea and coffee would be a boon to the population of this and other countries. To the identical alkaloid whose mysteriously invigorating powers have made tea and coffee an object of instinctive choice, it adds absolutely nutritious qualities. It is a food as well as a nervine tonic, and is free from the empyreumatic and irritant character which often make coffee more especially objectionable. As an ordinary household drink, cocoa is daily gaining ground, and its popularity will be increased by the excellent preparation which Mr. Schweitzer names cocoatina. Soluble cocoa is always a work of art; and sometimes cocoa-powder is so much diluted that the amount of alkaloid is relatively very small. We have already referred to this subject; and it will suffice to say that this cocoatina is a preparation of remarkable strength and purity, and of excellent flavour. We have already named one or two really good preparations of cocoa on previous occasions: this deserves a place in the front rank.

WARREN'S SWEET ESSENCE OF RENNET.

THIS is a novel preparation, in which the properties of glycerine have been utilised in preserving active principle of rennet. The "sweet essence" is a nearly colourless liquid, rather sweet, and of agreeable smell. By adding a dessert-spoonful of it to a pint of fresh milk, heating till lukewarm, and then leaving the mixture to cool in a basin, the milk is coagulated in a few minutes, forming excellent curds and whey. One of the recommendations of this essence of rennet is the entire absence of salt or dilute mineral acids. Dr. Cameron of Dublin has examined the preparation, and reports very favourably of the probability that it will be highly appreciated by those who have occasion to make use of such an article. It is prepared by Messrs. McMaster, Hodgson, and Co., of Dublin, and is warranted to remain unimpaired in any climate. We have much pleasure in expressing our opinion that this will be found the case, and in welcoming the introduction of this article as a very appropriate application of glycerine for preserving animal products. This material has already been used for similar purposes in America, and with success, as in the preparation of syrups in place of sugar, etc.; but we are not aware of the use of glycerine having been much adopted in this country for pharmaceutical or other purposes of a like nature.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 15TH, 1870.

RECENT REGULATIONS OF THE COLLEGE OF SURGEONS OF ENGLAND.

THE College of Surgeons of England has had its share of sharp and hostile criticism, and has proved its strength and vitality in profiting by it. None of its recent acts are more deserving of attention than the addition of regulations which substitute for two courses of Physiology, one of Physiology and one of Practical Physiology, and for two courses of Surgery, one of Surgery and one of Practical Surgery. These regulations are only now about to come into force, and time will probably be needed to develop their full usefulness. Unless some source of failure should present itself which is not at present apparent, they may be expected to exercise a considerable and useful influence in the improvement of medical education in this country. How far they will do so, will depend upon the interpretation which the schools on the one hand, and the College on the other, put on the terms of the requirement. Physiology was for a long time only taught in our schools as part of a course of Anatomy; frequently only a small part. When the subjects began to be taught separately, the anatomical aspect of Physiology continued largely to monopolise attention, and the subject taught as Physiology was for the most part really Physiological Anatomy; in one of the oldest and best known treatises produced in this country, it is accurately so labelled. Physiological Anatomy, however, although a highly important part, is still but a fragment of the great subject of Physiology; the real bearing of physiological teaching and study is more accurately indicated in the title accorded to it in the Edinburgh University, where it is taught by Professor Bennett as divided into two parts—the Institutes of Medicine, and Practical Physiology. It is in this spirit that there is ground to hope that the new requirements of the College of Surgeons of England will be interpreted in this country. The course adopted is one of considerable importance to the future of medical training and medical practice. We had the opportunity of hearing the introductory lecture of Professor Rutherford, who has been transplanted from the University of Edinburgh to King's College; and his explanation of the manner in which he proposed to conduct the new course will carry additional weight by reason of his previous experience in the matter. He said:

"I purpose repeating a course which I have already given some twenty times in the University of Edinburgh, and which was found to work well. The course which I there taught under the general direction of Professor Bennett consisted of three sections, practical histology, practical physiological and pathological chemistry, together with experimental physiology."

In Practical Histology, every student made preparations of nearly all the tissues of the body, and examined these with the microscope. He was taught how to inject, how to act upon the tissues by means of

chemical agents, how to preserve specimens of them, how to describe them, and how to represent them by drawings.

In Physiological Chemistry, every student analysed most of the solids and fluids of the body, devoting most time, however, to the analysis of the urine in its healthy and diseased conditions. In the two sections of the class, each student did everything with his own hands. It was not a matter of merely showing him how to work, and leaving him to do it, or not to do it, at some future time; but students were first shown what they should do, and how it was to be done, and then their attempts to imitate what they had seen were superintended.

In the section of Experimental Physiology, a different arrangement had to be adopted. There, it was found absolutely impossible for every student to do all the experiments at the same time, but these were performed with the general aid of those present, and a method of tuition was adopted which was calculated to enable them to thoroughly understand all the manipulations. Diagrams illustrating the arrangement of the apparatus were copied by the student, so that he might in the laboratory repeat the experiments which he had witnessed. In addition to this, the laboratory was always open, as it will be at King's College, just like the dissecting-room, so that students might at any time go and perform any experiment, or do any microscopic or chemical work they might desire.

"I have", said Dr. Rutherford, "rendered myself thoroughly familiar with the manner in which practical physiology is taught in France and Germany, and I must say that I have not anywhere seen a system of teaching calculated to yield better results than that which I have just detailed to you. When I make this statement, however, it is fitting that I should pay a compliment to my old teacher, Professor Bennett, of Edinburgh, who has done more to advance the teaching of practical medicine than any other man in this country. He it was who first taught practical histology in England, and who sketched the outlines of the method of teaching practical physiology which I have mentioned."

"The histological and experimental sections of this course should be attended during the student's first summer session; the chemical part, during his second winter or second summer session."

The requirement in teaching of Practical Surgery is certainly an improvement equally noteworthy with that on which comment is here made. But as its popularity is more secure, and the mode of interpreting and carrying out the regulation is less open to variety of interpretation than that of Practical Physiology, there is good reason for our dwelling first and most particularly on the promised generalisation of sound-working physiological study. We shall print next week an excellent lecture by Dr. Ferrier, inaugurating the course of Physiology at Middlesex Hospital School.

BABY-SLAUGHTER.

THE trial and execution of the unhappy woman who has suffered death for the murder of the babies whom she "farmed" at Brixton must have fallen heavily upon the conscience of many, even among those who feel that her offence was most grievous and her doom most righteous. It is difficult not to think of her punishment with feelings largely alloyed by pity. If we now refer to it, it is because it appears to us that the duty is strictly incumbent on all who can assume to have any influence in the matter, to endeavour to apply legitimate measures of prevention before the extreme severity of the law is again invoked for the purpose of punishing the crime for which Margaret Waters suffered death. It is difficult to acquit our people and our legislature of so much of complicity in the offence as is implied in a negligent disregard of the known conditions leading to it, and of so much of tacit acquiescence in slightly concealed baby-slaughter as is involved in the refusal to legally deal with the patently murderous trade of unregulated baby-farming. This negligent refusal was not based upon any want of knowledge, or of the presentment of the facts in a very public and noticeable manner. Our own columns and those of the *Pull Mall Gazette* have repeatedly served to demonstrate that baby-farming has long been practised as an overt means of rapidly disposing of babies, whose presence in the world was

inconvenient to their parents. We have on several occasions during the last four years furnished proofs, of which the validity and general application have never been disputed, that unregulated baby-farming is an organised conspiracy against infant life. At these times we have urged the necessity of preventive legislation by the introduction of a system which should substitute publicity for the secrecy which favours crime, and which should include the registration of persons undertaking the mercenary care of other people's children, and their supervision by the existing machinery of district Poor-law medical officers. To this was added the suggestion that "adoption" of alien children should only be permitted under circumstances which afforded a legal guarantee that maternal duties so thrown off could or would be properly assumed by the substituted parent. Lord Shaftesbury and Mr. Vanderbyl brought these facts and suggestions publicly under the notice of the ministers of the day in the Upper and Lower Houses of Parliament. The facts were admitted, and the suggestion approved; and a promise was given on behalf of the Government of Lord Derby that the subject should be considered with a view to legislation, probably in the sense suggested. Great political questions have absorbed the attention of successive sessions in Parliament, and nothing has been done. The trade of baby-farming has thriven under the public eye, as it did before its true character was publicly exposed. The evidence at the trial of Margaret Waters is known to be but a sample of similar, if less premeditated atrocities, largely practised, not only in London, but in other parts of the country. The example will strike terror, but its influence will soon be lost, unless some general measure be adopted to place under the protection of the law the large class of farmed infants who are more helpless than the lunatics and common lodgers, over whom the law already throws its protection. It is needless here to repeat the details of the scheme which we have developed at length some months since here and elsewhere. There is the less need to do so, that recent writers have pretty widely adopted and endorsed its principles. But we may express the hope that the emphasis given to the necessity for legislation by the career and fate of Margaret Waters will lead to practical action; and that the wisdom and skill of practised legislators will at once frame a scheme which will provide for the protection of nurslings, and prevent the wholesale commission of the class of offence which has brought this unhappy woman suddenly and swiftly to the gallows.

MODEL MEDICO-SANITARY REGULATIONS.

UNLESS the much talked of and much needed improvements in our sanitary regulations be speedily made, Great Britain will fall completely into the rear of European nations in her sanitary code. We pride ourselves just now on abstaining from meddling with the affairs of other nations. Still, we may take from them some useful lessons in managing our own. The Minister of the Interior in Italy has recently addressed to the prefects a circular on the sanitary service of the state, and on the municipal hygienic regulations. This document indicates that the ministry perceives the necessity of exercising vigilance over all that concerns the health of the country. The tone of the circular is one of advice rather than of dictation; much is apparently left to the free action of the local authorities; but it is clear that the Italian Government is fully aware of the importance of a sound hygienic administration.

The Minister points out, in the first place, that the hygienic regulations in many communes are defective, and in many respects do not fulfil their object. The fundamental principle in every sanitary ordinance is the district medical officer; but it is to be regretted that not a few communes are destitute of such an officer, while in other instances a single medical man has to labour in several communes, precisely where the scattered distribution of the inhabitants and the difficulty of travelling would demand the labour of several sanitary officers in one commune. The minister recognises the fact that the miserable position in which the district physician is placed renders it difficult for him to perform his special functions, which are, not only to attend sick individuals, but to

extend his researches in all directions which may afford evidence of the causes of prevailing diseases and of the mortality produced by them, so as to be able to improve the conditions of the locality to which he is attached. In certain respects, the sanitary conditions of the country have been improved; but much still remains to be done, especially in diminishing the amount of phthisis, syphilis, scrofula, rickets, and pellagra, and in opposing the causes of the high mortality which prevails among infants. The minister is therefore led to remark that a radical reform in the present organisation of the medical districts is in many country places an urgent provision, which, if duly appreciated by the communal councils, will soon produce most favourable results in the interest of the public safety, for the securing of which any increased expense will always be justifiable. A principle worthy of encouragement is that of providing domiciliary medical aid, and supporting it by local grants in such a way that it may be profitable to the physician; this principle has already been profitably adopted by not a few municipalities. As regards the certifying of deaths, there should be a more stringent application of the means of preventing individuals from being buried before they are yet dead.

The circular finally points out that the functions of the district physicians ought to be extended in certain directions, among which are the following. 1. To search out the causes of endemic diseases in the respective districts, and to point out by what means or precautionary measures they may be eliminated or at least notably diminished. 2. When contagious disease breaks out in a district, or when the locality is threatened by any epidemic disease, to point out to the municipal council the means of arresting its diffusion or of preserving the population; and to write an account of the same, and send it to the Council of Health under which he holds office. 3. To study the characters of the potable water, and of the mineral and thermal springs, and of the food, whether produced by the soil or brought into the public markets, or imported from other countries; and to offer hygienic suggestions regarding the same, not only to the municipal authorities, but to the people. 4. To prescribe the means of care necessary for the preservation of infants; and not to permit the burial of persons whose deaths have not been certified either by himself or by the medical men who have attended the patients. 5. To notice all causes of insalubrity; to watch over the hygienic condition of schools, hospitals, and all other charitable institutions maintained or partially supported by the commune; and to take care that the mortuary chambers are really fit for the objects for which they are designed. 6. To compile the medical statistics of the district, and, within the first two years of his residence, to draw up the medical topography of the same. Authenticated copies of these works are to be transmitted by the commune to the provincial council of health. The minister has also drawn up a scheme of hygienic arrangements, in accordance with the principles affirmed in the circular.

DR. BURNEY YEO has been elected President of the King's College Medical Society for the ensuing year.

DR. PARDO, in an article in the *Gazette Médicale d'Orient*, enumerates not fewer than fifty medical men who were more or less damaged in person or property by the terrible fire which devastated Constantinople some time ago.

STAFF ASSISTANT-SURGEON A. MOFFITT, instructor of the Army Hospital Corps at the Royal Victoria Hospital, Netley, has issued a manual of instruction for attendants on sick and wounded in war, illustrated with numerous woodcuts. The instructions, which are very careful and useful, are issued in the hope that they will be found serviceable in the great and humane work of the National Society for Aid to the Sick and Wounded. The book and the intention are alike excellent. We can hardly, however, share very strongly in the hope. So far as we know, the Society has not organised any army hospital corps whatever, and has done nothing towards the removal of the sick and wounded from the field of battle, or their transport.

DR. PANTALEONI, who has for many years been exiled from Rome, and has been in practice in Nice, has been appointed a member of the Commission to inquire into the hospitals of the former city.

A COMMISSION has been appointed to examine into the state of the places of punishment and the prisons in Rome. A medical man, Dr. David Toscani, is one of the members.

PROFESSOR LISTER's paper on the Application of the Antiseptic Method to the Treatment of Wounds in War, has been translated from the *BRITISH MEDICAL JOURNAL* into the *Berliner Klinische Wochenschrift*, and struck off in separate copies for circulation in the German hospitals. Some of the copies have reached us here. It has also been circulated in reprint by the British Aid Society, in the ambulances at the seat of war.

PATHOLOGICAL SOCIETY OF LONDON.

THE opening meeting of the session will take place on Tuesday, October 18th, at 8 P.M.

A FRENCH SURGEON KILLED.

DR. PIGACHE of St. Cloud was lately shot through the head by the bullet of a Franc-tireur, while on his way to attend a woman in labour.

THE ITALIAN MEDICAL ASSOCIATION.

THE meeting of the Italian Medical Association, which was to have been held on the 2nd instant at Bologna, has been postponed to a day undetermined. It is believed that the Executive Committee has in contemplation the holding of the meeting at Rome instead of Bologna, the place fixed on at the previous meeting.

HOSPITAL STATISTICS.

THE Annual Report of the Croydon General Hospital for 1870 shows that during the last year, with eighteen beds, the hospital received 130 in-patients and 1,234 out-patients. The average stay in hospital of each in-patient was twenty-eight days. The average cost, inclusive of establishment expenses, was £6 : 2 : 10 per patient, and £47 : 1 : 9 per bed.

MEDICAL SOCIETY OF LONDON.

THE session will commence on Monday next, October 17, at 8 P.M., when the President (Mr. John Gay) will deliver an address on Surgical Art and its Limitations. The Fothergillian Gold Medal in 1871 is offered for an essay on some subject in Obstetrics, including the diseases of women; and that for 1872 for an essay on Croup.

GEOGRAPHICAL DISTRIBUTION OF DISEASE.

AT St. Thomas's Hospital, Mr. Alfred Haviland has commenced a series of lectures on the Geographical Distribution of Disease in England and Wales. The lectures will be given on alternate Tuesdays at 4 P.M. The programme is as follows: October 11th, Introductory, and the Geographical Distribution of Heart-Disease; October 25th, Heart-Disease and Dropsy; November 8th, Cancer; 22nd, Phthisis; December 6th, Scrofula; 20th, Health.

PRACTICAL STUDIES.

ON the occasion of the recent publication of our educational number, we ventured upon a few "plain truths to medical students", in which expression was given to the opinion that there is among them a prevalent delusion as to what are really practical subjects of study. The view expressed was that the most practical thing for a student of medicine to do is to acquire, first, a thorough preliminary scientific training, and to accustom himself to the use of exact scientific methods of investigation. In this view, the subjects which are most apt to be scorned as unpractical—such as experimental physiology, physiological chemistry, the art of using exact instruments of physiological and chemical investigations—become the most essential, and therefore the most practical, preliminary parts of education. It is a source of satisfaction that in various of the introductory addresses, and in some quarters ex-

ternal to the profession also, these observations have attracted attention and endorsement. The following extract from an introductory address by Professor Rutherford, at King's College, of which we have received a report, discusses a part of this subject in detail, and gives the views in this connection of one of the soundest and most competent of British workers.

It may possibly appear to you that the imposition of this new class is likely to entail upon you more labour. Such will not be its effect. On the contrary, it will greatly lighten your exertions. Everyone knows how much easier it is to learn how to do a thing by being shown the method, compared with what it is to acquire the same knowledge from a book. We all know how much more clearly we remember the things which we have *seen* as compared with those which we have only heard or read about; and we know well how much more thoroughly we understand anything when we do it ourselves than when we merely witness others doing it. Every step, then, which is taken in the direction of making the teaching more practical in its character is a step in the right direction, tending alike to advance medicine and to facilitate its study. But when I use this word *practical*, I would caution you against the meaning which, unhappily, not a few members of our profession attach to it. There are those who will not be slow to tell you that if you want to be "practical" you had better confine your attention to learning how to cut off a leg, how to assist in the delivery of a child, or how to prescribe a pill and a potion. These gentlemen smile with much complacency and often with a grain or two of pity when they look at those who spend much of their time in working at microscopic anatomy, experimental physiology, physiological and pathological chemistry. Those who devote some of their time to these pursuits are set down as scientific, and therefore, in their eyes, "*not practical*". We need not rail at those who entertain these curious notions, for we may safely say that they are the victims of ignorance. The time will speedily come when we shall cease to encounter such strange opposition.

THE CLINICAL SOCIETY OF LONDON.

THE Clinical Society of London meets to-night (Friday) for the first time this session, under the presidency of Mr. Paget. The annual volume of *Transactions* is just issued. It contains a number of isolated papers of considerable interest, and the reports of committees on the influence of quinine on temperature in pyrexia, and of iodide of potassium on temperature in syphilitic periostitis. The volume is one which will perhaps be more generally read than the *Transactions* of any other society. The society is one of the most valuable and popular in the profession; and every year, it may be hoped, will increase its energy in adequately filling the difficult programme which its founders have traced for it.

THE HEALTH OF PHILADELPHIA.

THE *Medical and Surgical Reporter* gives an abstract of the Report for 1869 of the Board of Health of the city and port of Philadelphia. In the previous year, the cleaning of the streets was placed under the charge of the Board. They state that, during 1869, great improvements in the streets have been produced by the removal of dirt, etc. The number of deaths during the year was 13,428, which, estimating the population at 800,000, is about 16.78 in 1,000. Scarlet fever increased considerably during the year, and reached the number of 799—a large increase over the previous year, and the highest that had been attained since the year 1861. At the close of the year, it was still on the increase. Consumption shows far the highest figure, its victims numbering 1,975 during the year. Thirteen persons died over the age of 100 years, of whom one was over 110 years. The infant mortality continued simply appalling. The children under one year of age who died made very nearly one-third of the whole mortality (29.24 per cent., against 31.31 per cent. the previous year); while under ten years of age the number of children that died amounted to 8,103—an excess of 1,420 over that of adults, and, when compared with the entire mortality, equal to 54.80 per cent., or more than one-half of the total deaths in the city. The number of births registered during the year was 16,960, a decrease from the previous year of 299, or 1.73 per cent. As compared with the previous year, 1869 was healthy, and during its course the general sanitary condition of Philadelphia compared favour-

ably with that of any other city in the United States. No one, however, says the *Reporter*, can peruse the report without being deeply impressed with two facts: first, that there is a sad want of thoroughness and accuracy in our statistical returns (for which physicians are more to blame than anybody else); and secondly, that there is a vast amount of death and disease from preventable causes.

THE CHEMICAL CHAIRS AT KING'S COLLEGE AND ST. BARTHOLOMEW'S HOSPITALS.

ARRANGEMENTS are in process to carry on without delay the course of Chemistry at St. Bartholomew's Hospital, interrupted at the outset by the melancholy death of Dr. Matthiessen. It had already been arranged that Dr. Odling should fill temporarily the place of Dr. Miller, till more permanent arrangements could be made; and it is, we believe, probable, although not settled, that the same gentleman, who was Dr. Matthiessen's immediate predecessor at St. Bartholomew's, will respond to the call, and fill the gap for the time there also.

INSPECTION WITHOUT KNOWLEDGE.

SOME correspondents of the *Sheffield Daily Telegraph* appear to be of opinion that sanitary inspection is a work which requires no medical knowledge, or that, in other words, appropriate measures can be taken for the prevention of disease without the skilled training which gives a knowledge of the laws of causation of disease and the agents and means of prevention. It would be interesting to put some of these gentlemen through a brief catechism as to the appropriate means which they would recommend for adoption in limiting outbreaks of typhoid fever, of relapsing fever, and of scarlatina; how they would set to work to trace out the local causes of enteric fever; to ascertain whether any given manufacturing process complained of was or was not injurious to health; what are the ordinary methods of ascertaining the purity of air, water, or food of various kinds. In short, we should be glad to learn from these gentlemen how work which is eminently skilled can be performed economically or satisfactorily by any other persons than those who have gone through the necessary training for acquiring the necessary knowledge of the principles of judgment and modes of proceeding. Sanitary inspection is a work which eminently demands a large amount of knowledge that is peculiar to medical men, and that is only conveyed by medical education. A few of the more eminent theoretical lay sanitarians have mastered the principles of sanitary science from medical sources; but even they commit serious blunders, and would not attempt practical sanitary work.

A NEW ANTISEPTIC.

UNDER the designation of chlor-alum, Mr. John Gamgee has introduced to the medical profession and to the public generally a solution of hydrated chloride of aluminium, which bids fair to take up an important position among those valuable substances, the antiseptics and disinfectants. The chemical activity of solutions of chloride of aluminium depends, to some extent, upon there being so much potential muriatic acid. Ammonia—both the common ammonia, and every variety of foetid and offensive organic ammonia (and it is substances of this class that produce the different varieties of stink arising from garbage)—is instantly absorbed by these solutions, as it would be by so much acid. Moreover, there is the high probability (amounting almost to certainty) that the chloride of aluminium forms double compounds with the organic chlorides thereby produced. Many bad smells which carbolic acid might indeed overpower in virtue of its own strong odour, but which it cannot destroy, are at once removable by chloride of aluminium. Thus the foetid stench from cabbage-water is at once removed by chlor-alum, but not by carbolic acid. In this respect, chlor-alum has some advantages over even permanganate solution, which, as we all know, destroys foetor by oxidising the foetid substance, but which is almost powerless against, or acts very slowly upon, some varieties of malodorous things that have the property of not being very easily oxidisable. The smell arising from putrid fish affords a specially favourable case for exhibiting the powers of chlor-alum. Even chloride of lime is hardly so

potent against some kinds of foetor as is chlor-alum. The agent in general use to which chlor-alum most closely approximates is chloride of zinc, which, like it, is specially potent against offensive organic ammonias. Suppose that chloride of zinc, instead of being poisonous, were innocuous; that, instead of being corrosive, its strong solution were incapable of damaging textile fabrics; and suppose that its cost price were diminished to one-tenth, then it might be an adequate representative of the new antiseptic and disinfectant, chlor-alum.

A REMEDY FOR SEA-SICKNESS.

DR. O. RAPIN, of Grandson in Switzerland, says that he has found that the nausea and vomiting produced by swinging, and sea-sickness, can be arrested by applying to the epigastrium a layer of wadding dipped in collodion. It should extend from the xiphoid cartilage to the umbilicus, and be left until it falls off. If the adhesion be imperfect, the application should be renewed. Several persons, he says, have tried this plan with benefit. The explanation which he gives of it is, that the action of the peripheral nerves is interrupted, just in the same way as the pain of calculi in the bile-passages or ureters is sometimes mitigated by the application of castor-oil and collodion.

THE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE first meeting of the session of the Association of Medical Officers of Health will be held at the Scottish Corporation Hall, Crane Court, Fleet Street, on Saturday, Oct. 15, at 7.30 P.M., when an address will be given by the President, Dr. Druitt, on the Sanitary Topics of the Day. During the ensuing session, papers will be read by Robert Rawlinson, Esq., C.B., entitled Sanitary Progress from 1848 to 1870; by Dr. T. Spencer Cobbold, F.R.S., on Parasitism in relation to the Public Health; by Dr. F. Crace Calvert, F.R.S., on Fermentation and Putrefaction, and their relation to Fever; by Dr. Ballard, on a Localised Outbreak of Typhoid Fever in Islington, in July 1870; and by Dr. Letheby, entitled The Quality of the Water-Supply of some of the Large Cities and Towns of England, in relation to their Sanitary Condition. Dr. Letheby intended to have read the last paper during the previous session, but it was unavoidably postponed. The secretaries' report of the proceedings of the Society during the last year is a document of great interest. Unfortunately, however, it has to conclude with the statement that "but little in the way of sanitary legislation has been attempted during the present session of Parliament, owing probably to the pending report of the Royal Sanitary Commission". It may be hoped, however, that the report will be soon forthcoming, and that the heavy arrears of sanitary legislation will be gathered in without delay.

STUDENTS WITH THE MICROSCOPE.

THE Quekett Microscopical Club, one of the most active working societies and agreeable resort of microscopical students, has issued its fifth Annual Report. It numbers now over six hundred members, and meets twice in every month, without a recess, throughout the year; thus affording the members invaluable opportunities of frequent intercommunication and mutual assistance in the comparison of notes and specimens. The average attendance on the nights of ordinary meeting amounts to 112. The "gossip-nights" afford valued opportunities for the discussion of difficulties in microscopical manipulation, communicating and discussing the various methods of mounting microscopic objects, and of interchanging thoughts and plans, and promoting friendship amongst men who find in their common scientific interest an agreeable bond of union. Attached to the Club is a loan cabinet of specimens, a library for circulation, a fortnightly excursion committee, and other means of facilitating research by mutual aid. The subscription is half a guinea annually. Altogether, the Club is one which we can point out to medical students and to medical practitioners, who are all more or less interested in the use of the microscope and students of its revelations, as worthy of their attention. Of the six annual Presidents,

five have belonged to the medical profession—Dr. Lankester, Mr. Ernest Hart, Mr. Arthur Durham (during two years), and now Dr. Lionel Beale. By the kind permission of the authorities of University College, it meets in the fine library of that institution. Under the presidency of so highly accomplished a microscopist as Dr. Lionel Beale, an interesting and successful session may be predicted for the society during 1870-71.

ST. GEORGE'S HOSPITAL.

THE Morley Convalescent Hospital at Wimbledon, in connection with this institution, is being utilised in a manner likely to afford admirable results in a class of operations which, as a rule, have not been found to do well in general hospitals. We allude to cases of Ovariectomy. Mr. Pollock performs an operation there on Saturday afternoon at three o'clock.

FEVER IN LIVERPOOL.

THE following is the report of the Liverpool Fever Hospital for the week ending October 8th, 1870: Remaining under treatment, October 1st, 1191; admitted since, 356; discharged convalescent, 297; died, 14—remaining in hospital, 1236. The following resolutions were passed by the Health Committee on October 6th.

That the Select Vestry and several boards of guardians and the medical charities of the town be requested to instruct their medical officers to report before ten o'clock every morning to the medical officer of health (in addition to the lists at present furnished) all those houses and rooms which, in the judgment of the medical officer reporting, require disinfection, and can forthwith be disinfected; and that the medical officer of health be directed to give daily the necessary instructions for disinfecting all houses and rooms of which notices shall be received.

That in case the Select Vestry and boards of Guardians within the borough shall exercise the powers of removal to hospitals or places for the reception of the sick of persons suffering from dangerous contagious or infectious disorders, contained in the 36th section of the Sanitary Act 1866, the Corporation, as the nuisance authority, will defray the expenses of such removal in accordance with the Act.

THE PHARMACEUTICAL SOCIETY.

MR. G. F. SCHACHT delivered a very interesting address at the inaugural meeting of the session of 1870-71 at the Pharmaceutical Society last week. A bronze medal and certificates were handed to Messrs. C. Fryer, F. H. Peck, and H. Foster for their attainments in chemistry and pharmacy. Messrs. E. A. Webb, F. H. Peck, C. Fryer, H. Foster, J. P. Jackson, and E. Sainsbury received honours in botany; and Messrs. Fryer, Francis, Best, Raffles, Sainsbury, Metcalfe, Webb, and Peck in practical chemistry. The Assessors of the Privy Council, Professor Christison and Dr. Headlam Greenhow, have, as we have before mentioned, borne satisfactory and honourable testimony to the character of the major and minor examinations conducted by the society. Mr. Schacht's address, reminding his hearers that "this Pharmaceutical Society has a life to live before the world imposing obligations as constraining as those which relate to its own members," was of a character to inspire confidence in the desire of the society to adequately fulfil all its public obligations. Among these is the practical solution, in the interests of the public, and not in any narrow spirit, of the regulation of dispensing under such precautions as are calculated to diminish the frequency of accidental poisoning.

MEDICAL CLUB.

ON Wednesday last the members held their annual general meeting at the Club; Sir W. Fergusson, Bart., in the chair. Having elected six members to serve on the Committee in the place of six who retired in rotation, the meeting proceeded to consider and discuss the advisability of removing to a better house in Pall Mall East, at present occupied by the Union Bank, the refusal of purchasing which had been offered to Dr. Lory Marsh. Dr. Marsh informed the meeting that the expense of buying the lease, furniture, etc., would be about £5,000, and he proposed that the members should raise the amount on debentures of £25 each, bearing interest at 5 per cent., to be paid off by instalments; as

security for which the property would be vested in Trustees, who would have power to sell or carry on the Club on default being made in payment of interest, etc. The meeting appeared to accept the project of removing, and an opinion was generally expressed that as soon as the Club became established in premises of a sufficiently convenient and extensive nature it would expand into an institution creditable to, and worthy of, the profession. We understand that, after the present year, the entrance fee will be raised from eight to ten guineas, and the subscription will be five guineas for all members except those abroad.

ST. BARTHOLOMEW'S HOSPITAL.

THE *post mortem* theatre of this hospital has recently undergone radical improvement, and is now more in consonance with the importance of morbid anatomy than it has hitherto been. The benches have been reduced in number, thus affording a larger space for work in the body of the room. Three slate tables, which are to be marked with a measuring scale, have been furnished, above each of which gas-jets and a rose-douche have been suspended, similar to those in the theatre of the Middlesex Hospital. Abundant supplies of hot and of cold water have been laid on, with conveniences for washing, and the walls have been covered with Parian cement, which, by some unfortunate circumstance, has received a coating of blue paint, a mistake easily remedied. A slate, on which are stated the normal weights of the viscera, a microscope, with a cabinet containing all necessary agents, and a machine for ascertaining the weight of the body, are also being introduced. The ventilation and lighting of the theatre are good. The improvements adopted are such as to place every convenience for *post mortem* work in the hands of Dr. Gee and Dr. Wickham Legge, the Demonstrators. The rooms for the accommodation of nurses adjoining the wards are all being considerably enlarged, an improvement which we have had occasion to recommend.

HOSPITAL NECROPSIES.

THE question as to the right of hospital authorities to perform a *post mortem* examination without special permission from the friends of the patient is again under the consideration of the police-magistrate. The case was fully argued some days ago, and Mr. C. Hawkins appeared as Inspector of Anatomy to explain the difference between a *post mortem* examination and a dissection, and the legal consequences of that difference. The magistrate reserved his decision on a point of law, and before making comments it may be well to await it.

NECROPSIES AT GUY'S HOSPITAL.

IN consequence of the recent attack on the authorities at Guy's Hospital, the Court of Committee have, we understand, passed a resolution to the effect that in the interests of the public, and as one of the conditions of admission to the hospital, the Governors reserve to themselves the right of having a *post mortem* examination made on the body of every patient that dies in the hospital, by the pathologist or his representative, for the purpose of ascertaining the true cause of death. A clause has been introduced that, in the event of the friends having objections to the examination, they are to submit the same to the Superintendent, who will report their objections to the medical officer in charge of the deceased, and, if he see no urgent necessity for the examination, the Superintendent is authorised to dispense with it. This regulation will be added to the rules relative to the admission of patients.

SCOTLAND.

PROPOSED SICK CHILDREN'S HOSPITAL FOR GLASGOW.

THE need of such an Institution in Glasgow has been long acknowledged by most, and some years ago an active effort was made, which resulted in the collection of a considerable sum of money. The matter has since been left in abeyance on the understanding, as we believe, that a children's hospital should be erected in connection with the New Uni-

versity Hospital, and placed under the same management. An agitation of a similar nature has, as we think very unfortunately, of late sprung up from a totally different and, we are afraid, a rather badly informed quarter. These agitators seem unaware that the question is virtually settled, and a sum of money lying ready for use. It is to be hoped that the present movement will quietly die out, and that the subject will be taken up at the proper time, and by the proper persons.

GLASGOW—THE APPROACHING SESSION.

It has been found necessary to postpone the opening for still another week. The general opening will take place on November 7th, when addresses will be given by Principal Barclay and Professor Lushington. The Medical Session will be opened on the day following, when Professor Young will deliver his address.—The session at the Andersonian University begins on the 25th of the current month, as previously announced.

THE NEW EDINBURGH INFIRMARY.

ON Thursday their Royal Highnesses the Prince and Princess of Wales took part in the ceremonial attending the laying of the foundation-stone of the new Infirmary at Edinburgh. The preparations for this ceremony have engaged a considerable amount of attention in the city, the Earl of Dalhousie, the Grand Master Mason of Scotland, the Infirmary managers, and the municipal authorities having united to make the necessary arrangements. Both the Prince and Princess of Wales joined in the procession to the site of the new Infirmary.

THE EDINBURGH INFIRMARY.

AN Edinburgh correspondent writes:—Although the session has not begun, the dissecting-rooms are open, and the students are beginning to return in large numbers. Considerable excitement is already being shown in the ceremony of laying the foundation-stone of the new Royal Infirmary in Watson's Hospital grounds, by the Prince of Wales. The managers of the Infirmary have invited the staff and officials to accompany them to the platform. The day will be observed as a general holiday in town.

IRELAND.

QUEEN'S UNIVERSITY.

AT a meeting of Convocation, held on the 11th, Dr. Wm. MacCormac was unanimously re-elected a member of the Senate. He was not present, but the strongest testimony was borne as to the zeal and efficiency with which he had filled the office for the past three years.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE quarterly examinations are at present proceeding; and, as the clinical test is to be introduced at the next, the number of candidates is larger than usual. An election for the seat on the Council, vacant by Mr. Barker's resignation, is to be held on the 3rd November. Dr. Mapother, Professor of Physiology in the College, has announced his candidature.

RELAPSING FEVER.

GREAT uneasiness is felt in Dublin as to the probability of an epidemic of relapsing fever being imported from Liverpool, for there is very free communication between the ports. Insufficiency of food and personal uncleanness being the main promoting causes, the action of the Public Health Committee cannot be of very great service in an emergency; but the dread may at last lead to the establishment of public baths, which are sadly wanted.

STAFFORDSHIRE GENERAL INFIRMARY.—Acting upon a suggestion of the house-surgeon at the last meeting of the Board of Management, a local newspaper appeals to the public for arm-chairs for the use of convalescents, and a few pictures for the walls of the wards.

A SURGICAL VISIT TO THE SEAT OF WAR.

SEPTEMBER 1870.

I.

I MADE arrangements early in September to start for the ambulances around Sedan, in order to render any aid which I might find serviceable on the spot, and to ascertain what were the nature and extent of the military and voluntary services in operation there. The credentials which I received from the Prussian, French, and English authorities secured for me unusual facilities for the purpose. Mr. Berkeley Hill accompanied me in the first part of the journey; and, but for accidental circumstances which separated us at Saarbruck, I should have had the advantage of his good company and excellent judgment throughout. We took with us private stores, furnished by Mr. Hills (Bell and Co.), Messrs. Savory and Moore, Mr. Blaise (Savigny and Co.), Mr. Edwin Arnold, and Mr. Von Glehn, of which they wished us to superintend the distribution in their behalf. I was authorised to expend a certain amount of money on behalf of the French Committee; and Colonel Lindsay, on behalf of the British Society, very kindly added a store of assorted surgical instruments, together with a letter authorising the Society's agents to furnish what stores they could spare from their depôts, in case we should find it necessary to make further requisitions to meet the necessities which we might encounter.

Starting from London, we went straight through Dover to Brussels, *via* Calais, staying at Brussels only long enough to purchase stores of chocolate and cigars, which I knew could be bought cheaper there than in London. The first convoys of wounded were expected that night in Brussels; the German and French having agreed, immediately after the battle of Sedan, to allow the Belgian railways to be utilised for the transport of the wounded, and the Belgians having manifested a most humane and liberal desire to receive in their country considerable numbers of the more severely wounded, and to take charge of them in their hospitals. The Belgian railway authorities showed the most liberal desire to facilitate the transport of the cases of material which we had with us: they transported them at a considerably reduced rate, and did not subject them to customs examination.

On our way to Arlon, which was our first objective point, as being the principal depôt of the British Society, and the place at which we were most likely to meet the Society's chief agent, Captain Brackenbury, we travelled with a gentleman who was going in great haste to Libramont from Brussels. He had received at Brussels that morning a terrible account of the sufferings of the Prussian and French wounded, who were being brought thither from Sedan, in order to be despatched thence in special trains to the hospitals in the interior of Germany. They were, he said, lying in the open air, without coverings, food, shelter, or medical comforts; and he had been despatched instantly by some charitable persons in Brussels, taking with him some rugs, brandy, etc. Our train made but slow progress, as the line was encumbered with traffic—Belgian trains carrying regiments who were coming back from the frontier; goods-trains; trains full of wounded; and long lines of empty carriages from Germany, going and coming on their sad errand. A detention of a few hours at Namur enabled us to visit Dr. Hamoir, whom we found to be the chief physician charged with the reception and distribution of the wounded soldiers who were to be received in Belgium. The arrangements which he had made were excellent. Offers to receive smaller or larger numbers of the sufferers had poured in from all sides; and, as the wounded arrived, they were distributed in the principal towns and villages. In Namur itself, the civil hospital, the Jesuits' College, and other establishments, were already filled; and a rapid system of evacuation was in progress, by which the *petits blessés*, or slightly wounded, were moved on to more distant localities. Dr. Hamoir had lying on his table, when Mr. Hill and myself entered, a copy of the BRITISH MEDICAL JOURNAL, which an English physician in travelling had left with him. He expressed the intention of carrying out as far as possible Lister's method of treatment, and of communicating the results to these pages. It is worthy of notice, that the Jesuits' establishment had accidentally received almost exclusively Prussian (Protestant) patients; and, but for the unpleasant rumours which have been circulated, it might be needless to add that nothing either in the nationality or the religion of the patients in any degree diminished the solicitude of the fathers for their charge, or ren-

dered them less anxious to receive and tend them. On the contrary, when we called there to see whether anything was wanting for the comfort and well-being of the patients which we were in a position to supply, they seemed at first rather disposed to resent the visit as an imputation; and, when quite at ease on this point, they assured us that they were fully able to meet all the wants of their inmates, and that all were doing well. The burden was heavy for Namur, as the expenses were being met almost exclusively by spontaneous local contributions. Finding that Dr. Hamoir was unacquainted with the large resources and liberal dispositions of the British Society, and of the sources to which he might apply, we left with him particulars which would enable him, in case of need, to make such application.

Continuing our journey to Libramont, we found there that the picture drawn by our Belgian companion was not overdrawn. This was the nearest station to Bouillon. It was being used as a centre for the transport of the German wounded from the field-ambulances around Sedan to the hospital-trains which were to convey them to the reserve lazarets. It is a very small station, and is chiefly used as the place of stoppage for persons going to and from the neighbouring village of Neufchateau; it had absolutely no accommodation for the wounded. Immediately outside the station, two wooden shanties had been run up—I believe, at the expense of Messrs. Orban, organ-makers, who had a factory in the neighbourhood. These huts held each thirty or forty wounded men. The wounded were brought into them from the country carts that conveyed them from Bouillon, and were stretched on straw, and laid on the ground till they could be dressed. When we got out of the train, the platform was full of soldiers. There was a string of carts in which the wounded were lying waiting for their turn of removal; and the huts were full of men, to whom attention was being given as fast as circumstances permitted.

The train was about to leave again for Arlon; and, as it seemed important that we should lose no time in gaining information from headquarters as to the most useful position to which we could transport ourselves, it was agreed, after a short consultation between Mr. Berkeley Hill and myself, that he should continue the journey to Arlon (an hour's distance), and that I would stay at Libramont and ascertain what was to be done and learnt there, and come on by the night-train. Nowhere, perhaps, could the realities of the sufferings of the wounded in war be more accurately gauged than at such a station as Libramont. It was now about three o'clock. A small surgical staff, at the head of which was Dr. Manuel, were hard at work among the wounded in the huts. Finding a number of men lying just inside the doors, who were still waiting their turn, and were in a sad plight and much suffering, I yielded to their entreaties, and, encouraged by a few words from one of the *Krankenpfleger*, set to work at once, trusting to the nature of the work and to its obvious usefulness, to excuse my not waiting for any more direct commission to act. I had brought out of the carriage and strapped to my side one of Savory and Moore's excellent army field-companions, and had therefore at hand all the materials for immediate dressings. The first case was one in which the right hand had been dreadfully shattered by an exploding bomb. The fingers were intact; but the back of the hand was one great excavated wound, torn, sloughing, and pouring out foetid pus. The wound had been stuffed with charpie, which was now saturated and foetid. I changed the dressings, cleansed the wound, and applied a hand-splint and carbolic oil dressing. The next man was suffering with a bullet-wound which had penetrated the shoulder-joint and traversed the deltoid. The next had a shattered elbow-joint. Dr. Manuel now came up; and I took the opportunity of introducing myself to him, and more formally offering my services, which were very readily accepted. Of course the dressings which could be applied were not of a very elaborate character, and many of the poor fellows were in a sad state. Their dressings were foul and stiff; they were exhausted with a rough journey and much exposure; and the supplies of everything that was needed for their comfort were sadly overtaxed by the enormous numbers who were being daily brought down. When the work was over, I went with Dr. Manuel to Baron von Steyn, the Johanniter who was in charge of the station, and obtained a list of the things principally needed for immediate use. They included olive-oil, carbolic acid, lint, bandages, strapping, shirts, and the like.

I had to wait for a midnight train; the aspect of things outside the huts was singularly picturesque and characteristic. The store-waggons of the Johanniter were drawn up in a row, and the "red cross" attendants were getting a rough evening meal before they turned in to sleep in the waggons. Some peasants had set up stalls in the open air for the sale of bread, eggs, and beer outside the station: they were lighted by flaring torches; and the Belgian and Prussian soldiers, with many waggoners, and a crowd of marauding idlers, were gathered round them drinking hard beer and poisonous "schnaps." I was hungry enough

to make a good meal off black bread and eggs. I had given away three or four hundred cigars and a few pounds of chocolate among the slightly wounded in the carts, and I now walked down among them to have a chat. They had been waiting for hours in the carts, and were just being told off into the railway trains which were waiting for them, and where they would probably have to sleep all night; for some hours would probably pass before they could be got off. They were cold, stiff, hungry, and were in some doubt whether they would not have to sleep all night in the open carts where they lay; and yet not one of them murmured. The Anglican accent in which I got through my talk with them soon betrayed itself, and one or two of them spoke to me in very good English. There were two Englishmen among them: one was a young man of good family, speaking fluently English, French, and German; he was slightly wounded in the foot. They were all anxious to be cured as quickly as possible, in order to get back to their regiments; and the Englishmen were as thoroughly Prussianised as their comrades. Presently they were told off to their railway waggons. These were not elaborately arranged, as were some that I subsequently saw, for the reception of the wounded, but were just large covered baggage-waggons, into each of which from fifteen to twenty men were packed lying on the straw, which was littered on the floor. Each man got a hunk of black bread, and a couple of bottles of wine were handed in to be shared among them. Then the doors were slid to, and they lay there in the dark. It was impossible not to be struck with pity for the poor fellows, who endured so much suffering and bad accommodation with imperturbable patience and resignation. They accepted all that was done courteously and thankfully, and, amid all the hubbub and confusion at the crowded station, through all their sufferings and discomforts they alone never forgot their discipline or their manhood. I may observe, here, that although the carbolic oil dressings were generally applied at Libramont, they were not used after a fashion of which Mr. Lister would approve: charpie soaked into the oil was applied, and no other precaution was taken. Open wire splints were largely used, and we were asked for more, but were unable to supply them. Further on, we found plaster of Paris splints very largely and most usefully applied, but here I did not see any. Presently I started for Arlon, and, arriving there, I met Mr. Berkeley Hill and Mr. Attwood, a former student at St. Mary's Hospital, to whose hospitality I was indebted for a sofa on which to pass the night.

ERNEST HART.

ROYAL COLLEGE OF SURGEONS.

THE Calendar of this institution, which has just been published, contains some interesting matter as well for students as for the members of the college. The Fellows will find a new and important addition in the present work, viz., a chronological list of Fellows, commencing with the honorary class, and including, also, those by election and examination. Of the latter, there are 419. The total number is 1,340. The oldest honorary Fellow is Mr. Joseph Swan, a retired member of the Council, who was admitted a member on October 1st, 1813; the youngest is Professor Humphry, now a member of the Council. The senior Fellow by examination is Mr. Robert Martin, of Ipswich, December 24th, 1844; the youngest, Mr. Edwin Rickards, of Leicester, who passed on the 9th of June last.

The Council, of which Sir William Fergusson, Bart., is President, and Messrs. G. Busk and H. Hancock are Vice-Presidents, consists of twenty-four members, and during the past collegiate year has held sixteen meetings, receiving the remuneration of £316:1. Of the present members of the Council, Messrs. South, Hilton, Quain, and Cock, have filled the President's chair; the first named gentleman twice, viz., in 1851 and 1860.

The Court of Examiners consists of ten members, and during the past collegiate year has held five meetings for the examinations for the Fellowships, and fifty meetings for the primary and pass examinations for the membership. For the primary fellowship, there were 82 candidates, of which number 67 passed, and 15 were referred for six months; for the pass, there were 39 candidates, of which number only two were referred to their studies for twelve months. For the primary membership examination, there were 586 candidates, of which number 394 passed, and 192 were referred for three months. At the pass examination, there were 380 candidates; 272 passed, and 51 were approved in surgery, but required to qualify in medicine; and 57 were referred for six months. The remuneration to the Court of Examiners appears as £3,612:10:6.

The Board of Examiners in Midwifery, which consists of four members, met three times during the year to examine sixteen candidates, of which number nine passed, four were referred for a written examina-

tion, and three were referred for three months. The members of the Board received £18:4.

The Board of Examiners in Dental Surgery consists of six members; and during the year examined nine candidates, of whom six passed to the satisfaction of the Board, and three were referred to their professional studies for six months. The remuneration to the Board appears as £47:5.

The Library now contains 33,062 volumes, 13,592 works, and 35,962 tracts, pamphlets, reports and cases. During the past year, 496 volumes have been added to the library.

The Museum appears in a most flourishing condition.

Students will find all the papers submitted to the candidates for the primary and pass Fellowship and Membership examinations.

The total receipts amounted to £12,453:7:1, and the disbursements to £11,986:9:6, leaving a balance in favour of the College of £466:17:7. This is extracted from a full account of the receipts and expenditure of the College from Midsummer-day 1869, to Midsummer-day 1870.

THE METROPOLITAN MEDICAL SCHOOLS.

THE entries at the medical schools of the metropolis this year, thus far promise fairly. The number seems to be somewhat in advance of recent years. Up to Wednesday, the numbers of new students who had entered are approximately reported to us as follows:

St. Bartholomew's	75	St. Mary's	20
Charing Cross	8	Middlesex	16
St. George's.....	28	St. Thomas's	46
Guy's.....	112	University College	64
King's College.....	35	Westminster.....	8
London.....	30		

Total..... 442

In 1868, after the registration was closed, the number of new students was 410; and in 1869, 415.

There still, however, remain some days for registration, and some additions and corrections will probably require to be made in these figures.

THE REGISTRATION OF DISEASE.

MR. GOSCHEN has arranged to receive a deputation of the British Medical Association, on the subject of Registration of Disease, on Monday the 17th instant, at two o'clock P.M.; and, this being one of the questions which the Committees of the British Medical Association and Poor-law Medical Officers have co-operated to press forward, it has been decided to call the Committee of the latter Association together on Friday, the 14th instant, at the rooms of the Royal Medical Benevolent College, 37, Soho Square, at half-past two o'clock P.M. precisely, when this and other matters will be submitted to the consideration of the meeting. Some propositions of a practical and comprehensive character will, we are informed, be submitted to the meeting; they are the joint production of several earnest workers on this important subject—the principal being Dr. Rumsey of Cheltenham. Dr. Budd of Bristol and Dr. Trench have, we believe, given their cordial support to this movement; and it may be hoped that they may be able to form part of the deputation.

EXAMINERS AT THE COLLEGE OF SURGEONS.

AT the meeting of the Council of the Royal College of Surgeons on Thursday evening, the resignations of Sir William Fergusson, Mr. Quain, and Mr. Skey, as members of the Board of Examiners of the College, were tendered and accepted. The nomination of new examiners followed. Mr. Savory, Mr. Power, Mr. Holmes, Mr. Ellis, Mr. Marshall, Mr. Callender, and Mr. Hutchinson were put in nomination; these gentlemen not being on the Council. The names of the Councillors who may be selected as examiners do not need to be put forward prior to election. There is some difference of opinion in the Council as to the meaning which should be given to past resolutions on the subject of elections to examinerships of young anatomists and physiologists, in the presence of the halt which has been brought about in the proposed arrangements for separating the examinerships in anatomy and physiology from those in surgery. This is consequent upon the suspension of the plan for conjoint examinerships with other examining boards in view of the proposed arrangements of the Medical Bill, and upon the subsequent rejection of that Bill. The College is for the time thrown back upon the former plan, by which the examiners are

examiners in surgery as well as in anatomy and physiology. The same arguments do not apply in the one class of subjects which are very potent in the other; and to pass over such men as Curling, Le Gros Clark, and Charles Hawkins, who are mentioned to us as the three next available examiners in surgery, is a proceeding to which many of the voters object. The result of the ballot at the next Council cannot therefore be accurately foretold from the nominations made at this. These have, nevertheless, their own obvious importance as signs of the times and indications of the proximate, if not of the immediate, future. As such, they will be regarded with interest and satisfaction.

NOTES OF THE WAR.

SEVEN German-American surgeons have arrived in Europe to offer their professional services to the German army.

FRENCH AMBULANCES.

A WRITER in the *Echo Médical et Pharmaceutique Belge* says that some of the French ambulances have been deficient in the most necessary articles. At Sedan, a French surgeon declared that his medicine-chest contained only 1,500 grammes of chloroform, whereas he had asked for 25 kilogrammes (25,000 grammes). On the other hand, he had found in his stores eighteen or twenty pots of *pommade aux concombres*—for what purpose intended, it is not easy to guess. Carbolic acid, laudanum, chloral, etc., were either wanting, or were supplied in extremely small quantities.

MEDICAL CASUALTIES IN THE GERMAN ARMY.

THE following medical officers of the German army have been killed or wounded in the war: Volunteer Surgeon Dr. F. von Lichtenstein—killed; Dr. Beerman, Westphalia Field-Artillery—slightly wounded; Assistant-Surgeon Dr. Straub, 1st Brandenburg Dragoons—slightly wounded; Staff-Surgeon Dr. O. Geisler, 4th Brandenburg Infantry—wounded; Assistant-Surgeon Dr. Brömser, Holstein Infantry—severely wounded; Volunteer Surgeon Dr. Bertheau, 3rd Westphalia Infantry—killed; Field Staff-Surgeon Dr. Russe, 2nd Army Corps—died of his wounds; Staff-Surgeon Dr. Boden, 4th Thuringian Infantry—wounded; Assistant-Surgeon Dr. Gützloe, Westphalia Jägers—wounded, Staff-Surgeon Dr. W. Moritz, Hanoverian Field Artillery—slightly wounded; Staff-Surgeon Dr. Boden, Thuringian Infantry—slightly wounded; Superintending Staff-Surgeon Dr. Pahl, and Assistant-Surgeon Dr. Straub, sanitary detachment 3rd Army Corps—slightly wounded; Staff-Surgeon F. Stiehl, Westphalian Infantry—slightly wounded; Staff-Surgeon Dr. Sauerhering, sanitary detachment 2nd Army Corps—wounded; Staff-Surgeon E. Baumgarten, Brandenburg Field-Artillery—slightly wounded; Volunteer Assistant-Surgeon Dr. von Heyne, Brandenburg Infantry—severely wounded; Staff-Surgeon Dr. Vogelsang, Jäger Battalion—died of his wounds.

THE INTERNATIONAL HOSPITAL AT BINGEN.

A CORRESPONDENT sends us the following from Bingen.

The staff of English surgeons sent out under the leadership of Mr. John Simon and Dr. Thudichum are actively engaged in their sanitary experiment. The hospital is situated on the summit of the Rochusberg, about five hundred feet above the level of the Rhine, rather above Bingen, and just opposite Rudesheimer, near to the well known inn on the summit of this hill. There was some delay at first in the arrival of the tents, and several rooms of the inn were used as wards. About six patients still remain there. Part of the staff live on the hill, sleeping in one of the tents; and the rest below, at Bingen.

The hospital itself, which is situated about two hundred yards from the hotel, with which it is about to be connected by a tramway, consists of twenty tents, each to hold eight beds, with other necessities for the occupants. The tents seem well adapted to their purpose. The ventilation is very good; and each tent is provided with a patent stove, which seemed to be hardly less fond of smoking than the patients. The fierce sun at present makes the tents really too hot, without the aid of any artificial heat. The tents are arranged in two rows, with the operation-room in the centre; the whole bearing a strong resemblance to Wimbledon encampment in miniature. Moule's dry-earth closets are in exclusive use; and a free supply of water is pumped by steam from the Rhine below, and filtered. There is telegraphic communication from the hospital to the railway-station and the hotel at Bingen; and the tents are provided with a simple means of communication with each other and with the kitchens, etc.

The cases necessarily differ from those seen in the front, being only

those which it was possible to move. The majority of injuries, though by no means the whole, consist of wounds of the extremities.

The surgery is strictly conservative. There have been two amputations of the thigh; one in a case of extensive destruction of the limb, fragments of cloth, etc., having been found mixed with large pieces of already dead bone. Both are doing well. There has also been a recent resection of the elbow-joint for very extensive injury to the bones of the forearm. In one of the tents there was a man with a bullet-wound on the left side, about an inch above the centre of Poupart's ligament. He states that he ran some distance after being wounded; that he suddenly felt something in the leg of his loose knickerbocker trousers, and, on investigation, found the bullet, which had probably pushed in his shirt, and been pulled out by the rapid movements of running. Out of five deaths at this hospital, three have been from tetanus, each following a secondary operation for the extraction of a bullet. Chloral was used in each case with relief, but with no permanent benefit.

All through the tents, the healthiness of the men and of their wounds was remarkable. The various forms of carbolic acid were the only dressings. Nearly all the patients were smoking; and friend and foe, where lying together, seemed quite to have got over their enmity, if, indeed, any had ever existed. The *morale* among the men is exceedingly good, many badly wounded ones anxiously counting the days till they shall again be able to go on duty.

The Crown Princess of Prussia visited the camp on September 28th. Her Royal Highness, attended by Mr. John Simon and Dr. Thudichum, visited most of the tents, and conversed with many of the patients. She seemed in excellent health, and much pleased with all around. As the royal party drove off, three cheers for the English Princess were called for, and heartily responded to.

I crossed over to Rudesheimer; and there, by the kindness of Herr Evault, a gentleman who has been most active in getting up temporary hospitals in this neighbourhood, I was shown a large hospital on a hill in an old convent, as wholesome and commendable as any hospital in an old building could be. There were several cases of great interest in the wards, particularly several severe wounds of the lung, all in a fair way of recovery. An ample supply of air is allowed to each patient; and at present there is a spare bed beside each, so that in the daytime a change can generally be effected. The nursing here, which is admirable, is entirely in the hands of a neighbouring sisterhood. The various fractures, by their cleanliness and nice adaptation, showed excessive care; they all appeared very much covered up, but this was in great part the fault of the men, who were never content if their wounds were not thickly clad. Carbolic acid is everywhere freely used. There was one case where diphtheritic membrane had formed on the surface of the wound, with much fever. I saw the case, but not the membrane.

I should like to put on record an instance of what non-combatant officers can do in battle. Dr. Brömser, the junior surgeon at the Rudesheimer hospital, was with his regiment at Wörth. During the engagement, a ball crushed and carried away a portion of his right eye. He ceased from his work sufficiently long to place a piece of lint and a bandage round his own head, and then quietly continued his labours among his fellow-wounded till seen by his superior officer and ordered to the rear. I have seen and had the honour of conversing with this gentleman. He has already been rewarded with the Iron Cross.

This admirable voluntary hospital is but a specimen of what may be found just now in half the villages of Germany.

THE WOUNDED IN BERLIN.

OUR Berlin correspondent writes as follows on the 10th instant.

The number of sick and wounded treated in the Berlin hospitals diminishes continually, because a good many of them are dismissed and few new transports arrive. In the barracks on the field of Tempelhof, more than half of the beds are vacant; and, as the cold weather approaches, it is probable that the whole number of beds will never be used. It is intended to fit out some of the barracks for use in winter, with double walls and fireplaces. The distribution of the wounded arriving here is arranged in this way: the train first goes to the barrack-station, where one of the surgeons has the duty of selecting the most severe cases; the remaining cases are sent back to the other hospitals of the place. The consulting-surgeons to the barracks-hospital are Professors Esmarch of Kiel, König of Rostock, and Rose of Zurich—the last named residing in the hospital itself. In the beginning of last week a special hospital-train started for Metz to fetch wounded men to Berlin. The arrangement of the train was that which it is intended to use generally in future for transports. Hitherto, the sick and wounded have been brought in second or third-class carriages; or,

if not able to sit, lying on straw or mattresses in luggage-waggons. Of course, in these waggons with strong springs, intended for heavy loads, the motion is rather unpleasant. As long ago as 1867, Professor Esmarch proposed an improved plan of transport, similar to that used in the American war. For this purpose are used the fourth-class carriages, destined in peace time for passengers, but without sitting accommodation. The new fourth-class carriages on the royal railways are built with doors and a balcony at each end, so that one may walk from one end of the train to the other. Inside are wooden posts at a distance from the sides and from each other, corresponding to the size of military litters. For the transport of wounded, it is necessary only to screw on a certain number of hooks, and to hang up the litters with the patients by means of strong India-rubber rings. Previous experiments have showed the simplicity of the arrangement and its convenience to the patients. To complete the usefulness of such a train, and to avoid frequent stopping, it is necessary to have two or three carriages for the surgeons, nurses, dispensary, kitchen, closet, etc. For one train, the Berlin Aid Society has given this furniture; and this is the train abovementioned which started for Metz. Each of the waggons can receive eight or twelve patients, according to its size.

Last week a Würtemberg hospital-train arrived at Berlin with patients, who were very pleased with their journey. The litters were hanging in girths; but we think that the arrangement with the India-rubber rings will be superior. Certainly it will spare the patients a good deal of hurt and pain, if they can go from a hospital near Metz to any hospital in the middle of Germany without changing their couch. I may add, that the expense of transforming the fourth-class carriages for the purpose is not more than thirty dollars for each.

Sanitary Regulations for Soldiers is the title of a little pamphlet edited by the Berlin Aid Society, and distributed in large numbers to the German armies. In eighteen short paragraphs, it gives rules on hygiene in a popular style. Regarding, especially, water and drinking in general, very judicious explanations are given. Food, bathing, the care of the feet, behaviour in cold and heat, are the other topics treated in the paper.

It seems that rumour increases a little the number of cases of typhoid fever and dysentery among the German troops near Metz. In order to have the judgment of an authority on the point, and to take such measures as may be necessary, Professor Frerichs has been sent by the Government to inspect the hospitals in the locality.

ASSOCIATION INTELLIGENCE.

CUMBERLAND AND WESTMORLAND BRANCH.

THE autumnal meeting of the above Branch will be held at the Keswick Hotel, Keswick, on Wednesday, October 19th, 1870, at 1 P.M. THOMAS F. P'ANSON, M.D., of Whitehaven, President of the Branch, will take the Chair.

Gentlemen intending to read papers, or be present at the meeting, will greatly facilitate arrangements by communicating with the Secretary without delay.

HENRY BARNES, M.D., *Honorary Secretary*.

Carlisle, September 28th, 1870.

SHROPSHIRE SCIENTIFIC BRANCH.

THE autumnal meeting of the above Branch will be held in the Museum of the Natural History and Antiquarian Society, Shrewsbury, on Thursday, October 20th, at 2 P.M. President for 1869-70, Dr. OAKLEY; President-elect for 1870-71, J. D. HARRIES, Esq.

Gentlemen intending to read papers or report cases, are requested to communicate with the Honorary Secretary.

The dinner will take place at the Lion Hotel, at 4.30 for 5 exact time: J. D. Harries, Esq., in the Chair.

SAMUEL WOOD, F.R.C.S., *Honorary Secretary*.

Shrewsbury, September 26th, 1870.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting of the above Branch will be held at the White Hart Inn, Reigate, on Thursday, October 20th. Dr. HOLMAN will take the Chair at 4 P.M.

Papers, etc., are promised by Dr. Murray, Dr. Holman, Dr. Carpenter, and the Honorary Secretary.

HENRY T. LANCHESTER, M.D., *Hon. Secretary*.

Croydon, October 3rd, 1870.

SOUTH MIDLAND BRANCH.

THE fourteenth autumnal meeting of the above Branch will be held at Stony Stratford, Bucks, on Tuesday, October 18th.

Gentlemen who intend reading papers or cases, are requested to furnish the names or titles, as early as possible, to

J. M. BRYAN, M.D., *Honorary Secretary*.

Northampton, September 20th, 1870.

BATH AND BRISTOL BRANCH.

THE first meeting of the above Branch for the session, will be held on October 27th, at the Royal Hotel, College Green, Bristol.

The following papers are expected. 1. The Position of Medical Men receiving Resident Nervous Patients. By Horace Swete, M.D.—

2. Case of Recovery from General Dropsy. By Charles Steele, Esq.—

3. Case of Pyelitis from Injury. By R. W. Tibbits, M.B.—4. The Treatment of Ulcers by Transplantation of Skin. By Nelson C. Dobson, Esq.

EDMUND C. BOARD, *Honorary Secretary*

CORRESPONDENCE.

THE REGISTRATION OF DISEASE.

SIR,—As you have done me the honour to refer on several occasions to certain suggestions which a few months ago I ventured to make public, relative to the registration of disease, may I ask you to give me space for a few words touching an article upon that subject which appeared in your issue of the 3rd ultimo?

I hope it will not for one moment be imputed to me that I am weakening the efforts of those who are actively promoting the movement for sickness returns, if I take the liberty of expressing a doubt upon the expediency of regarding the provision of those returns as, *at the outset*, inseparable from the radical change in our present system of death-registration, implied in the following clause of the Report on the Registration of Disease adopted at the late meeting of the British Medical Association at Newcastle:

“The appointment, in each Superintendent Registrar’s district, or group of districts, of a ‘registration medical officer’, who, in addition to the collection of the above returns, and the supervision of the death-records, would, in doubtful cases, certify the fact of death, investigate and record its cause, and register still-births. He would also be available as a medical witness, or assessor, and might act as a medical officer of health in certain districts.”

Eventually some such an arrangement as is here proposed may possibly be carried out. But I am less sanguine than you appear to be of so thorough a reform being initiated all at once; my own impression, based on past experience, being that the legislature will rather incline to proceed tentatively than *per saltum*. Of course this is merely an opinion, which will be taken *quantum valeat*.

It is good, however, to be prepared for difficulties, whether imaginary or real; and, therefore, suffer me to remark, in the first place, that there appears to be an important difference between the “registration medical officer”, as developed by Dr. Farr in the Registrar-General’s Twenty-seventh Annual Report, and the same functionary as foreshadowed in the above quoted paragraph from the Registration of Disease Committee’s Report. I do not find, for example, that Dr. Farr proposed to interfere with the duties or position of the existing registration officers: he seems to have contemplated simply the provision of a means for insuring a more accurate and complete registration of the *causes* of death, but not (at least in his official report) for dealing in any new way with statistics of registration. And in the approval to which you refer as having been given by him to the proposals of the Registration of Disease Committee in 1866, I think I see the same consistent idea of non-interference with the present officers of registration: for in “collecting and publishing periodical returns of disease”, the registration medical officer would, I presume, draw his materials not from registration, but from Poor-law and other medical sources. But if the registration medical officer is to have “the supervision of the death-records”, is (in any case) to “certify the fact of death”, and to “register still-births”, a reference to the Registration Act will show that a very radical change indeed will have to be made in that Act. And in estimating the probabilities of such a change, it needs to be borne in mind that the Act originated in certain requirements of a purely civil character, such as that of individual identification for the purposes of property and otherwise; and that as regards those requirements, the experience of over thirty

years’ working is, on the whole, favourable to its efficacy. Hygienic considerations were evidently not prominent in the minds of the framers of the Act; hence it is not strange that for hygienic purposes it has not sufficed nor ever can do so. Clauses 18, 32, and 36, of the Act assign the custody of the register-books for a certain time to the registrars, and afterwards permanently to the superintendent registrars, who are almost all solicitors and clerks to the several Boards of Guardians; Clause 7 of the Act expressly giving to the union clerks the right to the office of superintendent registrar. This being so, it does appear to me that, supposing the present superintendents were retained, and there were associated with them medical superintendents to relieve them of certain functions and to perform other new ones, it would be a task of remarkable delicacy and some difficulty to devise a satisfactory adjustment of the rights and privileges of each of them; while the entire substitution of medical for lay superintendents would, for obvious reasons, be a formidable business if it were brought about at once, and would imply a long transitional period if the substitution were only to take place on the death of each one of over six hundred persons.

Further, the Act, as you know, places the certification of the *fact* of death exclusively in the hands of the lay registrar, and gives no legal value to the medical certificate of the *cause* of death. This regard for the purely legal side of things pervades the whole of the Registration Act, and is, in fact, its essential principle.

Considerations of this sort lead me to think that it would be prudent, in the first instance at least, to confine the functions of the registration medical officer within the limits suggested by Dr. Farr. Let us see how such an officer answers as an auxiliary before we depend on him for everything.

One word now in reference to the collection and publication of sickness returns, as to which you say “that a skilled local officer would be far more reliable than a central department in the prompt utilisation of facts of disease and mortality.” Would not this very much depend on the nature of those facts, the sources whence they were derived, and the object to be gained by their publication? If the returns of sickness were to be supplied as the returns of death are now supplied, by lay registrars, I should fully admit the force of your reference to Dr. Wilson’s “Notes on the Quarterly Return” as exhibiting the need for local revision of the facts before they were utilised centrally. Where the records of medical facts are all medical men, erroneous returns, such as Dr. Wilson discovered to have been made by lay registrars, are surely not to be anticipated.

As regards the utilisation of sickness returns, both locally and centrally, I ventured to express an opinion on this point in the paper which I had the privilege of reading before the Social Science Association in March last. I have not the vanity to suppose that the utterances of so humble an individual as myself upon an important public question would be likely to have attracted the attention of your readers, and this must be my excuse for asking you to print the following excerpt from my paper. “Local requirements would, I think, be adequately met, and in a way consistent with the prompt despatch of the returns to the central office, as follows.—It seems probable that the Sanitary Commission will recommend that the local sanitary authority of the future shall be the Board of Guardians, and in that case the Poor-law Union will be the sanitary unit of area. I apprehend that in each union we may some day expect to find a medical officer of health established—whether he acts for one or more unions is unimportant;—and what I propose is that, directly the workhouse or district medical officer has ascertained from his relief-book the number of new cases of certain specified forms of disease occurring within the prescribed interval, and has recorded that information for transmission to the central office, the sheets of his book containing the details of each case for the week, or other interval, should be then at the disposal of the medical officer of health of his district. That official would make arrangements for collecting the sheets at stated periods, and he would thus possess in the utmost completeness all the details which he could need for local use. And, as the health-officer would be an officer of the union, the records would be always available for union purposes. Pending the appointment universally of medical officers of health, the detailed sheets might be collected by health-officers where they already exist, and might be deposited with the union clerks in all other cases. The principle I advocate is the retention of the *details* for local use, and the transmission of *summaries* only for use at the central office. But then I would call upon the district medical officers of health to publish an annual report, in which all the topographical, geological, meteorological, and other particulars that any scientific investigator of the ætiology of disease might wish for, should be given. I think such annual reports should be made upon a uniform plan, properly laid down by competent authority, that the defects which at present characterise the annual reports of medical officers of health generally might be avoided. A

modification of the same principle should be applied to the records of medical charities and friendly societies."

It appeared to me at the time I wrote this, and I have seen no cause for altering my opinion, that such a plan of procedure would admit of expansion, as the conditions of our sanitary organisation are made to embrace a wider field, while it has the advantage of being equally applicable at the present moment. Moreover, it provides for what I deem an essential feature in any scheme for the registration of disease, namely that the central health department should be kept thoroughly posted up in the movement of disease (the graver forms of it, at any rate) throughout the country. You are probably much better informed than I as to what may be expected to flow from the inquiry of the Royal Sanitary Commission, and as to the interval likely to elapse before the recommendations of that most valuable Commission will become the subject of legislation. Perhaps I am overshooting the mark in assuming that it will be something like a couple of years before any new organisation for sanitary purposes is fairly launched. The question that occurs to me, then, is whether it is necessary that we should wait so long before making any attempt to collect sickness returns? I do not think so myself, and I hope that neither you nor the British Medical Association will be of that opinion. It is precisely because I think a beginning might be made almost at once that I have trespassed upon your space with this letter. If the President of the Poor-law Board can be induced to move for the co-operation of the Poor-law Medical Service, and if the necessary grant of money can be obtained from the Chancellor of the Exchequer, all other questions resolve themselves into matters of detail, which in energetic and sympathetic hands would present no insuperable difficulty.

In conclusion, let me assure you that I do not write in any spirit of antagonism towards those who may hold different views from myself. My sole wish is to contribute as far as lies in my power towards the solution of whatever difficulties may be found to obstruct the movement for the registration of disease, to promote which the Association you represent has done so much.

I am, etc.,

October 6th, 1870.

JAMES LEWIS.

THE CEPHALOTRIBE.

SIR,—I much regret that absence prevented my joining in the discussions in the Midwifery Section at the Newcastle meeting, particularly when the important question upon the cephalotribe took place; and this must be my excuse for asking a little space now. Unless I am much mistaken, the cephalotribe will be in future the principal instrument employed to reduce the size of the foetal head, not only in the extremely severe cases, but also in the less so. It is important, therefore, that we should have an instrument handy, sufficiently strong, and so shaped that we can seize the head readily above the brim. Sir James Simpson's is handy, but it is scarcely strong enough to bring down the head to the diminution required in the severest cases. The French instruments are needlessly long in the handles, and hence are never likely to be favourites in British practice. Indeed, this enormous size is to a great extent the reason why the instrument has been so long eschewed by British practitioners. We are indebted to Sir James Simpson for showing us that a smaller instrument will suffice. It is not, however, necessary to have an instrument over-powerful. There is only a certain amount of work to be done; any instrument which can do much more than required is by so much more needlessly cumbersome. The modification of the French instrument put forward by Dr. Matthews Duncan, in my opinion, falls under this head. The short handles can always be made strong enough, and the screw powerful enough. The short handles have less spring, and consequently there is less requirement of a long screw. The screw-power in Sir James Simpson's and in Dr. Kidd's is not convenient, because the female screw traverses in such a way as to cause the end of the male screw to run into the centre of the hand, consequently the thumb-pieces of the female screw must be worked on the side, whereby great loss of power is sustained, so much so as to lead Dr. Matthews Duncan to believe that it was impossible to obtain sufficient power without the long handles. In the modification which I have introduced, it will be seen that we have as much as we want; and it can be increased readily if needful. With regard to strength, I have no fear that the instrument will fail. I have tried it upon all the largest and hardest heads I could obtain, and it has never failed to reduce them to the lowest diameters required for actual practice. Also, with regard to its adaptability to actual practice, I can speak very satisfactorily from now a large experience—perhaps greater than that of any other British obstetrician in the use of the cephalotribe.

But there is another point in its construction requiring consideration; namely, the curve. This opens up the question under discussion be-

tween the Dublin and English schools. But with the cephalotribe the question of traction does not enter into consideration—not that I can assent to the opinion that the instrument is useless for traction—but because, as it is necessary for the instrument before traction to be rotated, and as this action makes the instrument more or less straight as regards the pelvic axis, it really approximates to the straight forms.

But with regard to the pelvic curve; I cannot but consider that the pelvic curve, although of disadvantage for traction in forceps, under some circumstances, is in this instrument, as also in the cephalotribe, of great importance when considered as an instrument for seizure. I need not repeat the arguments which have been advanced in favour of the straight and for curved forceps. No doubt under particular conditions each has an advantage, though I fancy the balance much in favour of the curved as a general instrument. But in the curved kinds of cephalotribe and forceps, the curve increases the area seized, and therefore brings more of the head under the grip of the blades. Its greater importance, however, depends upon its being more able to reach the head. For it must be considered that, whereas in the use of the forceps we are not so likely to have much bulging forward of the sacrum and lower lumbar vertebræ, in the cases in which the cephalotribe is of the greatest value the head is pushed so far over the pubes as to render it very difficult for a straight instrument, even with a relaxed perinæum, to do more than seize just the hindmost portion. That it is sometimes difficult even for an instrument curved as mine is (namely, about one inch and a half) for the pelvic curve, was well shown in a case which occurred recently to me, where the promontory of the sacrum pushed the head over the pubes, so far that it was very difficult to do more than seize the occiput so slightly that, on the screw being employed, the blades slipped backwards more than twice.

Admitting, then, that a curve is necessary in a large number of cases, it may be asked, What should be the extent of the curve? Formerly mine was made at least two inches, but, as this was rather great, it was altered to one and a half, which curve forms an intermediate one, suitable to the majority of cases.

There are many points connected with the mechanism of crushing and delivery to which I have not referred, but which will be found discussed by me in this JOURNAL's report of the Dublin meeting of the Association, and in the Obstetrical Society's *Transactions* for 1869.

One point remains for me to allude to; namely, Is it necessary to perforate before using the cephalotribe? Unquestionably: nothing can be more dangerous than to omit it. If this be doubted, let any one try to crush the dead foetal head without perforation. This I have already insisted upon more than once. Besides, if the obstacles are so great that we cannot perforate, the case is clearly not one for cephalotripsy, but for Cæsarean section; and the use of the perforator is easier than that of the cephalotribe.

I may add that I have seen two of the principal instrument-makers of London send out cephalotribes under my name totally different in shape and power from the one I have brought forward. Messrs. Krohne and Sesemann, of Duke Street, Manchester Square, have made mine for me, and know the chief points to be attended to. I shall be happy, however, to examine any instrument sent out in my name for any one who may wish to have one of correct pattern.

I am, etc.,

J. BRAXTON HICKS.

9, St. Thomas's Street, S.E., October 1870.

THE PHARMACEUTICAL SOCIETY.—At the meeting of the Pharmaceutical Society on Wednesday last, a portrait of Mr. Sandford, the President, by Mr. Knight, R.A., was presented to the Society. It was the result of a subscription from the members of £500 to mark their sense of his exertions in procuring the recent Pharmacy Bill, and in regulating the affairs of the body.—At the same meeting, it was announced that Mr. T. H. Hill had presented a sum which would produce £10 a year as a prize of books, to be distributed after the minor examinations among the younger students, to stimulate them to further exertions.

BEQUESTS, ETC.—The late Mr. John Ivatt Briscoe, M.P., has left £1,000 to each of the following institutions, viz.: the Victoria Hospital, the Surrey County Hospital, the Surrey Dispensary, King's College Hospital, London Fever Hospital, St. Mary's Hospital, St. Mark's Hospital, and Cancer Hospital; and £500 to each of the following: the Middlesex Hospital, the Consumption Hospital at Brompton, the Convalescent Hospital at Weybridge, the City Orthopædic Hospital, and the Hospital for Sick Children.—The Duke of Marlborough has presented £114 to the Radcliffe Infirmary, Oxford, being the amount of fees received from visitors to Blenheim Palace and Gardens during the past year.—"Anonymous" (a lady) has given £500 to the East Suffolk Hospital, Ipswich.

OBITUARY.

AUGUSTUS MATTHIESSEN, F.R.S.

THE melancholy death is announced of Dr. Matthiessen, formerly Professor of Chemistry at St. Mary's Hospital Medical School, London, and lately appointed to the same post at St. Bartholomew's Hospital: it comes immediately after the loss of Professor Miller. Dr. Matthiessen had already, at the age of thirty-nine, established a reputation as an original investigator, which had extended throughout Europe, and placed him in the very foremost rank. Only last week, we had occasion to refer to his admirable researches on the alkaloids of opium, of which we have many times had to give an account. These investigations were unique of their kind, and constitute the main basis of our knowledge on this subject, to which they have largely added. His researches on the properties of pure metals, and upon the electrical properties of metals, pure and alloyed, were even more immediately applied to important purposes. Dr. Matthiessen has received the Royal Medal of the Royal Society in honourable recognition of his varied, trustworthy, and distinguished labours. His career as a teacher at the medical schools was marked by the same laborious industry and ability as distinguished his researches. At St. Bartholomew's Hospital he had received the fullest support from the authorities in organising a most extensive and complete chemical working and teaching laboratory on a large scale, one of the very finest in the country. He had more than one lucrative appointment: his income was daily increasing from many sources, and his reputation, long firmly established, was still extending. He was a very excitable man: and under the influence, it is stated, of a threatened charge of indecent assault on a lad, he fell suddenly into a state of great excitement, and leaving a memorandum announcing the charge, and declaring that, though he was innocent, yet it blighted all his future prospects, he committed suicide. He was unmarried, a man of studious and reserved habits, and of high moral character. A more melancholy incident has rarely occurred. A career of unusual brilliancy and fruitfulness, and of large promise to science, has been suddenly and most sadly cut short.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, October 6th, 1870.

Rickards, Edwin, University College Hospital
White, Barrington Sayer, King's College, London

The following gentlemen also on the same day passed their first professional examination.

Bracey, Herbert Richard, Birmingham
Ransford, Thomas Davis, Guy's Hospital

As an Assistant in compounding and dispensing medicines.
Clark, Walter Beales, Leicester

MEDICAL VACANCIES.

THE following vacancies are announced:—

ADDENBROOKE'S HOSPITAL, Cambridge—Surgeon.
BIRKENHEAD BOROUGH HOSPITAL—Assistant House-Surgeon: applications, 18th.
BIRMINGHAM GENERAL HOSPITAL—Resident Medical Officer: applications, 27th; election, Nov. 4th.
BRIGHTON AND HOVE DISPENSARY—Resident House-Surgeon: applications, 31st; election, Dec. 6th; duties, Jan. 3rd.
BRISTOL ROYAL INFIRMARY—Assistant House-Surgeon: applications, Nov. 2nd.
CHARING CROSS HOSPITAL—Surgeon-Dentist: applications, 26th.
DERBYSHIRE GENERAL INFIRMARY, Derby—House-Surgeon: applications, Nov. 5th.
DELTING, Shetland—Parochial Medical Officer.
DORSET COUNTY HOSPITAL, Dorchester—House-Surgeon: applications, 19th; election, Nov. 5th.
DURSLEY UNION, Gloucestershire—Medical Officer for District No. 3: applications, 26th; election, 27th.
EAST DISPENSARY, Liverpool—Resident House-Surgeon.
HOSPITAL FOR WOMEN, Soho Square—House-Physician: applications, 21st.
KILKENNY UNION—Resident Apothecary for the Kilkenny Dispensary District: 18th.
KING'S COLLEGE, London—Professor of Chemistry.
LEICESTER PROVIDENT DISPENSARY—Medical Officer: applications, 17th; election, 20th.
LISMORE UNION, co. Waterford—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Ballyduff Dispensary District: 24th.
LOUGHBOROUGH INFIRMARY AND DISPENSARY—House-Surgeon: applications, 18th; duties, Nov. 7th.
MIDDLESEX HOSPITAL—Assistant-Physician.

MORPETH DISPENSARY—House-Surgeon: applications, Nov. 25th; election, Dec. 9th.
NATIONAL DENTAL HOSPITAL, Great Portland Street—Dental Surgeon: applications, 19th.
QUEEN ADELAIDE DISPENSARY, Bethnal Green Road—House-Surgeon: applications, Nov. 1st; election, 4th.
QUEEN'S HOSPITAL, Birmingham—Resident Surgeon: applications, 20th. Honorary Obstetric Officer, applications, 28th.
ROYAL FREE HOSPITAL, Gray's Inn Road—Junior House-Surgeon: applications, 26th.
ST. BARTHOLOMEW'S HOSPITAL MEDICAL COLLEGE—Professor of Chemistry.
ST. SAVIOUR'S UNION, Surrey—Two District Medical Officers for Districts Nos. 3 and 6: applications, 20th.
SOUTHEND, Argyleshire—Parochial Medical Officer.
STRABANE UNION, co. Tyrone—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Dunamagh Dispensary District: 24th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

COOPER, C. W., M.D., appointed Physician to the Leicester Infirmary and Fever House, *vice* G. Shaw, M.D., resigned.

BIRTHS.

DEBENHAM.—On October 5th, at Presteigne, Radnorshire, the wife of Horace K. Debenham, Esq., Surgeon, of a daughter.
GORNALL.—On October 8th, at Warrington, the wife of *John H. Gornall, Esq., Surgeon, of a daughter.
GREAVES.—On October 6th, at Derby, the wife of *Charles A. Greaves, M.B., LL.B., of a daughter.
TEMPLE.—On September 25th, at the Royal Arsenal, Woolwich, the wife of *Staff-Assistant-Surgeon W. Temple, M.B., V.C., of a daughter.
WOOKEY.—On October 7th, at Potter's Bar, the wife of *James Wookey, Esq., Surgeon, of a daughter.

MARRIAGES.

FOWKE, Frederick W., M.D., of Byfield, Northamptonshire, to Emma, only daughter of the late Thomas FABLEY, Esq., of Wormleighton, Leamington, on September 29th.
PEARMAN, George William, Esq., of Sunderland, to Eliza Anne, only daughter of John Grigg APPLETON, Esq., Surgeon, of Luton, at Staindrop, near Darlington, on September 29th.
TURNBULL, P. S., M.D., H.M. Indian Army, to Mary, second daughter of George OLIVER, Esq., at Borthaugh, Roxburghshire, on October 5th.

DEATHS.

BUCKLE.—On October 7th, at Leinster Square, aged 7, Alice Gertrude, third daughter of R. T. Buckle, M.D., Depot Battalion, Chatham.
CLENDON, John Chitty, Esq., Dental Surgeon, at Cambridge Gardens, Kensington Park, aged 66, on October 1st.
HOWELLS, Thomas, M.B., at Kennington Cross, aged 28, on October 5th.
KING, William, M.D., at Kettlewood House, near Woking, aged 84, on Sept. 29th.
SHARMAN.—On October 6th, at Gipsy Hill, Lower Norwood, aged 5, Florence Mary, daughter of John Sharman, Esq., Surgeon.

TESTIMONIALS.—On Wednesday, the boys of Christ's Hospital presented the late resident surgeon, Mr. T. Stone, with a handsome testimonial consisting of a drawing-room clock and candelabre, in the style of Louis XVI.—Dr. Humby has been presented with a handsome oak writing-case by the poor of Bournemouth, in recognition of his labours and kindness to them while Resident Medical Officer of the Dispensary.

BOOKS, ETC., RECEIVED.

The Characters of the Akazga Plant. By T. R. Fraser, M.D. Edinburgh: 1863.
The Kombi Arrow-Poison of the Manganja District of Africa. By Thomas R. Fraser, M.D. Edinburgh: 1870.
A Manual of Instruction for Attendants on Sick and Wounded in War. By Staff-Assistant-Surgeon A. Moffitt. London: 1870.
Report of the City of Glasgow Fever Hospital from May 1st, 1869, to April 30th, 1870. Glasgow: 1870.
A Pathological Classification of Mental Disease. By J. B. Tuke, M.D. Lewes: 1870.
The Satires of Horace translated into English Metre. By Andrew Wood, M.D., F.R.S.E. Edinburgh: 1870.
A Digest of Facts relating to the Treatment and Utilisation of Sewage. By W. H. Corfield, M.A., M.B.Oxon. London: 1870.
Physiological Action of Nitrous Oxide, as shewn by Experiments on Man and Lower Animals. By R. Amory, M.D. Boston and New York: 1870.
On Vertigo or Dizziness. By J. B. Bradbury, M.D. London: 1870.
The Popular Science Review.
Report of the Metropolitan Board of Works, 1870.
Prostitution in Paris: Dr. Chapman's replies to the Remarks of M. Le Fort and Mr. Berkeley Bill on Certain Passages in the Articles on Prostitution published in the *Westminster Review*. London: 1870.
The Third Annual Report of the Croydon General Hospital. Croydon: 1870.
The Value of Quinine. By Surgeon W. J. Moore, L.R.C.P.
On the Climate of Sidmouth. By Dr. J. Ingleby Mackenzie. London: 1867.
Introductory Address delivered to the Pharmaceutical Society of Great Britain. By George Frederick Schacht.
The Forces of the Universe. By George Berwick, M.D. London: 1870.
Report on Measures adopted for Sanitary Improvements in India, from June 1869 to June 1870.
Association of Medical Officers of Health: Secretaries' Report for 1869-70.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
 WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
 THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Pathological Society of London, 8 P.M. Mr. Spencer Watson, "Glioma of the Retina"; Mr. Christopher Heath, "Aneurism of Aorta"; Dr. Crisp, "Hair from a Case of General Alopecia"; Mr. Morris, "Renal Cyst"; etc.
 THURSDAY—Harveian Society of London, 8 P.M.
 FRIDAY—Western Medical and Surgical Society of London, 8 P.M.

EXPECTED OPERATIONS AT THE HOSPITALS.

GREAT NORTHERN HOSPITAL, Wednesday, October 19th, 2.30 P.M. Transplantation of Skin in a Case of Severe Burn, by Mr. Spencer Watson.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

AN article on the Indian Sanitary Report for 1869-70 is postponed, from pressure on space.

THE QUEEN'S HOSPITAL WORKING MEN'S COMMITTEE.

SIR,—“Great cry and little work.” Our Birmingham Queen's Hospital Working Men's Committee, which was to regenerate our hospital system, introduce a provident principle, generally to be the means of elevating the working classes into a spirit of independence, has now revealed its true character as declared in our local press. It is as follows. Working men are to be initiated into the vices of the rich—at least, so far as their moral delinquencies are allowed when public institutions are concerned. Building is to be commenced at the rate of £5000, when they have not above half that sum in hand. The provident principle is nowhere. And private practitioners are further to have their resources curtailed by a proposal for the Queen's Hospital to attend confinements for nothing.

Birmingham, October 1870.

I am, etc.,

PERCY LESLIE.

REPORTS OF SOCIETIES.—The report of the Manchester Medical Society's first meeting shall appear next week. Condensed reports of meetings of Medical Societies in London and throughout the provinces should, if possible, reach the office on the Monday of the week in which they are intended to appear.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

DR. F. COOK (Cheltenham), Mr. Fleischmann (Cheltenham), will observe that the omission to stitch the JOURNAL is not a new regulation of the Association, but an order from the Post Office, founded on an Act of Parliament, which applies to all other journals as well as to that of the Association. We agree with them in thinking it very inconvenient. Perhaps the numerous protests against it, to which we shall add our own on behalf of our readers, may induce some modification of the rule.

MR. LAING will, on reflection, we believe, consider that it is undesirable to resent the somewhat inconsiderate observations which he quotes from an introductory lecture. They were not reported in this JOURNAL; and to print our correspondent's letter “in the large print”, as he suggests, would magnify an incident which it is not worth while dwelling upon. St. George's needs no testimonial; its theatre has been the scene of many of the highest triumphs of surgical skill, and ranks among the most valuable workshops of humanity.

POSTAGE OF THE JOURNAL.—In consequence of the alterations in the rates of postage and conditions of transmission of newspapers, the postage of the BRITISH MEDICAL JOURNAL will be one halfpenny; which must be paid each time the JOURNAL is retransmitted by post. In order to retain the privileges of a newspaper, the JOURNAL must not be stitched.

DR. B. FOSTER (Birmingham).—Many thanks; but the account referred to has not come to hand.

DR. BOTT (Bury).—The manuscript is in the hands of the printer.

BIOGENESIS.

SIR,—The statements of Dr. Bastian concerning the effects of the *ascaris megalocephala* appear to me to have little or no reference to, or connexion with, the question of biogenesis. Subtle volatile, animal and vegetable, emanations—neither cytoïd nor colloïd—may be fairly concluded to be at times active in the causation of disease and toxic symptoms; but whether such matters be vitalised, or the contrary, can have no influence in the determination of the spontaneous or non-spontaneous origin of life. A very important fact, which is entirely overlooked by the upholders of either doctrine is, that *the development of the lowest living forms is invariably restricted to organic infusions*. Hence it must be held that prior organised molecules are indispensable to their evolution. If so, the inevitable corollary (highly favourable to the biogenists) ensues, that their production would be impossible, were the universe merely a boundless theatre of inorganic forces, to the exclusion of all pre-existent organic particles.

October 1870.

I am, etc.,

THEMUS.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

THE NEW POSTAL REGULATIONS.

THE following is one of the new conditions of registration of a newspaper for inland transmission.

“It must be printed and published in the United Kingdom; must be published in numbers at intervals of not more than seven days; and must be printed on a sheet or sheets unstitched.”

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THE COLLEGE OF SURGEONS OF ENGLAND.—S. S.—The gentlemen on the Council at the time of creating the honorary fellows were, of course, the first elected: hence Mr. Swan appears senior to the late Mr. Bacot.

A METROPOLITAN STUDENT may consult the advertising columns of the JOURNAL, where he will find the next examination fixed for Saturday, November 5th.

NOTICE.—It is requested that all Letters, etc., intended for the Editor or the Publisher of the BRITISH MEDICAL JOURNAL be addressed solely to the Office, 37, Great Queen Street, London, W.C.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, Sept. 12th; The New York Medical Gazette, Sept. 24th; The New York Medical Record, Sept. 29th; The Boston Medical and Surgical Journal, Sept. 29th; The Madras Mail, August 1st; The Shield, Oct. 8th; The Birmingham Daily Post, Oct. 10th; The Lincoln Mercury; The Melbourne Age; The Surrey Comet, Oct. 8th; The Lincoln Journal, Oct. 11th; The Sheffield Daily Telegraph; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Francis Cook, Cheltenham; Themus; Mr. A. Fleischmann, Cheltenham; Dr. Tessier, Tynemouth; Messrs. Lee and Nightingale, Liverpool; Mr. J. Chapman, London; Mr. Wight, Reading; M.D.; Dr. Berwick, London; Dr. Aveling, Rochester; Messrs. W. Best and Sons, London; An Old St. George's Student; Messrs. F. C. Calvert and Co., Manchester; Dr. Philpots, Poole; Dr. Balthazar Foster, Birmingham; Mr. Thomas Davies, Leeds; Mr. F. Laking, Kensington; Staff-Assistant-Surgeon Temple, Woolwich; Mr. Baker, York; The Secretary of the Pathological Society; Dr. Fussell, Brighton; Dr. Joseph Rogers, London; Dr. J. Marion Sims, Sedan; Dr. Rutherford, London; Dr. Funke, Berlin; Dr. Fleming, Birmingham; Dr. Tilbury Fox, London; Mr. Whitfield, London; Mr. J. D. MacLaine, Saarbruck; Mr. Bushnan, Arlon; Mr. W. Rutherford, Bingen; Dr. W. Hume, Beverley; etc.

LETTERS, ETC. (with enclosures) from:—

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INTRODUCTORY LECTURE

ON

LIFE AND VITAL ENERGY CONSIDERED
IN RELATION TO PHYSIOLOGY
AND MEDICINE.*Delivered in the Middlesex Hospital Medical School, October 5th, 1870.*By DAVID FERRIER, M.A., M.D.(EDIN.),
Lecturer on Physiology in the School.

GENTLEMEN,—The various subjects comprised in the medical curriculum are all so important in their relation to each other, that the omission of any one of them would weaken, if not render impossible, the whole edifice of medical science. You will therefore understand why each lecturer claims for his own subject a special importance. "Where all are indispensable, it would be difficult to say which is pre-eminent." There are two subjects, however, or rather two divisions of the same subject, which, first in the order of time, if not of importance, form the basis of all your future acquirements: I refer to the subjects of Anatomy and Physiology.

All knowledge is relative; and, therefore, as your object is to acquire a scientific, as distinguished from a vulgar, knowledge of disease and its treatment, it is essential that you first become acquainted with the laws and conditions of the healthy structure and functions of the human body. And as your knowledge of disease must be continuous and progressive, so also must be your knowledge of anatomy and physiology. Hence the necessity of devoting yourselves earnestly to the study of these subjects, so that your acquaintance with them may be firm and enduring, and form, as it were, part of your mental furniture.

In addition to the immense importance of the science of physiology in its relation to medicine, the subject of which it treats, viz., life and its phenomena, has excited the interest and curiosity of thoughtful minds in all ages. Life and the nature of vital energy form the common ground on which metaphysicians and physiologists meet. And it is interesting to trace in the history of philosophy and of medicine the mutual influence which metaphysical speculation and physiological investigation have exerted on each other. In this light I propose to-day to give you a short sketch of some of the principal views which have been entertained at different periods on the nature of life, and to discuss the nature of vital energy in so far as it bears on the direction and methods of physiological research.

It was the custom, before science and philosophy had developed themselves, for men to transfer to the outer world the idea of cause or power which they felt within, and to attribute all natural phenomena to the direct action of gods or demons. In like manner they ascribed to similar agencies all the phenomena of their own bodies which did not come directly under the sphere of consciousness. Hence, says Lucretius, *dira religio* and superstitious enthrallment. When, however, philosophy arose, and with it the desire to shake off superstition, and the man was considered "happy who could discover the causes of things", many, like Thales and the early Greek philosophers, went to the opposite extreme; and, seeing nothing in the universe but fire, air, earth, or water, they considered the principle of life to be some *etherial sublimata* or *subtle essence* distilled from one or more of these elements.

Similar imperfect notions of matter and energy prevailed in the system of Leucippus and Democritus, who were the founders of the atomic or materialistic philosophy. They originated the doctrine of spontaneous generation, of which we now hear so much. Living beings, said they, came into existence by a fortuitous concourse of atoms of an indestructible nature. And they described the *anima* or vital principle as composed of atoms of a spherical, mobile, ærial, or igneous character—a sort of refined matter as it were.

The first great name in the history of medicine and physiology is that of Hippocrates, who has justly been called the father of medicine. Hippocrates was a man of wonderful industry and marvellous power of observation. He belonged to a family of priests who were connected with the shrines of Æsculapius, which were established in various cities and islands of Greece. To these shrines resorted all who were afflicted with bodily ailments and disease, in order to obtain a cure by worshipping at the altars of the god of healing. In gratitude to the god who cured them of their maladies, they hung up in his temples votive tablets, whereon were recorded the history of their disease and the benefits they

had derived. Hippocrates used these tablets as vital statistics, and with their aid and his own observations he arrived at a knowledge of the nature of the functions of the body and the phenomena of disease, which creates astonishment in the minds of those who read his works in all the light and science of the present day.

The nature of life and vital energy was explained by Hippocrates according to the principles of the philosophy which prevailed when he wrote. The Pythagoreans, the Platonists, and Stoics, all agreed in ascribing the activity of the universe to a *power* or *principle* which exercised a directing, regulating, and controlling influence over matter, and gave to it its laws. This principle was called the *soul of the world* (*anima mundi*). Hippocrates considered that life and vital activity depended ultimately on a sort of emanation from the soul of the world, which he called *Φύσις*, or Nature. The *φύσις* exercised an intelligent control over vital phenomena, choosing what was beneficial, and rejecting what was injurious, to the organism.

Aristotle abolished from his system the idea of an universally active soul of the world, and held that the very idea of matter or substance involved in it a power of acting, or *ἐνέργεια*. He attributed the *ἐνέργεια* of living beings, or vital energy, to a species of soul, which he distinguished from the rational soul, under the name of the *vegetative soul*, or vital principle, common both to plants and animals.

From the time of Aristotle to that of Galen in the second century of our era, the views entertained on the subject of life and vital energy were simply more or less modifications or corruptions of the doctrines taught by Hippocrates, Aristotle, and others. Physiology and medicine wandered from the path of observation and induction pointed out by Hippocrates, and degenerated into subtle disquisitions and dialectic. Galen endeavoured to recal them to the true path; and, by his brilliant researches and discoveries in all branches of medicine, he has earned for himself an immortal fame in the annals of our science. Galen, like Hippocrates and Aristotle, believed in the existence of a special principle, the *ἐμπροῶν* (*impetus faciens*) or *active force*, which was the ultimate cause of vital activity. The doctrines of Galen were for the time lost sight of in the absurdities of Oriental mysticism and magic which prevailed in the early centuries of our era; and, in the reign of barbarism which succeeded, all true philosophy and science were lost.

With the revival of letters in the fifteenth century, Galenism was again predominant, and men swore by Galen in all things—so much so, that they would sooner have disbelieved the evidence of their senses than question the utterances of their great master. In the sixteenth century, however, there arose in Germany a man of extraordinary energy and unbounded conceit, who, nothing daunted by furious opposition, proclaimed that the ancients and Galen knew no more about medicine than the latchet of his shoe. This was the famous Paracelsus. His real name, however, was Philippus Aureolus Theophrastus Bombast von Hohenheim. The doctrines taught by Paracelsus were a strange mixture of astrology, alchemy, and cabalistic mysticism. He thought that there existed in us a *spiritual* or *celestial principle* of the same nature as the spirits or demons who presided over the movements of the celestial bodies. To this principle he gave the name of the *spirit of life*, the *sideric principle of man*, or more generally the *archæus*. The archæus had its seat in the stomach, and presided over its functions. Subordinate to the archæus there was a number of other spirits, who had each his own place and his own function. When all worked harmoniously, it was health; but when any of the minor spirits rebelled, and had to be subdued by the archæus, it was disease.

The doctrines of Paracelsus read very like the old fable of the belly and the members. Notwithstanding their seeming absurdity they exercised an enormous influence, and were propagated widely by Van Helmont and the mysterious sect of the Rosicrucians. Van Helmont adopted the archæus of Paracelsus, but further explained vital phenomena by various kinds of fermentation. The views of Van Helmont in regard to fermentation were further explained on mathematical grounds by the metaphysician and physiologist Descartes. Descartes, however, did not derive vital activity from the elements and mathematical properties of matter; for he considered that matter, as such, was inert, and owed its activity to an immaterial cause. Hence, in explaining vital energy, he had recourse to the soul, which, he thought, resided in the pineal gland, and there acted on the vital spirits contained in the ventricles of the brain, and set them in motion.

The mathematics of Descartes, and the discovery of the circulation of the blood by the immortal Harvey, together with the brilliant researches and discoveries of Newton and Leibnitz, formed the basis of the doctrines of the chemists and physicists who attempted to explain life on principles of chemistry alone, or of mechanics. The imperfect state of these sciences, and the subtle and complicated hypotheses that had to be resorted to, failed satisfactorily to account for vital phenomena, and produced a reaction in the system of the celebrated Stahl, a

Professor in the University of Halle in the year 1694. Like Descartes, Stahl denied all energy to matter. He moreover abolished such agencies as vital spirits as the medium of action of the immaterial principle of life, and held that all vital phenomena were the *direct* action of the *anima* or rational soul. For this reason he banished such subjects as histology, chemistry, and physics, as misleading, and utterly unable to explain vital action, which, he said, was entirely independent of material concomitants.

It was seen, however, that the life of plants in many respects resembled that of animals; and as they could not, without an abuse of the term, be said to possess a rational soul, the *anima* of Stahl gradually became modified by his followers into a *vital force* common both to plants and animals.

The doctrine of Stahl was ridiculed by many; among whom was the great Hoffman, a colleague of Stahl in the University of Halle. Hoffman's theory, however, in many respects was liable to the same objection as that of Stahl, only he held that the vital principle acted according to laws strictly mechanical, and not rationally.

It was the great Haller, who, in the middle of the last century, first pointed out the proper method of physiological research. He inculcated the methods of observation and experiment in the study of vital phenomena, and showed the futility of attempting to explain the phenomena of life by metaphysical disquisitions on the existence and mode of action of a vital principle. Haller distinguished between the purely chemical and physical processes going on in the body, and the purely vital endowments. These latter he termed irritability or contractibility, and sensibility; and considered them as peculiar forces, independent of chemical or physical condition, and characteristic of vitality.

The progress of science, however, showed that many of the phenomena which were supposed characteristic of vitality were to be generalised under the terms "chemical" and "physical". With each succeeding advance in anatomy, chemistry, and physics, the domain of so-called vital force became more and more narrowed, so that to many physiologists the terms vitality, vital force, etc., became synonymous with physical force, as yet unexplained.

The views that prevailed regarding the nature of matter and force were revolutionised by the grand generalisation in recent times of the law of the conservation of energy. This law, which is of immense importance in its bearing on the subject of physiology, I shall have to explain to you more fully on a future occasion. For the present it may suffice to say that it is based on the axioms "nothing comes from nothing", and "nothing can be reduced to nothing". The amount of energy in the universe is like matter—constant; it cannot be created, and it cannot be destroyed.

Energy is said to be active or potential. Thus, in the winding up of a watch, the active energy of the muscle is converted into potential energy as the tension of the spring, which again expends itself during the day as the active energy or movement of the machinery. So the energy or heat of a fire is simply the setting free of the active energy of the sun, which was rendered potential in the formation of the oxidisable substance or fuel. Again, the various forms of energy, such as heat, light, electricity, and chemical affinity, are looked upon as convertible into each other and into motion. Thus the motion of a steam-engine is only the converted heat of its fuel. Motion, again, may become heat, as when heat is produced by rubbing two surfaces on each other. So in like manner electricity and chemical affinity are convertible; and all the forms of energy are also shown to be convertible with each other either potentially or actively.

Up to the time of the enunciation of this law, physiologists had looked upon the food which an organism requires, not as representing the amount of energy at its disposal, but rather as a means of somehow or other repairing the vital machinery, or oiling its wheels. They looked upon a living organism as an example of an automatic self-determining force-creating machine. When we look, however, at living beings, we find that they are as much dependent for their vital energy on the food they consume as a fire or a steam-engine on their fuel; and that just as a fire goes out when its fuel is exhausted, so as surely the fire and light of life go out when food is withheld. The question then comes to be asked, If life is so dependent on matter and its forces, is not vital energy merely a form of physical energy, and convertible with it? This is the view which is now maintained by almost all the advanced physiologists of the present day, and which was lately made the subject of a celebrated essay by Professor Huxley. The physical doctrines of the nature of life and vital energy have, however, been stoutly opposed by several metaphysicians and physiologists, prominent among whom stand Dr. Hutchison Stirling* and Dr. Beale.† They deny that vital

energy can be explained by chemistry or physics; and hold that vital energy, though associated with matter, is independent of it; that it is an immaterial force or power—a principle which, under the various names of *vital force*, *vital power*, *force of organisation*, *architectonic principle*, *constructive agency*, *vitality*, etc., has replaced the *Πνεῦμα*, the *ether*, the *Φύσις*, the *ἐνοπύων*, the *archaus*, the *anima*, the *materies vite*, etc., of the older physiologists and metaphysicians.

The physical theory of vital energy is thus stated by Professor Huxley. All the phenomena characteristic of life—viz., nutrition, growth, and reproduction—are equally manifested by plants and by animals. The physical basis of these phenomena is a chemical substance of the nature of albumen, composed essentially of the elements—carbon, hydrogen, oxygen, and nitrogen—in certain definite proportions. This substance is termed protoplasm, or the physical basis of life. Protoplasm, he says, is of identical composition in the animal and vegetable worlds; this substance, variously modified, constitutes the organic clay of which all organisms are built; there is no chemical difference between living and dead protoplasm; the various forms of protoplasm, animal and vegetable, are convertible with each other; and, under the influence of pre-existing protoplasm, dead protoplasm may be converted into living protoplasm, and the protoplasm of one organism may become the protoplasm of another. Further, in such conversion there is no new entity as vitality added to it, any more than in the conversion of hydrogen and oxygen into water any such entity as *aquosity* is added to the elements: and, finally, all vital energy is the expression of molecular change in the physical basis of life.

Professor Huxley has been unfortunate in his use of the term protoplasm; and his incautious use of it has been the source of much misconception and misrepresentation of the theory of vital energy which he advocates. Had he clearly distinguished between the identity of protoplasm as such and the identity of its elements, and kept the term to its usual signification, the physical theory of life would have resisted much better the furious onslaughts that have been made against it.

It has been rightly argued by Dr. Stirling that we must regard protoplasm as possessing a definite organisation, and as existing as protoplasm only in that form of organisation which we call the *cell* or primary element of living beings. We may compare protoplasm to the familiarly known Prince Rupert's drop. If we attempt to take away a piece from it, it instantaneously falls to powder in our hands. The elements are still there, but the drop has disappeared; its molecular constitution has been altered; or, in Dr. Stirling's phrase, the idea has vanished. And in that consists the absolute difference between living protoplasm and dead protoplasm, between the elements simple and the elements in combination. Professor Huxley, therefore, would be in error if he claimed for dead protoplasm the same composition as living protoplasm, simply on the ground of the identity of the results furnished by chemical analysis. Mere chemical analysis of the elements of a substance teaches us nothing of its constitution.* We have numerous instances of substances which, on ultimate analysis, furnish the same elements and in the same proportion. But it cannot be said that the substances are the same, simply because their elements are the same, for with the same elements there may be infinite diversity of form and properties. I need only mention one instance. A piece of charcoal and a certain amount of water furnish us with all the elements of a lump of sugar, and in the same proportion. No one, however, would say that sugar is simply charcoal and water, or that the one may be substituted for the other. And we may safely predict that, to whatever straits the Parisians may be reduced, they will refuse to accept charcoal and water in lieu of their favourite *cau sucrée*.

We must therefore admit that, with the same elements, there may be a difference between dead and living protoplasm, and between the various kinds of protoplasm. It is essential to the stability of the physical theory of life that this difference should be recognised. Professor Huxley has done this, though somewhat vaguely, under the terms "subtle influences" and "influence of pre-existing protoplasm"—expressions which have been so much criticised. But whatever inconsistencies Professor Huxley may or may not be guilty of, an *argumentum ad hominem* does not affect the doctrine which he supports. And it is to be remarked that Dr. Stirling, in arguing against the universal identity of protoplasm, and in claiming for it differences in organisation and composition, has forged a most powerful weapon against himself. For if, with differences in vital phenomena, we have differences in constitution and chemical composition, the hypothesis of a vital force, independent of these differences, becomes the less necessary.

Dr. Beale has, consistently with his views as to vital force, endeavoured to establish, in *living or germinal matter* or bioplasm, an uniform appearance and composition. The microscope, however, is as incom-

* As regards Protoplasm, in Relation to Professor Huxley's Essay on the Physical Basis of Life. (Blackwood and Sons)

† Protoplasm; or Life, Matter and Mind. (Churchill and Sons.)

* This fact has been clearly brought out by Dr. Gamgee, in his able lecture on Force and Matter in Relation to Organisation. (MacLachlan & Stewart, Edinburgh.)

petent as chemical analysis to determine the constitution of substances; for we have endless instances where the same appearances coexist with entirely different composition and organisation. And therefore the argument of Dr. Beale, that because, with the aid of the highest powers of the microscope yet invented, he cannot discover any *molecular machinery* in living matter, and that therefore vital energy is independent of physical conditions, possesses little value. The theory that vital energy depends on molecular organisation does not stake its existence on the mere word "molecular". The essential fact which it seeks to establish is, that the phenomena are due to physical conditions. And if it can be shown that the hypothesis of a self-determining vital force, independent of matter, is untenable, we shall have the more reason for seeing in physical differences and physical conditions a sufficient explanation of the diversified phenomena and products of vital activity.

But, before proceeding further in the argument, it is absolutely essential to distinguish between two questions widely separated from each other, and, as far as we are at present concerned, having no relation to each other—I mean the question of the *primary origin of life*, and that of the *nature of vital energy*. The two questions differ from each other *toto calo*, yet they have been constantly confounded with each other; and the arguments of the vitalists, however powerful they may be against the spontaneous origin of living beings, are, as regards the physical theory of vital energy, glaring instances of the fallacies of irrelevancy and *non sequitur*. Thus it is argued that, because the elements of protoplasm cannot spontaneously or by artifice be made to combine so as to form a living protoplasm, therefore vital energy does not depend on the chemical and physical constitution of protoplasm. In the same manner it might be argued that because iron, coals, and water, cannot of themselves give a steam-engine action, therefore the action of a steam-engine is not explicable on chemical or physical grounds; or, to render it still more absurd, that it is impossible to understand the action of a watch unless we know the maker's name!

Again, the argument that, because vital energy has peculiarities which distinguish it from every other form of energy with which we are acquainted, therefore it cannot be a form of physical energy, is a manifest begging the question. We know so little of the ultimate nature of energy that it would be presumptuous to dogmatise on the subject: and yet the vitalists constantly charge their opponents with dogmatism when all they do is to generalise vital energy under the term energy, in so far as it is understood by us; namely, as connected with matter—physical energy.

Having considered the arguments of the vitalists against the physical theory of vital energy, let us turn to the position which they take up, and examine the nature of the *vital principle* or *immaterial force* on which, they say, vital activity depends. Dr. Stirling speaks of a *force of organisation*, an *architectonic principle*, an *entelechy* or active idea, as the cause of vital action. Now, granting for the time, the idea, the architectonic principle, according to which the organism was formed, to elevate this idea into an immaterial constantly operative force is a form of the Platonic doctrine of ideas, which, if logically carried out, would virtually annihilate the distinction which Dr. Stirling seeks to establish between material forms of organisation and living organisms. For, in like manner we should have to ascribe the action of a steam-engine, not to chemistry and physics, but to a *steam-engine principle*. And what better foundation is there for the existence of an architectonic operative principle, or force of organisation, than a steam-engine principle, apart from the material properties of the thing organised?

The vital force advocated by Dr. Beale is more difficult to understand. Vital force, he says, is a peculiar power, which influences matter for a short time, and which may be transmitted through the infinite multiplication of living matter without increase or diminution. This is equivalent to saying that it is a power or force which may be infinitely multiplied or divided and yet remain the same. Such a power would fully deserve its title "peculiar" if it really existed.

If we look at the germ or first rudiment of a living organism to which we may suppose this power has been transmitted, one or other of two suppositions may be entertained regarding it. It may be supposed, in the first place, that the germ contains potentially all the vital energy of the fully developed organism, that the vital principle exists in it in a state of extreme tension, and that with the growth of the organism it expands, so to speak, in a series of dissolving life-views. This idea, however, is disclaimed by Dr. Beale. The other supposition is, that the vital force exists in the germ exactly in the same amount as in the fully developed organism, and that in the multiplicity of vital phenomena there is really no increase or diminution of vital energy. This might or might not be true of a vital power, if it were of the immaterial nature which is claimed for it. It cannot, however, be immaterial, for the immaterial is an unity, and indivisible. But the vital power of the germ is capable of infinite division; and the reason for the specific life

of an individual part does not lie in the whole organism, for a part may be separated from the body and yet live.

What, then, is the nature of this principle, which, though associated with matter, is not of it, but independent of it? We find that under certain conditions this power may be added to and vitality increased: and it will not do to argue that there is no increase of vitality, but merely increased physical or chemical change; for increased nutrition and growth, being increased vital work, must mean increased vital force. Whence, then, the increase? If not from conversion of physical energy, then the vital principle must possess the power of adapting itself spontaneously to the infinite diversity of material conditions, and be capable of creating itself out of nothing. It must be a miraculous force—a force which can be increased, multiplied, and divided, and yet remain the same. There is only one thing that may be added to, subtracted from, multiplied and divided, and yet remain the same, and that thing is nothing. If the vital force exist, therefore, and be of the nature claimed for it, we should seem to have arrived at the positive existence of "nothing", and at reading *ex nihilo nil* in a new light. But if, on the other hand, it be said that vital energy depends for its existence on material conditions and physical energy, but yet is a peculiar power inconvertible with physical energy, then we have a source of the dissipation of energy which physicists have not yet taken into account; nor, I may add, are they likely to.

I have thus endeavoured to show that the arguments of those who support the doctrine of an immaterial principle, or force, operating in and through matter, and distinct from its chemical and physical organisation, are based on two fundamental fallacies, and on an unnecessary and unfounded hypothesis.

Regarding vital energy, then, as a mode of motion, so to speak, yet, inasmuch as it manifests itself in modes peculiar to itself, and different from any of the other modes of energy with which we are acquainted, we may yet use the terms vital energy, vitality, vital force, to signify this special mode of manifestation, so long as we do not use the term in the sense in which it is used by the vitalists. Vitality, therefore, is only looked upon as a fiction when it is used to signify a special force added to matter and independent of physical organisation. If used in this sense, it has just as much reason for existence as a hypothetical *aqueosity* on which the properties of water depend, or a *steam-engine principle* to which the action of a steam-engine is due. When we turn to the other side of the question; viz., the *origin of life*, we must confess that it is to us now as much as ever shrouded in mystery.

Some biologists, however, who hold the doctrine of spontaneous generation, argue very plausibly that, if vital phenomena are dependent on certain combinations and molecular organisation of simple elements, it is quite *conceivable* that spontaneously, or by artifice, these elements may be so combined and organised as to form a substance which shall manifest life. But conceivability is not fact; and we yet want proof that spontaneous generation takes place, or that the elixir of life or philosopher's stone has been discovered by which lifeless is transformed into living matter.

The physical theory of vital energy has been absurdly styled materialistic, and regarded as tending to overthrow established and sacred beliefs. There never was a greater mistake. These beliefs are really more endangered by these who claim to be their only friends and supporters. For the vitalists, by identifying their arguments for the existence of a vital force in living organisms, with those for the existence of the immaterial soul, have fallen into the error of Stahl. In their haste to avoid Scylla they have fallen into Charybdis, and are themselves the most dangerous enemies of the doctrine which they think they are upholding. It is, moreover, only by recognising the physical nature of vital energy that we can ever hope to establish therapeutics on a firm and sound basis; and this is the only view consistently with which we can continue to pursue our investigations, with the hope of further elucidating the more recondite and complex laws and phenomena of vital action.

Physiology must be regarded, therefore, as an experimental science. This has not, however, been sufficiently recognised in this country. It has been too much the custom to look upon physiology as of very inferior importance as compared with anatomy, and to consider it as merely a record of interesting and curious opinions and speculations, or as a part of the very pretty but scientifically worthless doctrine of final cause. In addition to this, physiology has had to contend in this country against the absurd prejudices of those—and, unfortunately, their name is legion—who imagine that they are advocating the cause of humanity by opposing those methods of physiological experiment on living animals which are essential to the advance of scientific medicine, and with it of the promotion of the welfare of the human race.

Until such ideas are cleared away, and physiology is studied practically as much as anatomy or chemistry, and laboratories are esta-

lished for physiological research, we cannot hope to do much in the way of advancing the scientific basis of medicine. When we consider what is done by Germany, and see her now *facile princeps* in war, as also in all that relates to the advancement of science, we must bestir ourselves if we are to maintain the position among the nations which we persuade ourselves we hold. A step in the right direction has been taken by the Council of the College of Surgeons. They now require of all those who present themselves for examination satisfactory proof that they have made themselves acquainted with the principles and methods of experimental research.

The next thing that requires to be done is the establishment of laboratories for that purpose. This is now being effected. In this way we hope soon to see a new era inaugurated in the prospects of scientific medicine in this country: for when all our students have it in their power to learn the methods of physiological investigation, and their practical application to therapeutics, we shall be the better able to sift fact from tradition and hypothesis, to clear up what is doubtful, and sweep away the fallacies on which quacks flourish and by which medicine is disgraced.

CASE OF IDIOPATHIC MYELITIS.

BY MARTIN G. B. OXLEY, L.K.Q.C.P.I.,

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THOS. McDERMOT, aged 11, a strong healthy-looking boy, was admitted to the Infirmary on February 24th, 1870. He stated that, about one week before admission, pains commenced in the small of his back, and gradually extended round his body on both sides, as high in front as the umbilicus. The pains were very much worse at night, preventing him from sleeping. Micturition was frequent, giving him temporary relief. Walking caused severe pain. He had received no injury, and was in perfect health previously to the attack.

On admission, his condition was as follows. The pulse was 120; the tongue coated; the skin hot. His countenance was expressive of great pain. The body was inclined slightly forward. He was unable to assume the erect posture. He could not walk without causing great increase of pain. The pain over the lower dorsal vertebræ was very severe; it extended round the abdomen and down the lower extremities, and was greatly increased by pressure over the spinous processes. Micturition was very frequent. The bowels were costive. Sensibility was nowhere impaired. The skin was red over the lower dorsal vertebra.

February 26th. Pulse 116; temperature 103.2. He seemed much worse, and had profuse perspirations. The pain was constant in the legs, and there was slight hyperæsthesia. Constant pain, increased by pressure, continued in the back. He jumped up frequently in the night and cried out with pain. Incontinence of urine, constipation, and priapism, now existed.

March 3rd. There was complete paralysis of the lower extremities; anæsthesia extended upwards as far as the seventh intercostal space in front and the fifth dorsal vertebra behind, above which slight hyperæsthesia existed. The fæces and urine were passed involuntarily. The priapism continued. He had a burning pain in the back, increased by pressure. The temperature in the groin was 102.1; in the axilla 100.4. Bedsores were forming over the sacrum and the trochanters of the thigh-bones. All the symptoms continued unchanged till April, when the bed-sores were rapidly extending, completely exposing the sacrum posteriorly, and the trochanters and head of the femur on each side. He died on April 18th.

Post Mortem Examination.—Inflammatory lymph extended over the lower dorsal portion of the spinal cord. The membranes here were very much injected, and partially adherent to bone, particularly posteriorly. On laying open the membranes, nothing abnormal was observed. A longitudinal incision of the cord showed white softening to the extent of half an inch opposite the fifth dorsal vertebra; and whitish fluid exuded here. The vertebræ were perfectly healthy. On removing the calvaria, the dura mater was not so vascular as is usual. There was slight subarachnoid effusion, general over the upper surface. At several points along the longitudinal fissure, clusters of minute white nodules resembling tubercle were situated on the arachnoid. The substance of the brain, on section, seemed very anæmic. At the base, slight adhesions and a few minute white nodules were observed. The bladder was found firmly contracted. In its walls, at the apex, was an abscess of the size of a hazel-nut. The interior of the bladder was ulcerated. The ureters were greatly dilated. The pelvis of the kidney was much enlarged and ulcerated. Points and patches of a brown colour with gritty particles, were scattered here and there through the substance of the kidneys. The renal structure was very pale; and numerous abscesses were present on the surface of both kidneys.

ON THE SHOULDER-TIP PAIN, AND OTHER SYMPATHETIC PAINS, IN DISEASES OF THE LIVER.*

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OF the group of symptoms ordinarily representing a disease of some internal organ, there are usually a few primary, central, and distinctive members, forming, as it were, the nucleus, and which are directly referable to the organ itself; to these are frequently added others more outlying or peripheral and less characteristic, indicating the influence exerted by the diseased organ upon parts, more or less distant it may be, but more or less importantly connected with it. Parts thus secondarily affected have been said to sympathise with the primarily diseased organ.

The study of the sympathies, morbid or healthy, of the different organs or parts of the body, obscure, intricate, and difficult, has from the earliest ages riveted the attention of Physicians, who in their earnest strivings after truth, have been led astray into the wildest conjectures and vainest hypotheses.

Within the past century, however, an increasing light has been dawning upon this part of our science. Thus we can, to a certain extent, account for the pain in the knee in hip-joint disease, through the connection of the knee and hip-joints by means of branches of the anterior crural and obturator nerves, and so on for other examples.

It must, however, be allowed that these explanations, such as they are, are neither full nor satisfactory; they only show that these pains do occur in certain cases, and that the parts concerned have certain more or less direct nervous interconnections, but they fail to inform us of the nature or essence of the sympathy existing, of the mode in which it is evoked, and of the good, if there be any, that comes of it; and the mystery of sympathy remains as great as before. And yet there can be little doubt that all the sympathetic pains we meet with are susceptible of satisfactory explanation, could we only examine them with sufficient care, and by reference to trustworthy anatomy.

The shoulder-tip pain in liver-disease belongs confessedly to the same category of sympathetic affections as that just named, but I have not been able to find any sufficiently satisfactory explanation of it, even to the extent to which explanation has been carried in the other instances.

The object proposed in this paper is to attempt an explanation which shall be plain and satisfactory, and shall dispel the ancient mystery which hangs around and obscures the morbid sympathy of organs.

As a preliminary, however, it may be interesting to glance at what has been written on the subject, for this pain has received a good share of attention from the time of the father of medicine, and probably long before, down to the present day.

For convenience, several quotations have been placed in foot-notes.

1. *Ancient Authors.*—Hippocrates,† Celsus,‡ Galen, Aretæus,§ Coelius Aurelianus, ||Paulus Ægineta,¶ Haly Abbas, and Rhazes, all mention the existence of pain in liver-disease in the shoulder, clavicle, or throat of the right side. Prosper Alpinus** notices it as occurring in the right side of the throat and the right scapula.

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

† "Pains in the shoulder, which, passing down the arms, occasion torpor and pains, do not usually terminate in deposits, but the patients get better by vomiting black bile. But when the pains remain in the shoulder, or extend to the back, the patients are relieved by vomiting pus or black bile. But if they have more difficulty of breathing, or if there be any unusual colour on the countenance, whether reddish or black, it is to be expected that they will rather spit blood."—(The Genuine Works of Hippocrates, by F. Adams, LL.D., Append. to Prognost., vol. i, p. 268. Sydenham Society, 1848.)

‡ In Acute Hepatitis.—"Dextrâ parte sub præcordiis vehemens dolor est; idemque ad latus dextrum et ad jugulum humerumque partis ejusdem pervenit; nonnunquam manus quoque dextra torquetur."—(A. Corn. Celsi Med., libri octo, by Milligan, lib. iv, viii.)

§ "The diaphragm and succingens (pleura) are dragged downwards, for from them the liver is suspended as a weight. For this reason, a strong pain extends to the clavicle of the same side."—(Extant Works of Aretæus the Cappadocian, by F. Adams, LL.D. Acute Diseases, book ii, cap. vii, p. 277. Syd. Soc., 1856.)

|| "The symptoms of scirrhus of the liver are a round circumscribed tumour, felt below the ribs, the colour jaundiced, the urine muddy, pain extending to the throat of the affected side, etc."—"The Seven Books of P. Ægineta, by F. Adams, book iii, p. 566. Syd. Soc., 1848; or, Coelius Aurelianus de Morbis Acut. et Chron., lib. iii, cap. iv.—De Jecorosis. Amstelodami, C1Q1CC1X.)

¶ "When the liver is inflamed, there is, in all cases, pain in the right hypochondrium, extending upwards as far as the clavicle."—(The Seven Books of P. Ægineta, by F. Adams, LL.D., book iii, sect. xlvi, p. 560. Syd. Soc., 1848.—On Affections of the Liver.) See also pp. 567 and 568.

** "Hæc deprehenditur a dolore in dextro hypochondrio tensivo juxta costas spurias (cum quâdam illiusce partis gravedine) aliquando ad jugulum, et ad scapulam pro-

2. *Modern Authors.*—Almost all agree in mentioning the pain in the shoulder, clavicle, or throat, as an accompaniment of certain liver-diseases, but they differ as to the frequency of its occurrence, and its intensity.

John Hunter, in his *Essays on Gun Shot Wounds*, published in 1794, says:—"From a wound in the liver there will be pain in the part, of the sickly or depressing kind; and if it is in the right lobe, there will be a delusive pain in the right shoulder, or in the left shoulder from a wound in the left lobe." (*The works of John Hunter*, F.R.S., by James F. Palmer, 1837, vol. 3, p. 560.)

The same illustrious Physiologist and Surgeon, in his *Lectures on the Principles of Surgery*, chap. x, On Sympathy, in which he treats copiously of the various kinds of natural and diseased sympathy, mentions more than once the shoulder pain in liver-disease. He says, however, very truly, that the sympathy is not reciprocal, that "the liver never sympathises with the shoulder." (*Ibid*, vol. 1, p. 317.)

Abercrombie* also mentions the shoulder-pain as occurring in acute and chronic inflammation, and in "Encephaloid Ramollissement" of the liver.

Annesley as well, as having been often observed in hepatitis and abscesses of the liver, and he believed that the pain indicated with certainty that the convex portion of the right lobe was diseased. (*Sketches of Diseases of India, etc.*, 1851.)

W. Thomson† names it as being by some considered as peculiar to hepatitis, but shows that it had been observed also in cases of passing gall-stones, and points out the fact that it had never been properly explained.

Dr. Copland,‡ in his deservedly celebrated *Dictionary of Medicine*, under the head of hepatitis, shows his familiar acquaintance with the pain in question.

The pain is noticed by Sir Thomas Watson§ as occurring in the clavicle and shoulder, not only of the right side, when the right lobe of the liver is diseased, but also of the left side when the left lobe is affected, thus exactly agreeing with what Hunter, as already quoted, says with regard to the pain after gun-shot wounds.

Dr. Budd|| has had his attention pointedly arrested by this pain, and

tenso, qui non nisi in magnis gibbæ partis observari solet, in quâ parte calorem quoque non obscurum sentiunt."—(Prosper Alpin. de Med. Methodicâ, lib. iv, cap. xiv—On Hepatitis.)

* *Acute Inflammation.*—There is generally fever, but this is often in a slight degree; there is sometimes jaundice, but this is often entirely wanting; and, frequently, there is pain extending to the right shoulder, but this is by no means a uniform symptom."—(*Pathol. and Pract. Researches on Dis. of Stomach, Intestinal Canal, Liver, etc.*, p. 347, 2nd Edit., Edinb., 1830). *Chronic Inflammation.*—"There is generally a feeling of distension and oppression in the epigastrium and right hypochondrium, often vomiting, and pain, or a dragging sensation referred to the right shoulder."—*Ibid*, p. 365. *Encephaloid Ramollissement.*—"Pain of the right shoulder is a symptom."—*Ibid*, p. 362.

† Tweedie's *Library of Medicine*, vol. iv, p. 178, no date, but last vol. of series, 1842.—"It is well known that in hepatic affections, the right shoulder is frequently the seat of sympathetic pain; a fact of which no satisfactory explanation has yet been proposed; nor is it well ascertained what are the affections of the biliary organs in which it occurs. Its frequent occurrence in hepatitis has led to the idea of its being a pathognomonic symptom of this disease. It is, however, far from being uniformly present in this affection, although when it does occur in a case resembling hepatitis in other respects, it may be considered conclusive of the nature of the disease. But though hepatitis may be the affection in which this symptom is most commonly observed, it does not follow that it is exclusively confined to it; most authors concur in stating that it also accompanies the passage of gall-stones through the gall-ducts."

‡ *Diction. of Med.*, vol. ii, p. 733.—"It is sometimes referred to the top of the right shoulder, frequently to the right shoulder-blade, occasionally to both scapulae. In a few instances, it is felt in the right clavicle and side of the neck. It more rarely affects the left shoulder and shoulder-blade only. When pain is present at the top of the right shoulder, it indicates disease of the right lobe of the liver; but this symptom is often absent." P. 734.—"When the outer surface and part of the right lobe is chiefly affected, the pain is most severe in the right hypochondrium, and at the margins of the ribs, sometimes extending to the right scapula and top of the shoulder. When the concave surface is the seat of disease, sometimes the pain extends to the right shoulder, and right side of the neck." The same testimony may be seen at p. 766, under "Organic Lesions of the Liver."

§ "The pain sometimes extends to the right clavicle, and to the top of the right shoulder. The existence of this pain makes it probable that the inflammation affects the convex surface of the right lobe of the liver. Occasionally, the left shoulder is painful; the left lobe of the liver being involved in the disease."

|| "The pain of the shoulder is far less frequent in such cases (of abscess of the liver) than is generally imagined, but it existed in five of the fifteen cases I had to treat at the *Dreadnought*. In one of these there was a small abscess on the convex surface of the right lobe, and the peritoneum covering the abscess adhered for the space of a shilling to the reflected layer of the peritoneum. There were old adhesions of the lung to the pleura costalis. The lungs were sound. In another, in which the abscess was on the convex surface of the liver, and formed a prominent tumour, the pain of the tumour was so severe as to cause the patient to moan. It continued extremely severe for a long time, and at length was relieved on our opening the abscess. In a third case, where the abscess likewise formed a prominent tumour, the patient complained of an aching pain in the right shoulder, extending to the shoulder-blade, and up the right side of the neck. In a fourth, pain in the shoulder varied in intensity with pain in the right side. When the side was easy, the shoulder was easy also. The two pains were evidently related. In this case there were five or six abscesses of various sizes in the liver—one opened into the lung; another was on the convex surface of the right lobe. In the fifth case, the abscess was single, and was

gives a more definite account of its connection with abscess of the liver, than any other previous author I have consulted. He mentions this pain as occurring also in a case of abdominal aneurism pressing on the liver. The subjoined extracts will be found of considerable interest.

Dr. S. H. Ward, Physician to the *Dreadnought*, among the symptoms tolerably conclusive of abscess of the liver, mentions after "Pain direct, distant pain referable to the right shoulder, and especially localised about the acromion." (*Lancet*, Aug. 1st, 1868.)

Dr. Murchison* notices the pain under the heads of congestion and of cancer, and gives a case of hydatids of the liver implicating the right side of the chest in which the same symptom occurred.

Louis, in his paper on Abscess of the Liver, as quoted by Dr. Budd, states that none of his patients, five in number, had any pain of the shoulder, and he hesitates to believe that this symptom really belongs to disease of the liver. He conjectures that, when present, it may depend on concomitant disease of the lung or pleura. (*Clinique Médicale de l'Hôtel Dieu de Paris*, vol. iii.)

Professor Broussais tells us that in hepatitis, "Les douleurs se propagent quelquefois à l'épaule, au bras droit, et jusque dans la hanche de ce côté." (*Cours de Pathologie et Thérapeutique Générale*, 1835, tom xi, p. 183.)

Professor G. Andral† witnesses to the occasional presence of the pain in acute hepatitis, and to its being then sufficient to make the patient cry out, and to its existence in cases of impacted biliary calculi.

He also notices‡ the pain as one purely sympathetic, and occurring less frequently than had been previously said, but as one at times well marked, and quotes the first case in which he had observed it.

Andral quotes Roche, who states, relatively to inflammation of the convexity of the liver, "C'est seulement dans ce cas qu'elle s'étend à la poitrine, au cou, et l'épaule du même côté;" and Roche quotes, as one of the symptoms given of acute hepatitis by Frank, propagation of pain to the right shoulder and clavicle. (*Dictionnaire de Médecine*, en xv vol., tom ix.)

Trousseau§ names the pain as occurring during the passage of gall-stones.

Frerichs|| mentions, in liver-abscess, the pain in the shoulder, scapula, and arm, and says it ceases as soon as the pus finds an outlet.

[To be concluded.]

likewise situated on the convex surface of the right lobe. There was no recent inflammation of the lung or pleura. The pain is usually described as a gnawing, aching pain. There is no swelling or redness of the shoulder, and the pain is not much increased by pressure—sometimes, indeed, it is relieved by holding or pressing the shoulder, but it is often increased by pressure on the liver. This sympathetic pain in the shoulder is occasionally felt in other diseases of the liver—in cases of cancer and of hydatid tumour. In a case of abdominal aneurism, this formed a tumour the size of a man's head immediately behind the liver, which it had very much flattened, but there was no trace of inflammation about the organ. The bodies of the first, second, and third lumbar vertebrae were partially destroyed."—(*On Diseases of the Liver*, p. 105, et. seq.)

* *Clinical Lectures on Diseases of the Liver*, etc., 1868. P. 121. *Congestion.*—"The pain and feeling of uneasiness may stretch up to the right shoulder—" P. 190. *Cancer.*—"4. A cancerous liver is almost always painful and tender on pressure, and very often the pain radiates to the shoulder, back, and loins." P. 196. *Case of Cancer of Liver and Ovary.*—"Sudden pain in epigastrium, and right hypochondrium, and both shoulders, accompanied with great languor." "Liver greatly enlarged, and studded all over with cancer-nodules; its interior contained similar matter."

† *Cours de Pathologie Interne*, 1836, tom xi, p. 195.—"Une douleur dans l'hypochondre droit s'étendant souvent à la poitrine, et jusqu'à l'épaule du même côté." *In intense cases.*—"L'hypochondre est d'une sensibilité exquise, la douleur de l'épaule arrache quelquefois des cris au malade." *In cases of biliary calculi.*—"La douleur du dos se prolonge parfois dans le sein droit, le cou, et l'épaule du même côté."

‡ *Clinique Médicale*, 1837, tom iv, pp. 190 and 430.—"Il y a d'autres douleurs qui ne se manifestent plus seulement là où existe le foie, mais en des lieux plus ou moins éloignés; elles sont purement sympathiques, et résultent d'une simple irritation nerveuse. Ainsi on a ce pus long temps noté, sans pouvoir trop s'en rendre compte, la douleur fixée à l'épaule droite qui accompagne un certain nombre d'affections du foie; cette douleur nous a paru exister moins souvent qu'on ne l'a dit; cependant dans plus d'un cas nous l'avons observée d'une manière bien tranchée." *Under Obs. 32, of a case of abscess in the right lobe much nearer to the under than the upper surface.*—"Cette observation est la première dans laquelle nous trouvons, au nombre des phénomènes morbides qui se manifestent pendant le cours d'une maladie du foie, la douleur de l'épaule droite." *This was* "Une douleur incommode et continuelle vers l'épaule droite; elle ne cessa pas depuis de se faire plus ou moins sentir."

§ *Clinique Médicale de l'Hôtel Dieu*, 1865, tom iii, p. 219.—"Coliques hépatiques. "Calculs biliaires."—"Cette douleur descend dans l'abdomen et en quelques cas simule la colique néphrétique; plus ordinairement elle remonte dans la poitrine, jusqu'au cou, et, phénomène singulier, qui se rencontre chez beaucoup d'individus, elle retentit dans l'épaule droite."

|| *A Clinical Treatise on Diseases of the Liver*, vol. ii, p. 125. New Sydenham Society. Abscess of the Liver.—"In addition to the local pain, there exists in many cases (according to Louis, in 23 out of 163 cases, or in 17 per cent.), a sympathetic pain, usually having its seat in the right shoulder, but sometimes complained of in the scapula and arm; the sensation is that of tightness or tension, and sometimes of an intolerable boring, and it is aggravated by every concussion of the hepatic region. This symptom usually lasts for a few days only, and ceases as soon as the pus finds an outlet." Cancer of the Liver, p. 301.—"From time to time the symptoms undergo

ON THE TREATMENT OF GUNSHOT-WOUNDS BY CHLORIDE OF ZINC.

By WILLIAM R. E. SMART, M.D., C.B.,
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IN a contribution to these pages "On the Treatment of Gunshot-Wounds", Mr. De Morgan has advocated strongly "the use of a solution of the chloride of zinc, thirty to forty grains to an ounce of water, applied freely in the crevices and dark corners of the wound, sponging it in until the whole surface is creamy, then covering the wound with lint wetted with a solution of five grains to the ounce of water, keeping the covering constantly wetted with this lotion". He says: "With no more care than this I have had rapid cure, without suppuration, in crushed and lacerated wounds". As a reason for advocating this mode at the present moment he states: "As an antiseptic, carbolic acid has, so far as I can learn, been as yet almost exclusively employed." In this he errs, inasmuch as the antiseptic properties of the chloride of zinc have been appreciated and relied on by naval surgeons through the last thirty years, especially in the treatment of sloughing ulcer, owing to its having been, until recently, the only disinfectant and antiseptic supplied from naval stores.

Having had much experience of its use in gunshot-wounds also, much after the same plan as Mr. De Morgan recommends, I can state that I agree with him entirely on the great value of the remedy; and, I may add, that I also "have returned to it after the use of other antiseptics".

Carbolic acid was unheard of when the necessities of the time and confidence in the properties of the chloride of zinc led me to employ it in almost all lacerated gunshot-wounds; and it rarely failed of good results, except where the wounds, being of the trunk, were from their nature mortal. I will not aver that I have not known sloughing and pyæmia to occur where it has been used; but I have doubted whether these occurrences might not have been averted by treatment in the first instance analogous to that which Mr. De Morgan terms "sponging".

My experience of the antiseptic has been recorded recently in the *Lancet*, in a paper "On Hospital Gangrene", in which I have stated my belief that, wherever a tendency to that affection exists, the faces of stumps should be washed after amputation with Burnett's solution of full strength.

I would now go further, on Mr. De Morgan's evidence, and would advocate with him its use in all gunshot-wounds; but as to the use of sponges, excepting in operations, I would always substitute glass-syringes and caoutchouc-bottles in military surgery. I could adduce many instances in proof; but will limit this communication to a simple selection from my case-book of a very severe case, in which its value was strongly pronounced, in the favourable casting of destroyed tissues in a terribly lacerated wound on the inside of the thigh treated on this plan, when the stump of the forearm amputated on the same occasion, and cased up in the usual way, commenced an unhealthy action, which would have ended in sloughing.

Case of Gunshot Laceration of both Hands and inner surface of the Thigh. October 1854.—J. M., aged 26, petty officer, while stooping and raising a heavy shot or shell, was struck by a cannon-ball that passed between his thighs. His left hand was carried away, and his right hand received compound comminuted fractures of the ring and little fingers, and a laceration of the thumb. The soft parts on the inner surface of the right thigh were extensively wounded over ten inches in its long, and eight inches in its transverse, diameter; the integuments and the deep aponeurosis being removed to that extent. The gracilis was divided, and the superficial fibres of the long and great adductors were torn off. A thin covering lay over the femoral artery, which was seen pulsating through it. The genitals escaped injury.

The surgeon of the batteries amputated the left forearm and the right ring and little fingers, and proposed to amputate the thigh, to which the sufferer would not consent, preferring death, which seemed certain. On the following day, he was sent to my care on board the hospital-ship at Balaklava. He was a fine specimen of a seaman, much respected by his shipmates and officers, full of spirits, and hopeful of the result, in good health, having but recently landed from his ship. The wounds of the thigh and hand were dressed with lint steeped in a lotion of Burnett's solution, one part to nine parts of water, and covered with oiled silk. His pulse was tranquil and his tongue clean. He took nourishment and an anodyne at night. On the fourth day after the accident,

the stump of the forearm was exposed; and, it being found inflamed, and threatening to slough at the margins of the incisions, the alternate sutures were removed, and the same lotion was applied on steeped lint between the lips and over the surface.

On the fifth day, sloughs were found suppurating on the thigh-wound, and others were detached, leaving a clean suppurating surface: there was no extension of death of parts beyond the laceration.

He was then sent into the offing at Sebastopol, where the same mode of dressing was persevered in for the time; and he enjoyed the purest of air and the best possible attention. Under those most favourable circumstances, he recovered without further loss of limb.

Had this case occurred alone in my practice, I should have needed no other to satisfy me of the great value of chloride of zinc in the primary treatment of gunshot-wounds; and I trust that, in our auxiliary hospitals at the seat of war, Mr. De Morgan's advice will be fully acted on and the results recorded.

NOTES ON THE EPIDEMIC OF RELAPSING FEVER IN LIVERPOOL.

By ROBERT GEE, M.D., M.R.C.P.,
Physician to the Liverpool Fever Hospital, etc.

IV.

IN my last communication it was stated that the epidemic was still on the increase, and it was feared that the ample provision then made would not prove adequate to the demand for hospital accommodation. That apprehension has been realised, and it has been found necessary to erect an additional temporary wooden shed to meet that demand.

In anticipation of this step, as the daily admissions were very numerous, information was solicited from the parochial district medical officers on the following points.

1. Was there any sign of abatement of fever in their districts?
2. Was the disease pretty evenly distributed over the whole of the districts, or were large portions still uninfected?
3. The number of cases attended at their own homes.

The replies may be summarised as follows.

1. There was no abatement but in one out of the twelve districts; that district being the one least affected by the epidemic.
2. In half the number, the disease had not appeared but in portions of the districts.
3. The number of fever-cases under treatment in their own dwellings at that date (September 22nd) was 169.

The inference to be drawn from the above was that the epidemic had not exhausted itself, and that it was undesirable to delay in making provision for a still larger influx of cases, and a second shed was accordingly ordered to be built near the Kirkdale Hospital.

The replies to the third question enabled us to calculate, with tolerable accuracy, the proportion of cases treated at home to those sent into hospital; the proportion being 15.1 per cent.

To show the importance of removing patients from their own dwellings, the following extracts from the above reports will amply suffice.

One gentleman states "that a great drawback to their treatment in their own dwellings, is that at least nine-tenths of them have no bedstead or bedding, and barely room to put up such furniture for all the inhabitants: their usual habit being to sleep on mats or straw on the floor." Another states "that no abatement in the epidemic can be expected so long as the patients are to remain, as I have seen them, two, three, four, and five in one bed together; living and sleeping in miserable dirty cellars where the remainder of the family have to perform their domestic duties, and possessing a great aversion to soap and water."

At a meeting of the Workhouse Committee, held on September 29th, one member stated that, while sanctioning the erection of an additional shed they were providing for an increasing epidemic, he thought something should be done to get at the source of the disease, and means taken to check its course; and as the Health Committee of the corporation had greater powers than they in that direction, he suggested that they should have some communication with that body in reference to the matter. It was resolved that the parochial medical officers should be requested to attend and give their opinion as to whether the Health Committee could do no more than they were doing to prevent the spread of fever. That meeting was held on the following day. The medical gentlemen stated without reserve that fearful overcrowding existed in some parts of their districts; that the courts and streets, especially the former, were in a filthy condition; that animal and vegetable refuse was

aggravation, the pains become more acute, and extend towards the shoulders and hips." Gall-Stones, p. 518.—"These pains (at the margin of the liver and in the epigastrium) are in most cases very severe, and of a burning or boring character, etc.; not unfrequently they extend over both hypochondria, and also radiate towards the back, the right shoulder, the neck, etc."

constantly observed to lie in the streets; and that the habits of the people were offensively unclean. It was then arranged that a deputation should wait on the Health Committee to represent this state of matters, and to consult with them on the general subject; also to urge that, if they had not sufficient powers to meet the necessities of the case, they should seek those powers as early as possible.

That conference, held on October 6th, was largely attended by the members of the Health Committee, with their superior officers, by a deputation from the Liverpool Select Vestry, and by one from the adjoining township of Toxteth Park, where relapsing fever is now making itself felt in an epidemic form. Dr. Buchanan, Medical Inspector of the Privy Council, was also present. It is to be hoped that the result will be the more effectual cleansing of the streets, the more thorough disinfection of houses after the removal of fever-cases, and pressure brought to bear on the magistracy to punish those who offend against the sanitary acts by permitting overcrowding in their dwellings.

ON UTERINE PATHOLOGY AT THE CHANGE OF LIFE AND AFTER THE MÉNOPAUSE.*

By EDWARD JOHN TILT, M.D., M.R.C.P.

I AM able to confirm the general belief among medical men that the change of life is a perilous period for those who approach it in a diseased state, particularly if they be suffering from any form of uterine disease; for this will be made worse, will become less amenable to treatment, and will unduly prolong the time required for the change of life, by checking that physiological process of ovario-uterine involution which is intended to ensure for the future an almost complete immunity from uterine irritation, congestion, and inflammation, hitherto the most frequent of diseases of the womb. Thus a fibroid of the size of the thumb stuck into the substance of the womb, a small polypus hanging from the cervical canal, hypertrophy of the cervix, and its habitual state of congestion, will check uterine involution. I find that, as the rule, when ulceration appears at the change of life, the patient has previously suffered from it; but sometimes the change of life brings to a crisis an habitual congestive or subacute inflammatory state of the womb, which had lasted for a long time without having been recognised, and ulceration ensues.

I can also confirm the belief in the powerful curative influence of the ménopause in severe cases of the most common forms of uterine disease; for I have notes of some forty patients who for many years before the ménopause were confined to the bed or to the sofa by chronic uterine inflammation, who made marvellous recoveries so soon as the change was effected, and who are now more or less actively engaged in those social duties and pleasures from which they had been divorced for ten or fifteen years. Out of many similar cases in which recovery was neither rapid nor perfect, I cannot call to my recollection a single instance in which considerable improvement did not follow judicious treatment. Twenty-six women ceased to be troubled with habitual leucorrhœa. Thirty-five women no longer suffered from uterine flexions and versions; although, on examination, I have found that these misplacements persisted to almost the same extent. This is a striking proof that the severe symptoms often attending uterine misplacements depend on concomitant inflammation and neuralgia, and that it is wrong to chiefly direct the treatment of such cases to mechanical measures—a position that I have maintained to the best of my power in my writings during the last twenty years. These are my reasons for believing that the ménopause not only greatly helps us to cure intractable cases of uterine disease, but is also an effectual means of curing many diseases of the womb that have never been detected.

From what I have stated, it naturally follows that, after the ménopause, congestive and inflammatory affections of the sexual organs are much less frequent and less severe; and that, when these organs assume great activity, it is a lower type of activity, denoting a deterioration of plastic force; the womb, the ovary, and the breast being more frequently than had previously been the case the seats of cystic, fibrous, and cancerous growths. Turning aside from these heteromorphous products, I proceed to sketch the modifications impressed by the ménopause on the more frequent diseases of the reproductive organs; and it will be more practical to notice these affections in the order of their relative frequency.

First in this order comes vaginitis, often originating in, and attended

by, slight ulceration of the cervix, but sometimes unaccompanied by any uterine lesion whatever. Those who have previously suffered much from uterine disease are unusually liable to vaginitis after the ménopause; and four patients have been thus occasionally troubled for several years, in whom there is no disease of the womb. Vaginitis oftener coincides with hypertrophy or displacement of the womb. Sometimes it seems to me to be the result of a tendency to malnutrition of most of the mucous membranes; and I have occasionally traced it to too frequent connexion, long after the ménopause. I must also mention that vaginitis accompanies a distressing kind of neuralgia of the sexual organs. I allude to leucorrhœa to say that I only restrain it when very abundant, and never when it occurs critically at monthly intervals.

Pudendal inflammatory lesions stand next in order of frequency, such as follicular inflammation of the mucous membrane, prurigo, eczema, and boils either coming to a head or curing by resolution. These complaints may appear for the first time at or after the change of life; but they often existed long before, and are then greatly aggravated.

Hard hypertrophy is the most frequent of cervical diseases, and is evidently a legacy of a previous period. Hypertrophy may last for years after cessation, without symptoms, or it may lead to vaginitis and ulceration; but I never knew it to turn to cancer. I have only twice seen soft hypertrophy to begin at the change of life; the cervix being much enlarged, soft, and baggy, as if it were made of erectile tissue; and through the speculum a ragged wound was seen to freely pour out blood. In one of these cases, the lesion was not detected; for the practitioner considered the repeated flooding to be climacteric menorrhagia. The other case had been considered cancer—erroneously, of course; for I cured it by nitrate of silver.

Ulceration of the cervix had been the undetected cause of the sufferings of some women for many years previous to the ménopause, when my advice was asked. Others had been long before cured of ulceration; but it relapsed at the change of life, or three or four years afterwards. A patient, who had a first and a very severe attack at cessation, has a slight return of it every year.

I have already noticed the relation between hypertrophy and vaginitis with ulceration. I have repeatedly seen the insertion of a small polypus at the os uteri to be the centre of a patch of ulceration of about the size of a shilling; and, in four cases, inflammation and ulceration of the cervix were caused by marriage during the change of life. Whenever ulceration occurs after the ménopause, it is unusually chronic and hard to cure—a fact noted by Dr. H. Bennet, and which tallies with Mr. Erasmus Wilson's experience of cutaneous affections at the change of life, testifying to a lack of that power to speedily repair mischief which is so characteristic of childhood.

I have had only one case of acute internal metritis after cessation, for the treatment of which I had the advantage of Dr. Barnes's advice; and, although we checked the blood-flow by injecting perchloride of iron into the cavity of the womb, the patient died, exhausted by previous loss of blood, vomiting, pain, and want of sleep. I have met with three cases of chronic internal metritis at the change of life; they were characterised by the recurrence, at successive menstrual periods, of bearing-down pains, followed by the expulsion of pus from the womb. If muco-pus be thus abundantly secreted in the uterine cavity when the cervix is strictured or bent at a right angle on the body, it is advisable to facilitate the exit of the retained fluid by means of a wax bougie or sound. These cases have been described by Dr. Matthews Duncan as "leucorrhœa of old women"; but I think he has exaggerated their frequency and their danger—judging, at least, from a letter in which he tells me that, "if not cured, they end in malignant ulceration of the womb;" whereas I have seen nothing to warrant so portentous a prognosis. From these cases there is but a step to others in which the closure of the mouth of the womb also coincides with an abundant secretion of muco-pus in the uterine cavity. The womb may then enlarge, and decrease, to enlarge again after a few months, with more or less pelvic pain, nausea, and disturbance of general health. In three cases of this description, I did not feel justified in re-establishing the permeability of the cervical canal by any operation; and, under the influence of rest, purgatives, and liniments to the epigastric region, the fluid collected in the womb was absorbed; and the patients have passed several years without a return of the occurrence. Such cases teach us, however, that even after the ménopause we should maintain the permeability of the cervical canal by proper measures, whenever we find it necessary to apply strong caustics to the os uteri. Three of my cases show that a long continued sero-sanguinolent uterine discharge may have no serious import. In one case, the lady was remarkably healthy, and menstruated regularly up to her death, at eighty-three. Six years before she died, I found considerable enlargement of the vaginal blood-vessels, the mucous membrane itself being very pale; and no sign of uterine disease except the sero-sanguinolent discharge. The

* Read in the Midwifery Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

application of a solution of nitrate of silver did no good, nor did injections; and the case was left to itself without ill effects. Another strong lady ceased to menstruate at fifty; and, when fifty-two, she was suddenly told that she was on the eve of being deserted by a man who had lived twenty-five years with her as a husband. This brought on delirium, which lasted a fortnight, and a muco-sanguinolent discharge from the womb, which has now lasted three years without impairment of health. Neither in this case nor in a third could I discover any organic lesion to explain the discharge.

I hasten to notice the neuralgic affections of the sexual organs. In the first place, there is the sudden increase of sexual desire, which, when at the change of life, may be compared to the last waking up of a soon to be extinguished flame—a psychical phenomenon promoted by ovario-uterine irritation. Neuralgia may assume the form of a frequently recurring itching or aching of the pudenda, without any appreciable morbid lesion—a neuralgia which yields less to remedies than to those nutritive transmutations brought about by time. Thirdly, there is a most lamentable form of what I take to be ovario-uterine neuralgia, of which you will find two good instances, described as abdominal neuralgia, by Dr. Handfield Jones, in his work on *Functional Nervous Diseases*; and you will find other cases in the new edition of my work on *Diseases of the Change of Life*. In these cases there is a frequently recurring burning sensation in the vagina and pelvis, with a variable amount of tenesmic action, which shifts from the neck of the bladder to the womb, and from the womb to the rectum, causing exhaustion and loss of power, referred to the epigastric centre of the ganglionic nervous system; and, by reacting on the brain, it determines sleeplessness or pseudo-narcotism, despondency, apathy, and other forms of cerebral neuralgia, which often render life intolerable. I have seen strong-minded women, previously in good health, suffer as much as those who were habitually weak and nervous; and, although I have always found this neuralgia to be allied to a certain amount of vaginitis, the cure of this has only alleviated the neuralgia. Vaginal injections sometimes brought on an attack, and had then to be given up. Fatigue and vexation always brought on or aggravated the neuralgia. Rest, reclining in the recumbent posture, with the feet higher than the pelvis, belladonna and opium suppositories in one or the other passage, often assuaged the attack; but the cure of the complaint is to be sought in whatever can strengthen the system—the ordinary tonics, and nerve tonics like arsenic and strychnia, change of habits and of scene. I have only met with half a dozen cases of this description; but, as women know so well how to conceal their sufferings, I believe somewhat similar cases to be not uncommon.

I conclude by mentioning the ovaries, to confess that I have still much to learn respecting the part they play in the morbid phenomena that I have described as occurring at and after the change of life. From what we positively know of their ruling power over menstruation, and of their influence to bring on diseases of women at previous epochs, it is fair to suppose that, when the irritation and congestion of the ovaries are no longer relieved by the menstrual flow, they then aggravate and delay the cure of the most common uterine diseases, cause a temporary return of passion, and give rise to suffering in the ganglionic and sensory nerves, of the kind which I have just described.

CLINICAL MEMORANDA.

LONG CONTINUED CONSTIPATION OF THE BOWELS.

E. T., a female servant, aged 24, of well-nourished appearance, came under my care, stating that for eight weeks she never had a motion of any sort from the bowels. During the first four or five weeks, she felt a little pain and sickness of stomach occasionally. During the last fortnight, these symptoms increased so that every meal was rejected almost as soon as taken. She had never consulted any medical man until she sent for me at the end of eight weeks; but she had taken twenty-four pills (which she had procured at some druggist's) during the last fortnight, and had taken some castor-oil this day (July 4th, 1870). I at once administered an enema, consisting of a pint of warm water, through an O'Beirne's long tube, passed up its whole length (about sixteen inches). In fifteen minutes, no effects being produced, I repeated the operation; and in about ten minutes there came a chamber-pot full of hardened feces, bits of rhubarb, and all sorts of heterogeneous things. After this, I repeated the enema, with successful results, although the defecations were not quite in such quantity. Having prescribed some mild aperient pills for bed-time, I left her feeling well and comfortable; and next morning I found her quite convalescent, after having made a good breakfast.

Todmorden, October 1870.

CHARLES W. THORPE.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

NEWCASTLE-ON-TYNE INFIRMARY.

CASE OF ANEURISM OF THE FEMORAL ARTERY TREATED BY RAPID PRESSURE.*

(Under the care of Mr. JOHN RUSSELL, Surgeon to the Infirmary.)

MATHEW POWELL, aged 38, was admitted May 16th, 1870. He had been a puddler and furnace-man since he was fourteen years of age. The work was very hot, and entailed the lifting of great weights. He had enjoyed good health. About twenty years ago, being then eighteen years of age, he first noticed a swelling in the left groin, of about the size of a hen's egg, following upon a fall against a pig of iron. He felt no pain, pulsation, or other inconvenience. A year ago, he strained himself whilst lifting a pig of iron. From this time, the swelling gradually increased, attended by pain. Pulsation was not noticeable till November last. It commenced suddenly while he was lying in bed. From that time, the tumour increased rapidly in size, with much pain around the hip and leg, and loss of sensation on the inside of the knee and leg.

On admission (May 16th), he had a tumour in his left groin, presenting the usual signs of an external aneurism. The affected extremity was well nourished. There was no œdema. The upper border of the tumour extended quite up to Poupart's ligament; the lower border, about five or six inches below the ligament. In size, it was about as large as a clenched fist.

After two days' rest in the recumbent posture, digital compression was made and continued by the resident staff of the Infirmary (eight in number), in turns of twenty minutes each, for twenty-four hours, commencing at 2.40 P.M. The pulse was quiet; temperature of both limbs 90 deg. The temperature of both limbs gradually fell; the temperature of the affected limb, however, never fell below 84 deg. The patient complained of intense pain; and, during the compression, took two grains of opium and two grains and a half of morphia, until the pupils became contracted. The pressure was exerted over the external iliac artery. The tumour was slightly harder, but the pulsation was unchanged. A liberal diet was now ordered, and thirty drops of tincture of perchloride of iron were given three times a day.

May 31st. Continuous and complete compression by a common horse-shoe tourniquet on the left common iliac artery was commenced at 10.45 A.M., the patient being deeply under chloroform. At this time, the temperature in both limbs was 86 deg. Pulse 76. The temperature was taken every hour, and in the affected limb never fell below 82 deg. Great difficulty was experienced in compressing the common iliac artery, owing to the slipping of the instrument. Carte's compressor and two other instruments were used; but the common horse-shoe tourniquet was found to answer best. The patient was muscular, and the artery appeared to lie very deep.

At 3.15, the tourniquet was relaxed. Pulsation was much less, and the tumour harder.

At 5 P.M., it was again relaxed. The pulsation was as before. The ether-spray was now used for about ten minutes.

At 6 P.M., the pressure was relaxed. The pulsation was less. Distal pressure was now applied in addition, immediately below the tumour.

At 7.30 P.M., his breathing was very difficult, and his pulse flagging. The tourniquet was relaxed over the abdomen, to relieve the breathing, the distal pressure being maintained. The pulsation was almost imperceptible to the touch and eye. In a few minutes, the pressure was reapplied, and at 7.55 it was removed altogether. The pulsation was now almost imperceptible, and in about five minutes ceased entirely. The tumour felt quite solid and incompressible.

The patient bore chloroform very well. The quantity used was thirty-five drachms. The chloroform was dropped upon a single strip of bandage, and the patient was kept deeply under its influence. Enemata of beef-tea and brandy were given frequently. The tumour was carefully watched until 10 P.M., when faint pulsation was noticed. At midnight, it was still pulsating slightly, but was very hard. About 4 A.M., pulsation ceased entirely for three hours, when it returned, but very slightly.

June 1st, 9 A.M. He complained of great pain in the thigh and leg,

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

and pain at the point of pressure. The leg and thigh were now flexed upon the abdomen; but, from the pain caused, this was discontinued.

June 2nd. He had a shivering fit. From this time up to June 16th, the condition of the tumour varied. Slight pulsation was felt; but generally during the night, and sometimes during the day, it ceased for several hours at a time. The tumour felt hard, and smaller than before the pressure had been made.

June 16th. He was placed under chloroform at 4.10 P.M., and pressure was made by a tourniquet over the common iliac artery. This time, Lister's abdominal tourniquet was applied, and found to answer better than the common horse-shoe form used before. The pressure was kept up for five hours, but during the time was relaxed twice. At the end of five hours, the pressure was removed, when pulsation was very slight, but still perceptible. From this date till June 24th (eight days), the pulsation was occasionally to be felt, but this day had ceased altogether. On June 30th, a plaster of Paris cast of the limb was made.

On July 10th, he was discharged, pulsation not having recurred since June 24th.

At this time (August 10th), the size of the tumour is the same as it has been for the last twenty years. The man has no expectation that it will become less, and has returned to his work.

REMARKS.—My main object in narrating this case has been a desire to keep before the members the importance of the rapid pressure treatment of aneurisms, more particularly as during the last few months we read of several operations for tying arteries having been performed—operations which no doubt have accomplished their object, but at a risk very much greater than that attending the mere pressure of arteries. The case itself requires few comments. As in many others, a second pressing was required.

REVIEWS AND NOTICES.

ADVANCED TEXT-BOOK OF ZOOLOGY FOR THE USE OF SCHOOLS.

By H. ALLEYNE NICHOLSON, M.D., D.Sc., Lecturer on Natural History in the Medical School of Edinburgh, etc. Edinburgh and London: W. Blackwood and Sons. 1870.

A FEW months ago, we had the pleasure of noticing with approbation the first part of Dr. ALLEYNE NICHOLSON'S *Manual of Zoology*. Since that time he has published the work now before us—the *Advanced Text-Book*. It must not be understood that the last named work is intended for students of a more advanced stage than those for whom the *Manual* is adapted; it is the more elementary of the two.

As a means of imparting an elementary knowledge of zoology, so far as concerns the classification of the various members of the animal kingdom and the description of the most obvious and distinctive characters of the various classes and orders, this book deserves a hearty approval. The descriptions are simple and intelligible; and the work is well illustrated with wood-engravings. Prefaced to the proper matter of the work is an Introduction, on the differences of animals and plants, the principles of classification, and other matters. This part, however, is intended rather for the teacher than the learner. At the end of the book is a glossary containing the etymologies and explanations of the technical terms used.

THE SATIRES OF HORACE, translated into English Metre. By ANDREW WOOD, M.D., F.R.S.E., Fellow of the Royal College of Surgeons of Edinburgh. Pp. 169. Edinburgh: 1870.

A GOOD translation of a classical author of such worth as Horace is at all times welcome; but the translation before us calls for notice here as being the work of a member of the medical profession. Dr. ANDREW WOOD, in a modest preface, explains how he was led to attempt this rendering of his favourite author into English; how, for experiment, he attempted to carry out the suggestion of a critic of the late Professor Conington's translation of Horace, that the "Don Juan" stanza of Byron might be applied to the works of the Roman poet; and how, having begun, he was gradually led on by the interest of his work till he had finished the two books of Satires. The work has been done in the time that could be spared from the labours of the translator's profession, and from various other duties which he has had to perform.

It would have been a pity if Dr. Wood had allowed the manuscripts of his translation to lie secluded and comparatively useless, instead of yielding to the advice of his friends that they should be published. We have compared many passages of the translation with the original, and have noticed throughout the accuracy with which the language of Horace has been rendered into English, and the fidelity with which his

meaning has been represented. The conciseness of expression in the *Satires* renders it unavoidable that a translation of them, to be intelligible, should in many parts be rather of the nature of a paraphrase; but, unless care be taken, this more copious use of words may be carried to such an excess as to dish up the old author in a very diluted sauce. Dr. Wood has avoided this error, and, we think, has very accurately hit on the proper mode of dressing Horace's Satires à l'Anglaise, without impairing their piquancy. He has, in our opinion, very successfully met the difficulties arising from the conciseness of the Roman poet, the differences of construction between the Latin and English languages, and the restrictions imposed on him in consequence of using rhyme. The metre used is varied; but the "Don Juan" stanza predominates.

We hope that this is not the last that we shall hear of Dr. Andrew Wood as a translator, but that we shall have to welcome a translation by him of some other of the writings of Horace.

NOTES ON LIGHT. By JOHN TYNDALL, LL.D., F.R.S.
Longmans: 1870.

IN a thin little volume of 74 pages, Professor TYNDALL has compressed a remarkable amount of information. His name is a guarantee that everything is well up to the day, or even ahead of it; and of the style, we can say that it possesses in a remarkable degree the qualities of clearness and condensation. The preface tells us that the notes were prepared for the use of those who attended the Professor's lectures at the Royal Institution last year, and that they were not at first intended for publication. Each note is separate and complete in itself, but they are judiciously arranged in groups. They number 502, and are brought to a conclusion by three eloquent pages on the undulatory theory of light and the remarkable confirmation which it has received from recent discoveries. Such works must form admirable helps to the lecture-room; and we wish that similar companions were provided for most of our medical classes. If they were, we should have fewer criticisms as to the uselessness of *viva voce* teaching. To any one commencing the study of the eye, this little book would be the best introduction to the optical part that could be obtained. It contains excellent information on "reflexion", "refraction", "lenses", "vision of the eye", "adjustment of the eye", "use of spectacles", "the foramen cæcum", "persistence of impressions", "bodies seen with the eye", and other subjects of directly professional bearing. If there is anything to regret, it is the paucity of woodcuts. We scarcely know any other book where the true explanation of the red pupil in the albino's eye is given. The absence of pigment in the iris, sometimes alleged, clearly has nothing to do with it, for the pupil may be dilated to a mere rim, and yet it will remain (as indeed it is in congenital absence of the iris) quite black. Nor does it do to assert increased vascularity of the choroid, for the ophthalmoscope shows us that in all eyes the choroid is fire-red. The real reason is, that the absence of pigment in the choroid allows light to pass in directly through the sclerotic, which, under other conditions, can enter only through the pupil. None of our recent systematic works—Bader, Wells, or Power—give this explanation.

Scarcely any of our modern authors on optics have taken the trouble to make themselves acquainted with modern discoveries as to the causes of the defects of refraction and accommodation of the eye. Some of the books now in the hands of students still teach the most old-fashioned and mistaken opinions. Professor Tyndall is right as to hypermetropia, myopia, conical cornea, and astigmatism; but he breaks down at presbyopia. It is fair to him to say that none of these long words are used, but each subject is adverted to in a lucid manner. The break-down to which we refer consists in this: "In old age, also, the refracting surfaces of the eye are slightly flattened, and thus rendered incompetent to refract the rays sufficiently." This takes no cognisance of the fact admitted in the previous page, that the adjustment of the eye is effected by changing the curvature of the crystalline lens. It is simply the loss of the capability of increase of curvature in this structure which explains the occurrence of presbyopia; and although in a certain sense it is true that "the refracting surfaces of the eye are slightly flattened", it is a pity, when the whole truth is so simple and so easy of comprehension, not to tell it.

Paragraph 183 begins with a statement which is not correct: "The eye is not adjusted at the same time for equally distant horizontal and vertical objects." This applies only to astigmatic eyes, which are exceptional. The mistake is one of composition only—not of ignorance. We hope that we shall not be accused of being hypercritical if we object to the expression in paragraph 182, "holding the object very close to the eye, so as to augment the divergence of its rays". Diminished distance does nothing to augment divergence, but merely enables the pupil to secure certain rays, the divergence of which would at

greater distances have carried them outside its area. The difference is again one as to mode of expression; but in these difficult points it is very desirable to be correct in phraseology. We may repeat that, as regards the optical explanation of peculiarities in the human eye and the need for spectacles, our author is a long distance before any other with whom we are acquainted, and has clearly studied Donders, Graefe, and Helmholtz.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCTOBER 5TH.

GRAILY HEWITT, M.D., President, in the Chair.

DR. PROTHEROE SMITH exhibited a specimen of Carcinoma of the Uterus, in which the disease was limited to the fundus, the cervix being unimplicated, and the uterus being quite moveable.—Dr. PHILLIPS referred to the rarity of this form of cancer, and regretted that he was unable to exhibit a specimen which he had hoped to have shewn, in which the cervix was unimplicated, although there were malignant disease in both ovaries, and secondary deposits in the lungs and bronchial glands, his patient having died from pleuritic effusion. The diagnosis of such cases during life was attended with great difficulty. In his cases there was very little vaginal discharge, either sanguineous or leucorrhœal. The uterus was quite moveable, and the nature of the disease was not suspected. Dr. Smith's specimen reminded him more of strumous than of cancerous disease of the uterus, although the fact of the Fallopian tubes being unimplicated was rather against this view.—Dr. ROUTH thought that it would be very desirable if, in recording this case in the *Transactions*, Dr. Smith would give the exact symptoms in detail. It was obvious that if cancer originating at the fundus were characterised by symptoms as specific as those of fundal endometritis, the diagnosis would be much facilitated. Were the glands in the neighbourhood free? Was it the case that, in cancer of the fundus there was no extension to the surrounding parts? If so, the question of gastrotomy might be worth entertaining, so as to remove the entire organs excepting the cervix, the diseased ovaries being included.

Dr. MARTIN (Melbourne) read a paper on a case of Hard Fibrous Tumour of the Ovary removed by Ovariectomy: Recovery, etc. After a description of the history of the patient, the operation, and the progress of the case, Dr. Martin remarked that the interest of his case arose from the great variety of fibrous tumours of the ovary, as there are scarcely any trustworthy cases of the kind on record. With reference to the diagnosis, Dr. Martin was of opinion that the use of the sound and the condition of the menstrual function were likely to give most help.—Mr. SPENCER WELLS said that it was impossible to form an opinion as to the nature of the tumour from the model exhibited; but, looking to the extreme rarity of fibroid tumours of the ovary, and the extreme frequency of fibroid outgrowths from the uterus, and the fact that many supposed fibroid tumours of the ovary had turned out on examination to be really uterine, he believed the tumours exhibited by Dr. Martin to be uterine and not ovarian.—The PRESIDENT agreed with Mr. Wells in considering the so-called fibroid tumour of the ovary to be really of uterine origin.

Dr. V. SABOIA read a paper on a case of Ovarian Disease.

Dr. HODDER (Toronto) read a paper on a case of Ovariectomy. This was a multicellular cyst of the ovary, and the interest of the case arose from the fact of the pedicle, which had been secured by Spencer Wells's clamp, disappearing into the abdomen on the sixth day after the operation, and causing a fatal result.—Mr. SPENCER WELLS did not think this case bore at all against the use of the clamp; but it did impress the important lesson not to remove the clamp too early. In this case it was removed on the fourth day, when the adhesions between the peritoneal coat and the abdominal wall were too recent to be firm. After eight or ten days, when a clamp generally falls off, or is held by mere shreds of tissue, the adhesions have become sufficiently firm to prevent the danger of the pedicle slipping inwards.

Dr. COPEMAN (Norwich) read a paper on Tumour of the Pelvis obstructing Delivery. After referring to the extreme danger of this form of complicated labour, the author said that it was not so rare as might be thought, and referred to a number of cases that had been collected by Merriman and others. He then proceeded to relate the particulars of two cases that had come under his own observation. In the first case, the tumour occupied the posterior portion of the pelvis. Delivery was effected by turning. The mother died on the third day. In the second case the tumour, which was hard, firm, and immovable, was attached by a broad base to the left side of the pelvis. This case

was also delivered by turning, but with extreme difficulty, on account of the size of the tumour. The patient made a good recovery. With regard to treatment in cases of this kind, Dr. Copeman remarked that he would recommend puncture of the tumour, but only when it could be ascertained that the contents were semifluid or soft enough to be partially evacuated. In other cases, he considered turning to be the preferable practice.—The PRESIDENT said that all would admire the courage and perseverance which brought about so successful a result in the second case described. He thought that Dr. Copeman had, probably unintentionally, omitted mention of a method of treatment of such cases, sometimes applicable, viz., the pushing of the obstructing tumour out of the pelvis and thus allowing the descent of the head.—Dr. PLAYFAIR said that Dr. Copeman had not alluded to what was the chief cause of danger in labour complicated by tumour. In 1867 he (Dr. Playfair) had read a paper before the Society on the Treatment of Labour complicated by Ovarian Tumour, in which he had collected the details of all the cases of this complication he could meet with, amounting to fifty-seven in all. Of these, thirteen had been left to Nature; that is, the tumour had been sufficiently small to admit of the child being squeezed past it. Of these thirteen cases, very nearly one half had proved fatal to the mother. In favourable contrast were the nine cases in which the tumour had been punctured, and in which, therefore, the tumour had collapsed, and had not been subjected to pressure; since every one of them had terminated favourably. The explanation of the great mortality in the former case was, no doubt, the contusion and pressure to which the tumours had been subjected, which set up a low form of diffuse peritonitis. Possibly this might have been the cause of death in the first of Dr. Copeman's cases. The inference from these facts seemed undoubtedly to be, that by far the best way of treating such cases was to puncture the tumours when they had fluid contents, and this even if there seemed room for the child to pass; and, even in cases where the tumour seemed solid, an exploratory puncture should be made before anything more formidable was done, as tumours apparently solid had often been found to contain fluid.—Dr. PROTHEROE SMITH said that it was frequently found that tumours obstructing delivery were cystic or subfascial deposits of serum, blood, or pus; and in such cases he recommended the puncture of the tumour by means of his needle-trocar. In a case lately operated on in the Hospital for Women, he had evacuated by means of it almost an ounce of thick pus from a tumour of the size of an orange, growing from the back wall of the vagina in a patient in her sixth month of utero-gestation. The operation was only like the prick of a pin, and required no after-treatment.—Dr. BARNES said that each case must be dealt with according to its individual features. It was necessary to consider the size, position, structure, attachments, firmness of the tumour, and its relations to the child. If the tumour were moveable, and could be pushed out of the way, by all means do it; but in many cases this was impossible. It must be ascertained if it contained fluid; and, if so, its bulk must be lessened; or possibly the tumour might admit of being removed altogether. To obviate the great danger to which Dr. Playfair had referred—that of crushing the tumour by the passage of the child—it was necessary, when the tumour could not be reduced, to reduce the bulk of the child; and in extreme cases, as a last resource, he recommended Cæsarean section. He had recently seen a case where a woman died of septicæmia, the result of the pressing of the tumour against the walls of the pelvis.—Dr. MADGE had attended a case where a large fibrous tumour had prevented the descent of the child's head. It was first punctured, and then, with great difficulty, pushed above the brim. The patient afterwards died of peritonitis, the seat of puncture showing signs of being the starting-point of the disease. He mentioned this as an argument against the too free employment of the operation.

Mr. LOWE (Burton-on-Trent) read a paper on a case of Hæmorrhage from Retained Placenta after Abortion. This was a case of profuse hæmorrhage from a portion of placenta retained for several weeks after abortion. It was successfully removed; but the patient sank with symptoms of septicæmia. The author dwelt at some length on the extreme importance of procuring the extrusion of all the secundines in cases of abortion, and pointed out the dangers likely to arise from retention.—The PRESIDENT thought that, in cases of abortion, little doubt was now entertained as to the expediency of removing the secundines as soon as possible, with the view of preventing various disasters. As a matter of fact, he had found retention of the secundines usually associated in such cases with a marked flexion of the uterus, which condition both caused the abortion and interfered with its completion.—Dr. WYNN WILLIAMS said that, in cases in which a portion of the membranes were retained, the injection of the uterine cavity with some antiseptic fluid, such as Condyl's fluid or a weak solution of iodine (the latter of which he himself preferred), was strongly to be recommended.—Dr. PLAYFAIR could not agree with Mr. Lowe's statement that re-

tention of a portion of the secundines was most likely to take place in the first two months. Indeed, he believed that this was directly opposed to the fact, and that in the first two months the ovum was most likely to be expelled entire; and that retention was most likely to occur in the third and fourth months, when the adhesions of the chorion were most intimate and extensive.

CLINICAL SOCIETY OF LONDON.

OCTOBER 14TH, 1870.

JAMES PAGET, Esq., F.R.S., President, in the Chair.

Mr. SPENCER WATSON read the reports of four cases of Parenchymatous Keratitis, associated with Acute Rheumatism. The patients were young adults, all under 19 years of age. Both corneae were affected, and the symptoms and appearances were not distinguishable from those of parenchymatous keratitis due to inherited syphilis. Out of a series of cases, extending over the last ten years, Mr. Watson had only observed acute rheumatism in association with parenchymatous keratitis in these four; but he suggested that in some others of the series this complication may have itself cut short the observations, by preventing the attendance of the patients at the Ophthalmic Hospital. From these cases it was conjectured that the interstitial keratitis of inherited syphilis may be allied to rheumatic inflammation, and may possibly yield to treatment such as is beneficial in the latter disease. Two of the patients, whose cases were related, were exhibited to the Society. In one, the attack of keratitis had occurred eight years ago. It was found in this case that the young woman had become myopic since, and most probably in consequence of the attack.—Mr. BRUDENELL CARTER believed that the changes affected not only the cornea, but extended to the remaining portions of the eyeball.—Mr. JOHN CROFT related a case which had been under his care at St. Thomas's Hospital, which became almost well while the patient was taking iodide of potassium.—A MEMBER had himself been the subject of two attacks of a similar disease, with ulceration of the cornea, which arose, he believed, from a gouty constitution.—Mr. SPENCER WATSON considered these attacks, in which ulceration was present, scarcely cases in point.

Dr. JOHN HARLEY read a paper on Injury to the Liver resulting in Abscess. The patient, aged 69, was, by the fall of his horse, thrown forwards upon the brass turrets of his horse's pad, thus bruising the epigastric region. An inflammatory tumour, exquisitely painful, formed just above and to the right of the umbilicus. On moving in bed fourteen days after the accident, this tumour suddenly disappeared; collapse followed, and subsequently general peritonitis. In a few days, the peritonitis became circumscribed, and the pain and swelling limited to the left side of the umbilical region, where there was evidence of formation of a second abscess. This also suddenly disappeared, on the twenty-fifth day, with dangerous collapse and evacuation of pus by the rectum. Marked colic symptoms, showing lesion of the bowel, preceded this second rupture. From time to time there were retention of the purulent discharge and hectic, but ultimately a free passage was maintained, the appetite returned, and the patient made so complete a recovery that, at the end of seven months from the time of the accident, he was able to ride and follow his professional work, and he has since (for the last eighteen months) enjoyed perfect health. There was interrupted discharge of pus by the rectum up to the 112th day. The author considered that the left lobe of the liver was bruised or lacerated by the accident; that an abscess formed which pointed partly towards the right hypochondrium, and partly within the small omental sac behind the stomach; that, rupture having occurred in the latter situation, the pus escaped into the small omental sac, and then, finding its way through the upper layer of the transverse meso-colon, passed further downwards between its layers, forming a second abscess by the side of the descending colon. This, in its turn, caused inflammation and rupture of the contiguous wall of the large intestine, and thus the pus was liberated and carried out of the body. Hectic and jaundice attended the retention of the discharge.

Dr. OGLE related a case of Tetanus. The patient, a healthy boy, got a bruise on the thumb. Three days afterwards he complained of stiff-neck, and vomited, and shortly afterwards became affected by opisthotonos. On the fifth day after the injury, he was admitted into St. George's Hospital in a state of tetanus. He was put fully under the influence of belladonna; ice was constantly kept applied to the spine, and chloral was given at night to induce sleep. It was noticed that at no time did the sardonic smile exist, and never was there any trismus or (except on one day) difficulty in swallowing liquid food, such as wine, brandy, beef-tea, and beaten-up eggs. In this case the temperature and pulse were registered twice a day; almost throughout the patient's stay in the hospital, the temperature was higher in the even-

ing than in the morning, on one day reaching 102.3 deg. About the fourteenth day after the injury, the tetanic symptoms began to abate, and by degrees the belladonna and the chloral were discontinued, and also the application of ice to the spine. After about a month from the accident, the patient left the hospital quite well, and has so continued ever since. Dr. Ogle suggested that possibly the examination of numbers of cases of tetanus might show that the temperature always increased in the evening, and that this fact might have value in diagnosing true tetanus from certain cases of affections of the spinal cord and its membranes, certain cases of hysteria, and strychnia and other poisoning. Dr. Ogle believed that the highest temperature arrived at in tetanus was recorded by Wunderlich, who described it as being 108 deg. shortly before death; 112.55 deg. at death; and 113.56 deg. after death. He also alluded to a case of tetanus in which, after the attack, the patient was subject to great irregularity of the heart's action, with much discomfort and palpitation on exertion, as if the mechanism of the organ had been injured in some violent muscular effort.—Dr. OGLE stated, in answer to Mr. JOHN CROFT, that he had given belladonna with the idea of quieting reflex action of the spinal cord. Mr. Croft referred to a case in which he gave hydrate of chloral with decided success, the attacks becoming aggravated by omitting it for twelve hours. The boy was 13 years of age, and remained tetanic for fourteen days, during which time he was taking doses of from fifteen to thirty grains of hydrate of chloral.—Mr. CARTER stated that Dr. Richardson had just reported to him a favourable case treated by nitrite of amyl.—Dr. CHUNDER ROY had seen a large number of cases of tetanus in India. There were, he considered, two class of cases: those which recovered without medicine, and those in which medicine was of no use. In the latter class of cases, the patients could not swallow; the former did well. At Calcutta, chloroform and Indian hemp were employed. Opium, when it was given, was smoked by the patient. It did not thus confine the bowels. In one case, belladonna had been given without benefit. Division of the nerves in suitable cases was adopted.—Dr. BARCLAY referred to the experiments of Dr. Fuller, who gave enormous doses of belladonna extract—a drachm *per diem* to patients suffering from chorea. He found that children affected by chorea were very tolerant of belladonna, but children always bore it well, and became accustomed to it. The irritability of the nervous system in Dr. Ogle's case might have been as little affected by the belladonna as in chorea. Nothing, however, should be given in tetanus to affect the general health.—Mr. PAGET had seen palliative results in one case from the administration of the hydrate of chloral, but the patient died. He doubted if anyone had treated six cases successfully by any one remedy.—Dr. ANSTIE remarked that Dr. Eben Watson had treated at least three successfully by Calabar bean.—Dr. BROADBENT had just seen a case of non-traumatic tetanus successfully treated by the same remedy.—Mr. JOHN CROFT referred to a case in which strong Calabar bean had failed.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, OCTOBER 5TH, 1870.

J. O. FLETCHER, M.D., President, in the Chair.

Rupture of the Gall-Bladder.—Mr. BRADLEY mentioned a case of this accident which he had lately met with. The man in whom it occurred had been a free liver, but had enjoyed good health till about a month before death, when he was seized with an attack of hepatic colic, and complained of pain over the liver and transverse colon. This passed off, and he remained tolerably well till four days before death, when graver symptoms presented themselves. On August 24th, he was seized with a sudden pain over the whole abdomen, which was quickly followed by collapse, and death occurred in six hours. On inspection, a mixture of bile and pus was found in the peritoneal cavity; the colon and gall-bladder were matted together by dense adhesions; and an opening was found in the latter, close to the intestinal wall, occasioned by the formation of an abscess from impaction of a gall-stone at the junction of the hepatic and cystic ducts.

Tubercular Deposit in the Cerebellum.—Dr. SIMPSON read notes of a case of cerebral disease of much interest. The patient was a boy aged 14, who, up to the end of 1869, had enjoyed good health, and whose family history was satisfactory. About Christmas, he began to complain of severe shooting pain at the back of the head, intermittent in character, and at times so severe as to make him scream out. Soon afterwards, he began to vomit; at first in the morning, but subsequently also after his meals. The vomiting was unaccompanied by nausea. His bowels became very costive. He continued in this state for some time, when, about the middle of April, he began to have a dull heavy expression, and also showed some difficulty in walking and

articulating. It soon became evident that his sight was becoming impaired, and though he remained fairly intelligent, his memory became very defective. There was slight paralysis of the internal rectus of the left eye. The symptoms gradually became worse. His gait was not that of paralysis, but of want of co-ordinating power. On July 25th, his eyes were examined with the ophthalmoscope by Mr. Windsor, who reported a large and swollen condition of the optic disc, with no distinct boundary, a swollen and tortuous condition of the veins, and other evidence of intracranial pressure. His progress was steadily downward, and he died on September 17th, comatose. At the *post mortem* examination, the head only could be examined. The veins of the dura mater were turgid, and the visceral arachnoid rather thick and opaque; and there were several ounces of slightly turbid cerebro-spinal fluid. There was a little lymph about the optic commissure and anterior margin of the pons. The *venæ Galeni* were very turgid. The whole brain-substance was softened, particularly the parts at the base. Both lobes of the cerebellum contained numerous yellow masses of tubercle, varying in size from a pea to a marble. No tubercle was found elsewhere in the brain, and during life there was no evidence of its presence in any other organ. Dr. Simpson referred to the question of diagnosis, and discussed particularly the differential diagnosis of tubercle and hydatid cyst of the brain.

Hydatid of the Liver.—Dr. SIMPSON mentioned a case of this affection in a girl aged nine years. The tumour, which was of some months' duration, was about the size of the closed fist, and was gradually enlarging. It caused no annoyance. It was treated by withdrawing a small quantity of fluid, by means of a subcutaneous syringe. A slight attack of peritonitis followed, probably owing to the escape of fluid from the distended cyst into the peritoneum. This passed off in a few days, and coincidentally the cyst gradually disappeared.

[To be continued.]

THE TEACHING OF PHARMACY IN MEDICAL SCHOOLS.

THE prospectus of the University of Durham College of Medicine in Newcastle for the present session describes the provisions which have been made there for the teaching of pharmacy. As a large class of students throughout the country besides medical students now require a pharmaceutical education, under the clauses of the Pharmacy Act, the Warden and Senate, desirous of adding to the facilities of medical students, and of promoting pharmaceutical education, last year instituted a lectureship on pharmacy.

The curriculum for students in pharmacy consists of attendance on lectures on botany, materia medica, chemistry, and pharmacy. The lectures on the two former of these subjects are delivered in the summer, and those on the two latter in the winter session of study.

The Chair of Pharmacy, which was specially instituted for pharmacy students, is held by Barnard S. Proctor, Esq.; the other portions of the pharmacy curriculum being obtained by their attending the courses instituted for the medical students, the respective lecturers in which are Botany—J. Thornhill, Esq., and W. C. Arnison, Esq., M.D., M.R.C.S.; Materia Medica—Thomas Humble, Esq., M.D., M.R.C.P.; and Chemistry—A. Freire-Marreco, Esq., M.A.

The order in which students in pharmacy attend the several courses of lectures is optional; but as the study of materia medica and pharmacy involves the application of knowledge acquired from the courses on botany and chemistry, it is recommended that the following order be adopted as far as circumstances admit: Botany, chemistry, materia medica, and pharmacy.

The course on practical pharmacy includes—general processes and physics applied to pharmacy; pharmacopœial processes and the most important recent improvements in pharmaceutical preparations; dispensing operations; testing and the test solutions of the Pharmacopœia; and is illustrated with apparatus, experiments, and processes in operation.

The fees are: perpetual ticket for pharmacy curriculum, £6 6s. (this applies only to students at present engaged in pharmacy, and who enter before October 1871); separate courses of lectures, each £4 4s. The perpetual ticket entitles the holder to attend the lectures on botany, chemistry, materia medica, and pharmacy, and to use the museum of materia medica in the library of the College.

At the end of each session, a silver medal and certificates of honour, if merited, will be awarded, after examination, to the best students in each of the following classes; viz., pharmacy (practical), chemistry, botany, materia medica.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Saturday, October 1st.*

UNDER existing circumstances I can only send you a few curt, disjointed sentences, to indicate in a general way the state of Paris in relation to matters medical, sanitary, and social. Possibly, they may never reach you. Since the morning of Sunday, September 18th, no news nor letters have reached Paris. The Prussian lines limit our world. The post-office authorities have organised a service by which—wind and weather favourable—letters are occasionally sent forth by a balloon (*ballon monté*); and if this letter ever reach you, you will be indebted for it to the aerial Paris mail. The weight of each letter is restricted to four *grammes*; and, in making up the weight of the mail, preference is given to the lightest letters.

Hitherto, the health of my two millions of fellow prisoners, civil and military, has been good. This is explained by food having been sufficient and accessible to all; and also by the long run of superb weather. Excepting small-pox, no disease is at present epidemic; and small-pox has not increased, which, considering that we have a new population—the population of the surrounding districts (now deserts)—within the walls, is remarkable. This enormous new population is one of the difficulties of the siege; for it has to be fed at the public cost, to a great extent. All persons in easy circumstances have left Paris, excepting those retained by duty. The ladies and the British Protestant clergy of all denominations have left us a month ago. The French clergy—Catholic and Protestant—remain.

When the investment of Paris was imminent, an enormous exodus of English and other foreigners took place, including about 1100 persons to whom a free passage was given by the British Charitable Fund. A large number of poor English, from a variety of causes, were unable to leave in time; and of them about 450 are living wholly or partially at the cost of the Fund now named. Through its ministrations, much fearful misery has been prevented among a class of persons who have been till now self-supporting. The members of the committee who remain in Paris, and by whom the Fund is now being administered, are the Honble. Alan Herbert, M.D.; Charles Shrimpton, M.D.; John Rose Cormack, M.D.; and the Rev. Dr. Smyth, of St. Germain-en-Laye.

Food is evidently not sufficiently abundant to allow the public to use it according to fancy. The entire live stock of oxen, sheep, and pigs in Paris belongs to the Government, by whom 500 oxen and 4000 sheep are given up daily for slaughter. The butchers—as paid agents of the Government—retail it to the public at reasonable fixed prices, a certain limited quantity being allowed to each purchaser. The shops of the butchers are open only for a few hours in the morning every second or third day. Bread is sold at a fixed Government price, and seems abundant enough. At noon, on parade yesterday, the Gardes Mobiles (nearly 200,000 men) were told that, in future, they were to have fresh meat only twice a week in place of daily. Much of the live stock in Paris is being killed and salted in consequence of scarcity of forage. Enormous supplies of hay were burnt at the very last to keep them out of the power of the enemy. Green vegetables can hardly be had even in small quantity at any price. Milk, butter, eggs, and cheese, are exceedingly scarce. Potatoes are dear; but Government is going to interfere so as to make the price fair to all parties. The distribution of meat is quite a scene: to secure being served, persons take their place at the butcher's at five in the morning. This actually occurred to-day. The food question, the socialistic gatherings, the constant boom of cannon, and the transformation of gay Paris into a grim arsenal and huge camp, painfully oppress the spirits. But notwithstanding the dismal circumstances, the bearing and bravery of the defenders of the town are increasingly satisfactory. Within the walls of Paris, the flower of the manhood of France is rapidly becoming a magnificent army. If Paris fall, it will not be ignominiously. All *must* be brave in a war *pro focis*.

Dr. Shrimpton has an ambulance in the Faubourg Saint Honoré; and Dr. Cormack is director of another in the arrondissement of the Batignolles, close to the ramparts at Les Ternes.

Dr. Gordon, Deputy Inspector-General of Hospitals, and Surgeon-Major Wyatt, are here to observe and report to the medical department of the British army. Yesterday, Dr. Gordon was ten hours occupied in the ambulances and seeing the wounded brought in after a smart fight.

* This letter, sent by balloon, was received on the morning of Friday, Oct. 14th.

NOTICE.

THE ANNUAL SUBSCRIPTIONS TO THE BRITISH MEDICAL ASSOCIATION FOR THE YEAR 1870 BECAME DUE ON THE 1ST DAY OF JANUARY LAST: and it is a matter of essential importance to the working of the Association, that all which still remain unpaid, should be paid promptly.—Members of Branches, and all others who usually receive circulars at the beginning of the year from the local Secretaries, are urgently requested therefore TO PAY THEIR SUBSCRIPTIONS FORTHWITH TO THE LOCAL SECRETARIES.—All other members should pay their Subscriptions without delay to the General Secretary, T. WATKIN WILLIAMS, Esq., 13, Newhall Street, Birmingham.

Gentlemen wishing to become members of the Association are requested to apply to the General Secretary, to the Branch Secretaries, or at the office of the JOURNAL, when forms of application and the rules of admission will be forwarded.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 22ND, 1870.

A SOCIAL BLOT.*

YEAR by year the blue-book of the Commissioners in Lunacy appears, not, we regret to say, as a record of progress and a permanent witness of what has been achieved, but as an importunate remembrancer of unpleasant, not to say unseemly truths, which we fain would dismiss to the land of forgetfulness.

On the 1st of January, 1870, no fewer than 54,713 insane persons were under official cognisance in England and Wales, being an increase of 1,536 since the 1st January, 1869. On the 1st January, 1859, the number under official cognisance was 38,058, giving an average increase of over 1,665 *per annum* during eleven years past. On the 1st January, 1869, the estimated population was 21,869,607, and on the 1st January, 1870, 22,090,163, being an increase of 220,556 persons, of whom 6.909 *per mille* were recognised as insane; while the corresponding increase between the years 1859 and 1860 was 5.099 *per mille*, showing an advance of 1.81 *per mille* in the increase of lunatics above the increase of population; while the ratio *per 1,000* which the insane bear to the general population has gradually crept up from 1.90 in 1860 to 2.47 in 1870. The commission has now been in operation for twenty-five years, and it is hardly possible to imagine that the means of obtaining returns are much, if at all, more efficient than they were ten years ago, especially when we consider the great efforts which have always been made by the Commissioners to ensure accurate returns; and, even granting something for improvement in the machinery, and very much more for the increase of knowledge and skill exercised in the recognition of mental diseases, we cannot close our eyes to the fact that lunacy is on the increase. Again, the total number of lunatics discharged cured, is not increasing in proportion to the numbers who are coming under treatment. In 1859, out of 32,211 actually under treatment, as many as 3,270, over 10 per cent., were discharged as cured. In 1869, out of 46,199, only 3,801, or 8.2 per cent., were discharged cured.

We now turn to some of the leading features characterising the report, which almost commences with the following leading statement.

"Although in some instances it has been our duty to comment on shortcomings and cases of neglect, we have generally been able to bear testimony to the skill and zeal evinced by the medical superintendents in the execution of their very grave and difficult duties. The amount of responsibility thrown upon these gentlemen varies considerably in different counties, but in the majority of cases the committees of visitors wisely entrust them with very extensive powers.

"There are still asylums where the medical staff is not sufficient to render it practically possible that recent and curable cases should receive the amount of individual and personal care necessary for their treatment and restoration, and where, also, from the same cause, due supervision cannot be exercised over the attendants and nurses.

"This last most important subject will be fully dealt with elsewhere, and we regret that we shall have to describe several acts of violence committed by attendants in county asylums, which in three instances were followed by fatal results, but in only one of which, although careful inquiries were instituted, such evidence was obtained as would justify criminal proceedings."

In the next paragraph, the Report speaks generally of "the accommodation for pauper lunatics, which in some counties is still insufficient to meet the increasing requirements of the population." We, however, propose particularising, in order to give our readers a clear idea of the exact condition of our lunatic asylums, and of the manner in which our lunatics are treated and cared for.

The Secretary of State, in 1868, sanctioned additions to the Three Counties Asylum, near Hitchin; but the water-supply of the place was insufficient, and it is only now, after boring many hundred feet, that such a supply has been obtained as to warrant the commencement of the new building.

At the Carmarthen Asylum, opened in 1866, there is already urgent necessity for increased accommodation, while of the house now standing the Commissioners state:—

"Great inconvenience has been experienced here owing to culpable negligence on the part of the architect during the progress of the buildings, which was given up by the contractor in such a discreditable condition that very heavy expenses will have to be incurred in the repairs already become everywhere necessary."

In this asylum, on January 8th, 1870, Rees Price, a feeble, blind, and paralysed old man, died, having eight broken ribs. He was admitted without a proper examination of his person having been made by either of the medical officers; was sent into a ward without special directions in regard to his treatment, and not seen again until the following day, when he was found bruised and cut on the head and hand, and a difficulty of breathing was observed, but no personal examination made; and although the difficulty of breathing continued to increase until death ensued on the eighth day, both medical officers admitted that broken ribs were suspected, but no effort was made to ascertain the truth, and the patient was left without any surgical appliances, or medical treatment suitable to his injuries.

No fewer than seven instances of broken ribs are reported, viz.:—Lancaster Asylum, William Wilson: twelve ribs broken, three of them in two places. Hanwell, Santa Nistri: eight ribs and breast-bone broken. Carmarthen (detailed above), Rees Price: eight ribs broken. Salop and Montgomery, Thomas Jones: some ribs broken (number not stated) in an altercation in which undue violence was proved to have been used by the attendant. Wiltshire, H. V.: breast-bone and two ribs broken. Camberwell House, Candali: broken rib. The attendant Williams was seen to lift the patient up and drop him twice on the floor. This was proved by another attendant. Chorlton Workhouse, Callagham: broken ribs, number not stated, but shown to be due to violence.

With regard to the Wilts case, Dr. Thurnam, the Medical Superintendent, wrote a letter to the Commissioners, stating that it had been said "that, before admission, the deceased had repeatedly 'slammed' his chest with his open hand whilst under excitement;" and remarked, "I should not have thought this could have produced a fracture of the bone, still it is, perhaps, just possible." The Commissioners, however, make the following just comment:—"Such a possibility is so extremely remote in the case of a young man thirty-two years of age, that it may safely be set aside; and this case must, we think, be added to the list of those where death has been caused by violence."

But rib-crushing, though the favourite, seems not to be the only mode in which lunatics are hurried out of existence. It will be remembered that in the report for 1869 a patient at Northampton was boiled in his bath. The example so set has been followed no less than four times in the ensuing twelve months. At Hanwell, W. E. was left by his attendant to get into a bath of scalding water. At the North Riding Asylum, M. D. was left by his attendant to the tender mercies of a patient, who filled a bath with scalding water and placed the unfortunate M. D. in it. The attendant, instead of reporting

* Twenty-fourth Report of the Commissioners in Lunacy to the Lord Chancellor. Ordered by the House of Commons to be printed, 7th July, 1870.

the circumstance, rubbed the scalds with zinc ointment, pulled some woollen stockings on the man's legs, and took him into the airing court. The occurrence took place at 7 A.M.; it was reported by another attendant at 3 P.M., and the patient died nine days afterwards. The third case occurred at Newbury Union Workhouse; and the fourth at Frome Union Workhouse.

Another means by which lunatics are allowed to escape from their misery is rather less novel, being none other than suicide. No fewer than eight cases have been reported; two of them in the Gloucester Asylum, in reference to the first of which the Commissioners record their opinion that the circumstances "involved grave errors of judgment on the part of the Medical Superintendent"; and to the second, that it "showed a want of precaution as inexcusable." At the Suffolk Asylum the third case happened, in which the evidence "proved that there had been great neglect and mismanagement." A fourth case was at Dr. Monro's Asylum, at Brook House. The deceased, a lady, Mrs. D., a few months previously had, at home, thrown herself out of window and broken several of her ribs. "She was always considered and treated by Dr. Monro as disposed to suicide," and yet she was left alone in her bedroom, where there was an open cupboard containing a box of lucifer matches, with some of which Mrs. D. set fire to her dress.

Case No. 5 occurred at Dr. Hunt's Asylum, Hoxton House. A patient (Mrs. S.) having secreted a table-knife, cut her throat with it.

Of the three remaining cases, the commissioners state that "no blame was attributable to those who had charge of the patients except in one", which took place in Dinsdale Park (licensed to Dr. J. W. Eastwood), where there was "culpable neglect of duty on the part of the nurse". The patient was left alone, and hung herself from a low bedpost while the nurse was away dressing herself.

At Colney Hatch, fifteen patients, said to be destructive, were placed to sleep on the floor without bed or pillow, and the practice was sanctioned by the medical officers. In this asylum also we find Dr. Sheppard defending the practice of bathing more than one patient in the same water.

At Fisherton House, the patients complained to the commissioners that blisters, tartar emetic, and shower-baths, were used to quiet them.

At Newington's Asylum, Ticehurst, the nurses had a practice of restraining the lady-patients at night-time by fastening them to the bedstead and tying their feet together; and the assistant medical officer appears to have discovered the fact, but, instead of reporting it to his superior, contented himself by making an entry of it in the medical journal.

At Witham Asylum, licensed to Mr. T. M. Tomkin, a patient was found lying on a bench in an open rustic seat restrained by a strait-jacket, restlessly moving and moaning, and unattended by any one.

At Plympton House, licensed to Mr. S. Langworthy, upon which the commissioners comment unfavourably, a patient is described as "noisy, threatening, and abusive; his clothing disorderly, his person dirty"; and his room was in a filthy state.

We might fill all the columns of this number with details, so black is every page of this report; but more is unnecessary. We should have been surprised had the report been other than black, considering the horrible disclosures that have been made in the daily press during the past year, notwithstanding the numerous attempts to stifle the voice that has been raised, and the criticism of "clumsy exaggeration" applied to the remarks of a daily contemporary—remarks, however, which have found only too painful a confirmation in the Parliamentary Blue-book before us.

We have no intention of entering here on the question whether lunatics' ribs are more brittle than those of other people. If they are, lunatics require all the more careful handling. As it is, however, their treatment appears simply brutal; and we may properly inquire why such a state of things exists? and we think that the answer is to be found in the laxity of the law. The lunacy law is permissive; but since it involves the question of the liberty of the subject, and practically sets

aside the Habeas Corpus Act, it ought to be imperative, and ought to be worked by a commission in whom full power is vested.

The power of the present commission is almost *nil* as regards the county asylums. The magistrates under whose authority these establishments are placed, as a rule ignore the commissioners, and frequently take pleasure in opposing them, while they ask one another "Why they, who devote their time without remuneration to the affairs of the asylum should be dictated to by paid commissioners?" The consequence is, we have asylums growing to inordinate proportions and beyond the limit of the possibility of due supervision by its medical staff, which is seldom increased in ratio. On account of the ignorance and obstinacy and the penny-wise and pound-foolish policy of many committees of visitors, elaborate buildings are constructed often of unsuitable materials, and at enormous and unreasonable cost, while the patients may have their ribs crushed, be boiled, or commit suicide before a moderate and reasonable sum is expended upon sufficient and skilful attention.

Would the Commissioners have to censure medical superintendents if they were efficient? We think not. But why have not all asylums efficient superintendents? The answer is plain, when we remember that the service is most arduous and responsible, is badly paid, is very unpopular, and therefore is not recruited from the first ranks of the profession. There are certainly some very able men among the asylum superintendents; but the fact arises from the accident that most medical appointments and lunatic asylums are commonly regarded as a refuge for the destitute. Necessity rather than choice induces a younger man to take the post of assistant medical officer. This post leads to that of superintendent; but, as a rule, shuts him out from every other practice, and every other opportunity of professional advancement. A superintendent's appointment would hardly be given to a practitioner who had not passed through the apprenticeship of assistant medical officer; whilst a highly trained physician or surgeon, unless the victim of misfortune, would hardly seek such a position. But, however good a captain may be, without a good crew he cannot successfully manage his ship; and, however efficient a medical superintendent may be, he cannot manage an asylum well without good attendants. The wages of attendants are insufficient to tempt many respectable men into the employment, and committees of visitors even grumble at the amount of food they eat. The hours of duty are excessive, usually 6 A.M. till 8 P.M. The time for recreation is inadequate. Their labours, though not hard, are often sickening, are very tedious, and are monotonous to a degree, and require the special qualities of forbearance and gentleness; and our experience of the men who take such situations is, that they are half Herculean, half brute, almost uneducated, and without qualities or feelings above the animal appetites; often they are old soldiers, who only understand being driven, and are by habit neglectful. It is not to be wondered that they naturally conclude if a person, whether lunatic or not, is troublesome and unruly, the shortest and most certain means of controlling him is by knocking him down.

As for private asylums, the morality of the system may well be made a subject for investigation. Some proprietors live in a sort of terror of the Commission; others assume, more or less, a defiant attitude, and the Commission usually seem to tread lightly and with great caution in dealing with them. The system resolves itself into a study of parsimony and the question of the smallest outlay on the patient and the greatest return to the proprietor. But when a proprietor admits that he has not a sufficient number of attendants to take charge of the patients under his care, and will tie a poor creature up in a strait-jacket and leave him to the nominal care of a gardener's assistant, who is doing his ordinary duties in the garden, we have some little insight into the gross perversion of morality which seems to govern private asylums. The practical question is the remedy; which, we believe, is either in the abolition of private asylums, or in a more stringent law, and a more extended Commission. Already the work to be done is greater than the present Commission can easily compass.

The number of Commissioners might well be doubled; and if the

expense of an extended Commission be considered objectionable, Commissioners' salaries might be lessened. We ought, however, to have a sufficient number for the work; all asylums, both public and private, ought to be visited more frequently and inspected more searchingly; the Commissioners ought to have sufficient power to protect from harm the poor lunatic, who is imprisoned for no crime, but for whom the Habeas Corpus Act was passed in vain. And the Commissioners ought to be able to secure for every patient an honest return for the money paid for his or her care.

A POOR-LAW MEDICAL AND SANITARY SERVICE.

THE British Medical Association never appears to greater advantage than when, occupying itself with questions of public medicine, it addresses its energies to the solution of the problems of sanitary organisation. The nation owes to this Association, co-operating with the Social Science Association, the important investigations of the Royal Sanitary Commission, of which the issue is now, we trust, not far distant, and which cannot fail to end in important improvements in sanitary legislation. The temper of the House of Commons next year will be favourable to the consideration of such questions. Of this we have received many recent indications, and shall be able shortly to give some evidences. We give on another page an account of the proceedings of a deputation which waited last Monday on the President of the Poor-law Board, to urge on him the importance of a systematic national registration of disease. The case laid before Mr. Göschen was very broadly stated, and it was thought wise, while pressing for early measures for registering disease, to indicate to the President of the Poor-law Board the intimate connexion of that question with a general reorganisation of the sanitary service of the poor; for what is known as the Poor-law medical service is as largely a sanitary as a medical service. The relation of the two terms cannot be too strongly insisted on; and by giving to the Poor-law medical officers sanitary or preventive, as well as purely curative functions, their office will be rendered at once more useful to the nation, and more truly economic in its relations. This addition to and elevation of their functions will involve a reorganisation of the conditions of their service and of its remuneration. The whole bearing of the question was outlined by the deputation. To have filled in the sketch would have occupied more time than such an occasion afforded; but Mr. Göschen will be quick to seize the whole body of the argument of which the outlines were laid down before him, and he showed himself sympathetic with the object which our Association has in view. To organise the four thousand medical officers serving under the Poor-law Board as an active, disciplined, and co-ordinated sanitary corps is a scheme worthy of our great Association, and one which any minister might be proud to carry out. No other country possesses such a well distributed and well educated body of officers ready and able to take up this great work in a concerted and practical manner. It is not to be expected that so great a scheme can be carried out at the first word of proposal. But the ground is already tolerably clear; and if Mr. Göschen has the will and the courage to undertake to put the officers of the Poor-Law medical service fairly in possession of the sanitary field, we feel sure that he has the skill to arrange the details, and he will have the most energetic support from all quarters in carrying out an undertaking promising so largely for the national welfare.

BABY-FARMING.

IN a characteristic letter, which we publish in another column, Dr. Drysdale discusses the remedies which we have proposed for the evils of baby-farming. He belongs to the school of radical reformers; and, while giving some useful information as to the working of State supervision of baby-farming in France, he goes to what he considers the root of the system, which he believes to lie deep in our social regulations. We are not prepared to discuss here all the questions which he raises—not for the first time—as to “facility of divorce” and “limitation

of families”. We have the misfortune to differ entirely from him on these subjects; but at any rate we hope that none of our correspondents will follow him into that field, for it is beyond our purpose to open the columns of the JOURNAL to such a discussion. The present basis of society must here at least be taken for granted. It would, no doubt, be desirable that every mother should suckle her own child. What we have, however, in the present instance to consider is, how to deal with the children to whom mothers refuse or are unable to give individual and personal attention. The question to be considered narrows itself, therefore, to this: Is it better to leave such children to the unregulated mercies of uninspected baby-farmers, or is it desirable to provide State inspection for the helpless bantlings? In the latter alternative, what is the best method of procedure? To solve these questions has been our aim in the investigations which we have set on foot as to the method and results of baby-farming; and in the communications which we have published, our readers are cognisant of the various propositions of Mr. Hart in these pages and in those of the *Pall Mall Gazette*, to provide State regulations and to establish a “Society for the Protection of Infant Life”. Parallel labours have been recorded also by Mr. J. B. Curgenvin, Mr. Baker, and others. A society for the Protection of Infant Life is in process of formation; and we have other reasons for stating that this question will shortly assume a satisfactory and practical aspect. The first meeting to organise the proposed society will be held on November 1st, at 3 P.M., at the Rooms of the Social Science Association. The problem to be solved is eminently medical, and involves very difficult questions in connection with the care of infants. We invite the practical attention of our readers to the subject, and shall be glad to receive communications from them. The subject is one which so eminently demands medical experience for its solution, that we hope to see a good attendance of medical men at the meeting. There are many crude theorists whose propositions require to be tempered by medical experience.

MR. HARRY LEACH has been appointed Senior Medical Officer of the Seamen's Hospital Society, and Mr. W. Johnson Smith Surgeon to the Institution.

THE Merthyr Tydvil Board of Guardians, at a recent meeting, appointed an officer to prosecute all persons throughout the Union who neglected to have their children vaccinated.

BY order of the Ministry of the Interior at Vienna, several surgeons have been appointed to co-operate with the police in investigations requiring the exercise of professional skill.

MR. WANKLYN, who is one of the candidates for the vacant Chair of Chemistry at St. Bartholomew's Hospital, was last year elected a Corresponding Member of the Royal Bavarian Academy of Sciences; a similar distinction being conferred on Dr. Frankland on the same occasion.

DR. HUGHLINGS JACKSON has, in accordance with a recent regulation of the London Hospital, received the title of Physician to that hospital, having held the post of Assistant-Physician seven years. There is no change of duties.

THE CLINICAL SOCIETY.

THE Clinical Society met for the first time this session on Friday of last week, in its old quarters, the rooms of the Royal Medical and Surgical Society, Berners Street. Mr. Paget, the President, occupied the chair; and, if the attendance on the first night may be considered as evidencing the popularity of the step which the Council have deemed it desirable to take in returning to Berners Street, we anticipate an useful and well attended succession of meetings this year. Papers of interest were brought forward by Mr. Spencer Watson, Dr. John Harley, and Dr. Ogle; the last, on a case of Tetanus, exciting a prolonged discussion.

LINCOLN COUNTY HOSPITAL.

AT the Quarterly Meeting of the Governors, it was resolved to rescind the rule that all officers of the Institution should be members of the Church of England, on the understanding that at the next meeting another rule should be passed making it compulsory upon all officers and servants employed in the building to attend the religious services held in the Hospital.

MEDICAL SOCIETY OF LONDON.

ON Monday last, John Gay, Esq., President of the Society, opened the ninety-eighth session with an introductory address on the Limitations of Surgical Art. The speaker was listened to with much attention; and, at the close of the address, a vote of thanks, proposed by Mr. de Méric, and seconded by Dr. Richardson, was unanimously accorded. Dr. Andrew Clark then read the paper of the evening, on Local Inflammations in certain defined conditions as causes of Pulmonary Phthisis.

HIGHGATE INFIRMARY.

ON Tuesday, the members of the Metropolitan Sick Asylum Board, under the presidency of Alderman Sir Sydney H. Waterlow, took formal possession of and inaugurated the Highgate Infirmary as the hospital of the sick poor of that division of the metropolis which comes under their control, viz., the parishes within the city of Westminster, St. Pancras, Bloomsbury, and Holborn. There will be accommodation for about 550 patients, exclusive of the staff, which is of the most perfect description, including the Nightingale nurses.

VACANT CHAIRS.

WE are informed that Dr. Roscoe and Mr. Vernon Harcourt, whose names have been mentioned as intending candidates for the Chair of Chemistry at St. Bartholomew's Hospital Medical College, are not, and do not propose to be, candidates. Among chemists whose names are mentioned are Messrs. Maxwell Simpson, Wanklyn, Duprè, and Russell. Mr. Bloxam will, we hear, most probably succeed to the Professorship of Chemistry at King's College, if its duties be found compatible with his other important engagements.

RURAL SITES FOR CIVIC SCHOOLS.

THE experience of the managers of the School for the Indigent Blind, one of the most valuable of our metropolitan institutions, has shown that the health of its inmates, notwithstanding everything that can be done in the way of sanitary arrangement, good food, and medical care, has suffered in a way which nothing but their removal from St. George's Fields to the purer air of the country can effectually remedy. This necessity was recognised by the society nearly twelve months ago; and, at a committee meeting, a subcommittee was appointed with ample power to select a site and to adopt other prompt and active measures for carrying out this desirable object.

THE ENGLISH AMBULANCE TRAIN.

ON the evening of October 13th, the paddle steamer *John Bull*, chartered of the General Steam Navigation Company by the National Society for Aid to the Sick and Wounded in War, sailed from the Royal Arsenal, Woolwich, with an ambulance train, complete in all its arrangements, and intended to operate in the neighbourhood of Paris. The destination of the vessel was Havre, whence the stores and attendants proceeded by rail as far as Rouen, thence by road to Versailles, where it is hoped that permanent quarters will be assigned them by the King of Prussia. The personal staff consists of Dr. Thomas Guy, Deputy Inspector-General of Hospitals, who will be director and general medical officer; Mr. Reginald Shee, secretary; Mr. J. S. Young, of the Army Control Department, commissary; Surgeon J. H. Porter, 97th Regiment; Staff-Surgeon Tertius Ball; Surgeon W. G. N. Manley, V.C., Royal Artillery; Staff-Surgeon J. Jameson; Assistant-Surgeons McNalty, Power, Moore, Melladew, Macrobin, Malcolm, and Barroll; twenty-seven ambulance attendants, one dispenser, and three grooms.

There are already at Havre one veterinary surgeon, fifty-two drivers, three cooks, and a number of horses. The stores comprise eight ambulance-waggons and twelve store-waggons. Each waggon will be drawn by four horses, suitable sets of harness having been purchased with them from the War Department; and each ambulance will accommodate six wounded men. The store-waggons are for the conveyance of camp equipage, provisions, etc. The hospital will consist, unless a building be set apart, of twelve hospital-marquees and twenty bell-tents, which will accommodate at least two hundred patients. These marquees, and the field equipment of bedding, utensils, etc., will be transported in the store-waggons until their destination is reached. Provisions sufficient for two patients and 100 attendants for ten days accompany the ambulance, and a regular system of weekly supply will be organised by the Society, with Havre as a basis. Lord Bury met the ambulance-train at Havre, where he has been for some time purchasing horses and engaging drivers, and it moved forward without delay towards Versailles.

HOSPITAL NECROPSIES.

THE decision of Mr. Ellison has already borne good fruit. We reported last week the rule newly adopted at Guy's Hospital by which necropsies are to be specially authorised by the bye-laws, unless a preliminary objection be registered by the friends of the patient. On Tuesday, at the Southwark police-court, a woman complained that a *post mortem* examination of her husband's body had been made by the medical authorities of Guy's Hospital without the applicant's consent. Her husband had died in the hospital of typhoid fever, and, in reply to the magistrate, the woman said she had given no orders that the body should not be opened, as she did not think there was any necessity to do so. Mr. Partridge stated that he could not interfere, as the Anatomy Act gave the hospital authorities the power to make a *post mortem* examination, provided no objection was offered by the relatives of the deceased person.

YELLOW FEVER.

FOR nearly seven weeks yellow fever, happily of a not very virulent type, has prevailed on Governor's Island, New York. All this time, till within a day or two, communication has been perfectly free between the island and the city, and it is feared that the contagion has spread to the poorer and more crowded quarters. During the seven weeks, one hundred persons have been attacked on the island, and about twenty-five have died.—Yellow fever still prevails at Barcelona, and panic reigns. The *Telegraph* of that place says that, in the principal streets alone, no fewer than 731 houses are closed. On the 29th ult., there were thirty-nine admissions into hospital, and thirty-seven deaths; on the 1st inst., thirty-five admissions and twenty-five deaths; and on the 2nd, forty-seven admissions and twenty-two deaths. The suburbs of Barcelona have suffered most, and have been evacuated by order of the alcalde. Yellow fever also prevails at Alicante. On the 3rd, twenty cases occurred. The panic there is as great as at Barcelona. Many are leaving. Much misery prevails amongst the working classes, in whose aid the municipality can do nothing for lack of funds. There was a talk of levying a forced loan upon the rich, and disturbances were dreaded.

THE FOOT-AND-MOUTH-DISEASE AMONG CATTLE.

THE present epizootic of foot-and-mouth disease has spread very extensively among the cattle in some parts. In Somerset and Dorset, and in some parts of Wiltshire and Hampshire, it has prevailed widely, mostly among horned cattle, pigs being affected in some instances. In the North and East Ridings of Yorkshire there is a diminution in the number of new cases—probably, as often occurs in zymotic diseases, in consequence of the exhaustion of the supply of subjects liable to attack. At the dairy-farm of the Feltham Reformatory, the disease has broken out among the cows. The outbreak is attributed to the employment of sewage-irrigation—at least, a theory has been advanced that this may to a certain extent have predisposed the animals to

attack. This theory, however, seems not to rest as yet on sufficient evidence to justify its adoption. The foot-and-mouth disease is undoubtedly and very highly contagious; and it is by this property that its spread is to be accounted for. The mortality has been apparently slight. Some deaths are said to have occurred at Weston Zoyland and Chilton Polden, in Somerset; but, on the other hand, Mr. Superintendent Jeffs reports that, from August 20th to October 1st, the number of diseased animals in the Bridgewater district amounted to 1,838 cows, 544 heifers, 431 oxen, 145 calves, 38 bulls, and 43 pigs—none of which died.

THE NEW ANTISEPTICS.

THE following note from Mr. Squire, of Orchard Street, to Mr. John Gamgee, relates to the use of the chloride of aluminium, or chlor-alum, as an antiseptic employed for medical purposes, to which we last week referred.

"In reply to your inquiry as to my experience of the chloride of aluminium, I beg to state that I found it of the highest utility.

"1. As a substitute for Burnett's disinfecting fluid; used somewhat more dilute than the form supplied, it was a most convenient means of disinfecting secretions in the utensils of the sick room, and, moreover, without the danger and disadvantage of being a dangerous poison.

"2. Used of the full strength to deodorise water-closets and defective drains, no great quantity was thus applied, for this use of it was considered wasteful. Not only is it better to remedy the cause of offence at once, by removing the defect, but the value of the solution of aluminium medicinally was found to be very great.

"I have used the chloride of aluminium in the proportion of one part to twenty or thirty of water, as an astringent lotion; in a still stronger form, as a direct application to the throat, in some cases of diphtheria; largely diluted, ten grains to an ounce, as a gargle; still more dilute, three to five grains to an ounce, as an internal remedy; and, lastly, of the same strength as the gargle, in the form of a spray, in the third stage of whooping cough. Details of a case in which this was used with remarkable benefit are given in a paper of mine read at the Obstetrical Society of London in May."

CRIMINAL LUNATICS.

WE learn from the Judicial Statistics for 1869, just published, that the criminal lunatics under detention in the different asylums, hospitals, and licensed houses during the year amounted to 747, of whom 644 were at Broadmoor State Asylum, and 186 in county asylums. Under the Act 30 Vict. c. 12, pursuant to which criminal lunatics whose term of punishment has expired are not afterwards to be considered as criminals, but are to be treated as pauper lunatics, 70 lunatics ceased during the year to be considered as criminals, making, with the numbers of the two previous years, 899 to whose cases the provisions of the Act have already applied. The number of criminal lunatics under detention at the commencement of the year was 585, and 162 were committed during the year, making up the before-mentioned number of 747. Of this number 35 died, 8 escaped, 18 became sane and were discharged, 8 were removed sane for trial or punishment, 4 were removed to other asylums, and 70 ceased to be criminal lunatics under the before-mentioned Act, leaving 604 under detention at the end of the year. The total number during 1869 is less than the total number in 1868 by 206, following a decrease of 291 on the numbers for 1867. The average cost per head in the State Asylum at Broadmoor was £64 : 8 against £67 : 4 : 9 in 1867. For the 35 county asylums in which criminal lunatics were under detention during the year the average cost per head was £24 : 9 : 2 against £25 : 1 : 2 in 1868.

THE PROPAGATION OF DISEASE.

Dr. GEORGE JOHNSON has pointed out in our pages that probably one of the reasons for the chronic state of scarlet fever which prevails in the metropolitan district is the condition of the houses of the laundresses to which clothes are sent to be washed, and the promiscuous mingling of linen which there takes place. An illustration of the truth of this remark may be found in a report of the proceedings of the Hampstead vestry, which appears in the *Hampstead and Highgate Express* of last week. The clerk to the guardians forwarded to the vestry an extract

from the report of Dr. Cook, their officer, calling attention to an outbreak of scarlet fever at Oriel House, Little Church Row, in that parish, and asking the vestry to take steps for its arrest. Dr. Cook stated that he had been called upon to attend an infant in Buckland Crescent, and found that the family's washing was done at Oriel House, where there was a man suffering from dropsy and fever, and where three cases of scarlet fever had proved fatal. From this focus it had spread to the child at Buckland Crescent. He also understood that a woman in the house divided her time between nursing another woman in her confinement and attending to the man with the fever. The guardians treated the report with ignorant indifference. But their perverse and cruel folly has received the public castigation which it deserves. We trust that medical men will not fail to press upon public bodies their duties in these sanitary matters, and we shall be glad to have our attention called to the results of their representations, *favourable or otherwise*.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE first meeting of this Association for the session was held at the Scottish Corporation Hall on Saturday last, October 15th; Dr. Druitt, President, in the chair. The President delivered an address, in which he took a general review of the field of sanitary operations, noticing the points that seemed most to require attention. He spoke of the prevalence of scarlet fever, the registration of diseases, the Contagious Diseases Act, the anomalies of the Poor-laws, and other matters. He expressed a hope that a consolidation and amendment of the laws relating to the public health would soon result from the labours of the Sanitary Commission.

THE PREVENTION OF SCARLET FEVER.

Dr. WHITMORE, in his monthly report on the health of the parish of Marylebone, after deploring the difficulties of limiting the dissemination of scarlet fever, owing to the apathetic disregard amongst the poorer classes generally of even the simplest measures of prevention, adds:

"It has not unfrequently come within my personal knowledge that some medical men (and I believe there are but few such), when called in to attend cases of scarlet or typhoid fever, are not sufficiently earnest in impressing upon the mother of the sick child the great importance of isolation in such cases, nor do they trouble themselves to give sufficiently explicit instructions as to the proper use of disinfectants. My Inspector frequently finds, on visiting a child suffering from fever of any kind, that nothing whatever has been done to prevent other persons in the house from catching the disease; and, on his remonstrating with the parent, she will probably tell him that the doctor might have told her to use chloride of lime, but that was all. Now, I venture to suggest that, in the treatment of all infectious diseases, the medical attendant should have in view the twofold objects of prevention as well as cure. His primary duty should be to place, so to speak, a *cordon sanitaire* around his patient, beyond which the infectious germs cannot pass, and having done that, apply his talents to the treatment of the disease; but the mere sprinkling of a little carbolic acid or chloride of lime about the sick chamber will not accomplish the object of thorough disinfection; it requires to be more skilfully and carefully done, and, inasmuch as the poorer classes generally are altogether ignorant on such matters, and very hard to teach, it becomes the duty of the medical attendant either to do it himself or to entrust the work to competent hands."

SCOTLAND.

UNIVERSITY OF ABERDEEN.

Dr. ANGUS FRASER and Dr. Fiddes of Aberdeen, and Dr. Traill of Monymusk, have been appointed Medical Examiners in the University of Aberdeen.

THE CHILDREN'S HOSPITAL, EDINBURGH.

ON Wednesday the Prince and Princess of Wales visited the Sick Children's Hospital, and inspected the wards under the guidance of Dr. Matthews Duncan, Dr. Peel Ritchie, and Dr. Gamgee. Their Royal Highnesses expressed their great satisfaction with the arrangements, and with the general comfort of the hospital wards.

THE GOODSIR MEMORIAL IN THE UNIVERSITY OF EDINBURGH.

WE understand that an effort is about to be made to complete the scheme for a memorial to the late Professor Goodsir, which was commenced three years ago, and came somewhat abruptly to a close after a sum of over £600 had been collected. It is now proposed, as being perhaps more suitable, to found a Goodsir Scholarship in Anatomy, open to undergraduates, instead of a Fellowship for competition amongst graduates. To carry out this scheme, further subscriptions to the amount of £200 are needed; and, as many who have promised support have not yet paid their subscriptions, and many more of the professor's former pupils in various parts of the world have as yet not given in their names, it is confidently expected that the necessary sum will before long be paid up, so that the Scholarship may be founded within the next year. Dr. Dyce Duckworth, 11, Grafton Street, Piccadilly, Secretary (for London) to the Fund, will receive subscriptions.

THE ROYAL INFIRMARY, EDINBURGH.

OUR readers are already familiar with the warm discussions which led to the determination to build a new home for this great hospital on the grounds of Watson's Hospital, and that the new building should accommodate the surgical as well as medical patients. The property was purchased for £43,000.

"Having at his disposal 11½ acres of ground of sloping surface, the architect, Mr. Bryce, proposes to cover that area with buildings to the extent of six acres, leaving the remaining space to be appropriated chiefly as recreation ground. The general scheme of construction adopted is that known as the pavilion system. Another point kept steadily in view has been the arrangement of the hospital wards so that their windows shall look east and west, and have the morning sun on one side and the afternoon sun on the other all the year round. The main front will face the important thoroughfare of Lauriston. The style adopted is an adaptation of the old Scottish architecture; and all who know Holyrood Palace will recognise in the frontage some resemblance to the venerable pile. At each end of the central building, which is intended for administrative purposes, there is a low range of corridors giving access to the pavilions, containing the surgical wards of the hospital, four of which show in the north front. The two inner pavilions form, with the central buildings, three sides of a square, which will be used as the carriage access to the main entrance. On each side of the central block there is an airing-ground, being the space enclosed between two pavilions and the corridor at the back connecting them. The pavilions are two storeys in height, besides basements. The entire length and width of each storey constitutes a ward. In each ward a portion next the corridor is appropriated for kitchen, doctors' and nurses' rooms, convalescent and private wards, etc., while the interior of the towers at the opposite ends is turned to account for necessary offices. In all there are in the surgical house sixteen wards, containing 260 beds; but this includes the accommodation afforded by two additional pavilions running south from the connecting corridor. Each ward is complete in itself; it has a range of windows and a fireplace on each side; and the beds are placed between the windows, at a distance of nine feet from each other. It will thus be seen that everything has been done to ensure free air and sufficient ventilation. In addition to the wards above-mentioned, there are in the surgical hospital three reserved wards, with forty-eight beds, which may be used when it is necessary to vacate any of the ordinary wards. The operating theatre will be situated in the rear of the surgical house, and will communicate with the present hospital buildings, which are to be made use of as residences for officers and as administrative accommodation. Further down the slope will be placed the medical house, similar in its main features to the surgical hospital, the intervening ground, to the extent of 140 feet by 80 feet, being reserved as a recreation-ground for patients. The medical house will consist of seven pavilions, five branching off to the south and two to the north of a long corridor stretching east and west. The round towers and stepped gables of these pavilions will constitute a prominent feature of the building when viewed from the Meadows. In the medical, as well as in the surgical hospital, a clear space of about eighty feet will be preserved between each pavilion, and the wards appropriated to male patients will be quite distinct from those intended for females. The Medical Hospital will contain fifteen wards, with three hundred and forty beds, besides four reserved wards with one hundred beds, capable of being used in cases of emergency. Altogether, the two hospitals will afford accommodation for six hundred patients, exclusive of the accommodation afforded by the reserve wards. In both the hospitals provision is made for class-

rooms suitable for clinical instruction. A fever-house, with forty beds, will be erected to the south-west of the surgical hospital, and near this will be situated the pathological house, with spacious lecture-room, the mortuary, workshops, etc. The unoccupied space on the south side, next the Meadows, will probably be laid out as a pleasure-ground; and access to the whole establishment will be afforded by two gates, one at each end of Lauriston front."

The foundation-stone of these buildings was laid with great state on October 13th, by H.R.H. the Prince of Wales, accompanied by the Princess. The Masonic order was represented very largely in the procession, nearly four thousand masons being present; the Lord-Provost and the Town Council, the University authorities, and the Royal College of Physicians and Surgeons, and the Medical and Surgical Staff, were adequately represented. The Prince laid the foundation-stone with all due ceremony, and expressed gracefully the interest which he and the Princess feel and consistently display in public charities of such importance. Subsequently the Prince has sent a cheque of £100. The whole ceremony was one which did credit to His Royal Highness, and puts in a just light the important services which this great institution has rendered and is yet destined to render to science and humanity.

IRELAND.

QUEEN'S UNIVERSITY.

AT the annual meeting for degrees of the Queen's University, the Marquis of Kildare, the newly elected Chancellor, said, in referring to the Medical Faculty: "Mr. Joseph O'Brien, of Queen's College, Cork, a Master in Arts, about to take the degree of Doctor in Medicine, obtained the second place at the competition for the Indian Medical Service. Dr. Hastings, Dr. Lloyd, Dr. Daniel Martin, and Mr. Arthur B. Smyth, also obtained places in the same service. Dr. William Sweetman, Mr. William D. Isaac, Mr. William S. Sandham, Dr. James L. Sweetman, Dr. Alexander Trousdell, Dr. Thomas O'Sullivan, of Queen's College, Galway; Dr. William Colahan, of the same College; and Dr. Charles Hames, of Queen's College, Cork, obtained places in the Naval Medical Service by competition."

QUEEN'S COLLEGE, BIRMINGHAM.

ON the evening of October 4th, a *conversazione* was held at the Great Western Hotel, Birmingham, in connection with the opening of the Winter Session at Queen's College. The gathering was devised by Dr. Balthazar Foster, with the object of forming a social party which should bring teachers and students together, and thus improve their mutual relations. The meeting, which was the first of the kind held in connection with Queen's College, was very successful, and combined a great deal of instruction with amusement. The objects exhibited were interesting and varied. The contributors and contributions were as follows:—Microscope and microscopic objects, Mr. T. Fiddian; microscope and objects, Mr. W. P. Marshall; microscope and objects, Mr. C. T. Parsons; maps illustrating the geographic distribution of disease in England and Wales, Mr. Alfred Haviland; the stetho-sphygmograph—an instrument for recording synchronously the movements of the heart, pulse, and lungs, Dr. Hawksley; microscope and objects (palates of the mollusca and mosses), Mr. C. Pumphrey; Mr. W. P. Marshall's mounting and dissecting microscope, simple and compound (Field), Mr. R. Field; crystalline forms of salts shown by oxhydrogen microscope, Mr. A. W. Wills; experiments illustrating the production of white light from the colours of the spectrum, Mr. C. J. Woodward; photomicrography of magnesium light, Mr. F. Fowke; microscope and objects (myelin-tubules), and ancient British flint weapons, Mr. Lawson Tait; series of Upper Silurian fossils, Mr. S. Allport; ancient flint weapons, etc., and geological specimens, Rev. H. W. Crosskey, F.G.S.; improved and complete case of obstetric instruments, Dr. Earle; urinary deposits, etc., Dr. Welch; pathological and surgical drawings, Dr. Jolly; laryngoscope and apparatus, Dr. Sawyer; illustrations of medical pathology, Dr. Russell; experiments on the formation of the rouleaux by the blood-corpuscles, Dr. Norris; illustrations of surgical pathology, Mr. Pemberton; series of physiological diagrams, Mr. Bartleet; surgical diagrams, Mr. Furneaux Jordan; British poisonous plants, Dr. W. Hinds; singing flames, etc., Dr. Hill; ophthalmoscope, Mr. Solomon; sphygmograph, atmograph, and cardiograph, Dr.

Foster; medical electrical apparatus and pharmaceutical preparations, Dr. Mackey; surgical instruments, Messrs. Salt and Son; graphoscope, etc., Mr. Lancaster; photographs, etc., Messrs. Hill and Thrupp; new books, etc., Messrs. Cornish Brothers. Mr. A. J. Sutton and Mr. Micklam entertained the party with pianoforte music during the evening.

THE METROPOLITAN MEDICAL SCHOOLS.

THE registration of students in our eleven metropolitan medical schools has closed. The result shows that there is an increase in the number of freshmen of 18 over the number of last year, instead of, as was expected, a decrease in consequence of the great number of rejections in June and September last at the Arts Examinations at the College of Surgeons and Society of Apothecaries. Last October, there were 1,241 students in the eleven metropolitan hospitals. This year there are 1,298.

	New Entries.	Total Students.
1. Guy's Hospital	102	302
2. St. Bartholomew's Hospital	75	251
3. University College	72	207
4. St. Thomas's Hospital	48	105
5. King's College	36	110
6. London Hospital	23	84
7. St. George's Hospital	23	77
8. Middlesex Hospital	19	45
9. St. Mary's Hospital	15	53
10. Westminster Hospital	11	24
11. Charing Cross Hospital	9	40
Total.....	433	1298

PATHOLOGICAL SOCIETY OF LONDON.

THE first meeting of the Pathological Society for the present session was held on the 18th instant. The President, Dr. Quain, on taking the chair, briefly congratulated the members on again meeting together for the work of a session which he hoped would be as marked as its predecessors for utility and progress. He expressed the regret of the Council that, owing to the illness and subsequent death of one of the artists into whose hands a large share of the illustrations had been committed, the volume of *Transactions* was not yet ready for distribution; but he was authorised by the editing Secretary to say that a volume second to none of those that had preceded it would be in the hands of the members before the next meeting. Several of the members of the Society had died during the recess, and their places would know them no more. He briefly referred to those gentlemen. Speaking of Mr. Nunneley of Leeds, he said that that gentleman had gained for himself, by his ability and his energy, a conspicuous position in provincial surgery; and, notwithstanding the active engagements of his large practice, he found time to devote his attention to pathological and other scientific researches. As the volumes of the Society testified, he was a frequent contributor to, and not seldom an attendant at, the meetings. Mr. J. Zachariah Laurence had at one time been a frequent attendant at the meetings, and a contributor to the *Transactions*. During a life too soon cut short, he had published several useful memoirs on the subject of ophthalmology, to which he had devoted himself. Mr. C. Hewitt Moore had earned a distinguished reputation by his very able scientific investigations, more especially on the nature and treatment of malignant disease. Mr. Moore had not been long a member of the Society; but his contributions might be reckoned as some of the most valuable made to the *Transactions*, whilst his personal worth made his presence always acceptable. Dr. H. L. Rooke, as one of the surgeons to the *Dreadnaught*, had fulfilled the duties of his mission in such a manner as to cause his name to be widely known and respected, and his loss to be lamented. The President spoke feelingly of the loss of one who had been his predecessor in the chair—Dr. Copland. He was present at the earliest meetings of the Society, had been its Treasurer and its President, and its constant friend and supporter. Dr. Copland was universally known by that monument of learned industry, his *Medical Dictionary*—a work which, though it may be in many respects behind the rapid lines of investigation, thought, and progress of the present day, would ever remain a library of useful knowledge—a record of the labours of our predecessors—a mirror before which original investigations may be sometimes held before being published as such. Dr. Copland had many other claims to respect in a scientific point of view. He might be remembered as a kind and warm-hearted friend, a genial and hospitable host. Dr. Quain, in conclusion, whilst lament-

ing these losses, said it was gratifying to see, session after session, the number of zealous young physicians and surgeons adding themselves to our ranks, and devoting themselves to advancing the knowledge of scientific pathology, the basis of sound practical science.

Some interesting specimens were shown by Mr. Christopher Heath, Dr. Moxon, Mr. Morris, Dr. John Murray, Dr. Bristowe, Dr. Crisp, and others. There was a good attendance, and the session opened with good promise.

NOTES OF THE WAR.

MR. NORTON, of St. Mary's Hospital, and Mr. Savile, a Member of the College of Surgeons, and dental surgeon, give a very interesting account in the *Times* of their management of an ambulance at Briey. They had a dépôt as well as an ambulance; and their work extended to the distribution of stores, as well as the charge of patients. Although surgically uneventful, the charge of the ambulance must have been full of interest and experience. Unfortunately, dysentery and pyæmia marred the results of the cases which had been previously operated on, and of which they took charge. This ambulance was one which was notably useful; and we had an opportunity of observing the energy with which Mr. Norton devoted himself to its organisation, and to obtaining supplies for it.

AUTHENTIC RECORDS OF THE WAR.

THE central directory at Berlin has published the following statistical account of the sick and wounded received into the hospitals from the beginning of the war up to the evening of September 28th. At this time, the number of sick and wounded had reached 54,450. Reports had been received from 1,188 lazareths, of which 48 were field and war-hospitals, the remainder being reserve lazareths and private hospitals. Out of the total number, 4,597 had become capable of removal as convalescents, or had been removed to hospitals at a distance or by their friends. The number of those who remained in the field or were left at the stations as cured was 3,808; of these, a small portion appear to have been invalided. There were 518 deaths in the lazareths. The percentages were, according to the numbers above given, as follows: convalescents, 8.44; cured, 6.90; invalided, 0.08; died, 0.95.

PROFESSOR BILLROTH ON THE GERMAN AID-SOCIETIES.

PROFESSOR BILLROTH, who has lately returned to Vienna from his visit to the seat of war, whither he was sent by the Austrian patriotic Aid-Society, has addressed to the President of the Society a letter, from which the following is an extract.

During my service in the field, I became convinced that a noble duty is being performed by the aid-societies. Here and there, there has been a pressing want of material and of assistance; but this has arisen from the mode of distribution and the nature of these articles—circumstances over which the Johanniter and the aid-societies were often powerless, since, in war, the supplies necessary for the advancing troops require the first consideration. Immediately after a battle in an enemy's country, there will always be a want of surgeons and appliances for dressing and supporting the patients; and this want could only be obviated by the general in command giving notice about three days beforehand that a battle was about to be fought, and that a certain amount of loss was expected. As this is impracticable in the great chess-game played by nations one with another, all that can be done is to adopt the plea "c'est la guerre", and regard the evil as unavoidable. The Johanniter and members of the aid-societies, with their abundant material and numerous surgeons, have in this war been much better prepared for the battles than on previous occasions. The long period of inactivity before the fights must here and there have given many opportunities of communication; and the result has been that, in a period varying from twenty-four to forty-eight hours, after the most extensive battles, the fields and woods have been cleared of the killed and wounded, and the latter have been dressed and placed under roof. Some have lamented that this was not done in a much shorter time. For my part, I think that the performances, in the circumstances, have been truly colossal. In earlier times, without the help of civilians, more than a week would have been occupied in clearing such great battle-fields as those of Wörth, Gravelotte, and Courcelles. Even with the systematic use of telegraphs and railways, two or three days must always elapse before the slightly wounded can be sent on, and before sufficient material can be brought together to set up lazareths on the spot for the reception of from three to five hundred severely wounded. As long as the war continues, a constant succession

of supplies to the lazareths is necessary. In sending material to the dépôts at Berlin, Munich, Stuttgart, Carlsruhe, Frankfort, Mannheim, or Cologne, it is highly advisable to inquire what is really needed; for (says Dr. Billroth) I too often saw enormous masses of some materials uselessly accumulated, while of things really wanted there was a deficiency.

THE REGISTRATION OF DISEASE AND THE POOR-LAW.

JOINT MEETING OF COMMITTEES OF THE BRITISH MEDICAL AND POOR-LAW MEDICAL ASSOCIATIONS.

ON October 14th, the combined Committees of the British Medical Association and of the Poor-law Medical Officers' Association met at the Royal Medical Benevolent College, Soho Square, to consider the reference made to them by their respective Associations as to the best means of pressing for the adoption of a system of Registration of Sickness and Disease. Mr. RANDOLPH ROBINSON, who was introduced to the Committees as a gentleman connected with several hospitals, was requested to preside.

Dr. JOSEPH ROGERS opened the proceedings by explaining that he had attended the meeting of the British Medical Association at Newcastle, and read a paper on the relief of the poor. The facts which he stated were so startling that a Committee on Poor Relief, which had been in abeyance, was reappointed, and he was requested to put himself in communication with gentlemen who were interested in the subject. He had done so; and Dr. Rumsey, who acted for the British Medical Association, had suggested the names of other gentlemen. Having read a list of names of gentlemen who were willing to associate themselves with the Committees, he proceeded to state that he had, in conjunction with Dr. Rumsey, Dr. Ransome, Dr. Anstie, and others, drawn up propositions, to which he desired to obtain the assent of the meeting, in order that they might be laid before Mr. Göschén, who had consented to receive a deputation upon the subject of the registration of disease, as the views of the conjoint Committee. The speaker said that he knew Mr. Göschén was favourable to the object of the deputation, and to wait upon him merely to press that question would be to ask his assent over again; so that it became desirable to urge other points, and to draw up certain propositions to meet the questions which the President would naturally put. The meeting had been called somewhat precipitately together; for, as they had been told that Mr. Göschén would meet them in the last week of the present month, it had not been intended yet to summon them; but, as Mr. Göschén had appointed Monday for the meeting, it had become necessary to summon the joint Committee at once. The propositions which he submitted were as follows. The words in brackets were subsequently added.

1. That medical relief and the sanitary care of the poorer classes [with which the registration of diseases is indissolubly connected] are questions which ought not to be treated independently of each other; and that they require to be settled on improved principles, by a connected and consistent scheme of legislation and administration.

2. That, with regard to medical relief under the Poor-law, it is desirable to establish in England and Wales a system of District Dispensaries, similar in many respects to that which has been for some years in operation in Ireland [of which a system of registration of disease forms an important part] with great benefit, not only to the sick poor, but also to the public health and the control of pauperism; and that, in every district, medicines and other remedial appliances be provided, under inspection, at the cost of the local authorities.

3. That, in order to secure efficient treatment of the sick poor, and adequate remuneration to their medical attendants, it is important that the area and population of medical districts, and the salaries of the medical officers, be re-settled [as far as practicable] on an uniform basis, by a code of regulations or general orders, having statutory force; no local exemptions being permitted without the sanction of the central authority.

4. That the position, the tenure of office, the qualifications, and the duties of the medical officers be determined and regulated by the same code of regulations; and that the salaries of the medical officers be defrayed either wholly out of the Consolidated Fund, or partly from that Fund and partly from a county rate.

5. That a general registration of disease be instituted; and that all new cases of sickness, etc., coming under treatment at the public cost, whether in union districts and workhouses or in public and charitable institutions, be returned every week or oftener in times of pestilence [according to an uniform system of nomenclature and record], by the re-

sident medical officers of such institutions, and by the Poor-law medical officers, who should be fairly remunerated for this addition to their labours.

6. That the above returns of disease be collected and revised by a registration medical officer, or by a medical officer of health acting as such, in every superintendent registrar's district or group of districts, so as to constitute a register for the use of local authorities; and that a copy thereof be forwarded at stated intervals to the central authority.

7. That certain preventive duties relating to the sanitary condition of the poor be performed by the Poor-law medical officers, as deputy health-officers; and that they be paid for such sanitary duties on a scale to be determined by the central authority.

8. That, in order to rectify and prevent abuses, the medical and sanitary care of the poor in districts and workhouses be subjected to periodical inspection, either by the proposed chief officer of health, debarred from private practice, or by medical inspectors under the central authority, or by both.

9. That, in any re-arrangement of sanitary organisation resulting from the inquiry of the Royal Sanitary Commission, it is desirable that the foregoing propositions should be embodied.

On the first of these propositions being read, Mr. ERNEST HART said he should like to ask Dr. Rogers if it had been quite understood that so large a question as was laid out in these propositions was to be now entered upon. As he (Mr. Hart) understood the matter, there were two Committees, formed by the two Associations; one to consider the question of the registration of disease; the other, that of poor-relief. This latter was a question that required to be specially considered; it was a very wide question indeed—one that involved the most careful consideration; and it could not be very satisfactorily dealt with at one meeting. In the notice issued calling the present meeting, the subject mentioned was "registration of disease" only; but the propositions now submitted went into the whole of the great question of poor-relief. He considered that the meeting should consider the position in which they stood; for, though the propositions were admirable in themselves, he feared that, by bringing them in merely as an adjunct to the question of "registration of disease," which was the object for which Mr. Göschén had consented to receive the deputation, their full importance was not likely to be developed. Mr. Göschén, too, might object to anything in the nature of a surprise.

Dr. STALLARD agreed with the views expressed by Mr. Hart. There was not a word in the resolutions to which he should object, and he should be ready at what he thought was the proper time to give them his hearty and cordial support; but it appeared to him that they could not go to Mr. Göschén on the question of registration of disease and drag in those propositions. The deputation had better be confined to the one question of registration; and they might point out how it could be done, so as to meet the objections which might be urged on the score of expense. They might put it to Mr. Göschén that the Poor-law medical officers had a vast amount of clerical work to perform in keeping official books, involving a great amount of trouble and loss of time, and yet that these books afforded no information of practical value to either the Guardians or the public. The deputation might address itself to laying before Mr. Göschén some simple scheme by which those books, introduced thirty-five years ago, might be replaced, so as to lay less clerical work upon the medical man, give him more time to attend to his patients, and permit him to keep books which should be of service to the public in affording valuable information. If this were done, the deputation would be imparting to Mr. Göschén a piece of information which apparently had not struck his staff; and in asking him to carry it out the first steps would be taken in a matter which would be a great public benefit. This might be done; and, indeed, he (Dr. Stallard) was engaged in drawing up forms for this purpose; and he ventured to think that the registration-books which he proposed would contain nothing which did not need to be registered, and they would give information without imposing any additional labour upon the officers connected with the Poor-law service. The deputation could go to Mr. Göschén and explain such a plan, and then they would have reasonable ground for asking him to do away with the present cumbersome system, which is not carried out, in accordance with order, in one place in fifty. He would be glad to commit himself to the resolutions proposed by Dr. Rogers; but the deputation would do better to confine themselves to the one question of registration of disease.

Dr. ROGERS held that, if the deputation advanced the list of propositions which he had submitted, future proceedings in the same direction would not be barred.

The other propositions were read *seriatim*, and to each the same objection was raised—that it was apart from the question which Mr. Göschén had engaged to discuss. Dr. Rogers urged that he had the sanction of Dr. Rumsey and Dr. Ransome to these propositions, and

he pressed them. The Chairman, Dr. Fowler, Dr. Stallard, and others, urged that the propositions would be out of place. Ultimately, on Dr. Rogers still pressing for their adoption, some sentences were left out of the resolutions, and those in brackets introduced, so as to give the resolutions a connection with the subject to be brought before Mr. Göschén; and Mr. Hart was asked to draw up a letter explaining to Mr. Göschén the grounds on which it was desired to take this opportunity of bringing before him the larger question of the general reorganisation of the Poor-law medical service, and requesting him to allow that question to be introduced.

Thanks to the Chairman concluded the proceedings.

DEPUTATION TO THE PRESIDENT OF THE POOR-LAW BOARD.

ON Monday, at 2 P.M., a conjoint deputation of the Committee of the British Medical Association on the Registration of Disease, and of the Committee of the Poor Law Medical Association, had an interview with the Right Hon. G. J. Göschén, President of the Poor-law Board. The deputation was introduced by Dr. Lyon Playfair, M.P.; and among those present were Mr. Cawley, M.P., Dr. Rumsey (Cheltenham), Dr. W. Farr, Dr. Sibson, Dr. Joseph Rogers, Dr. Ransome (Manchester), Dr. Morgan (Manchester), Mr. Randolph Robinson, Dr. Anstie, Mr. James Lewis, Dr. Stallard, Dr. Carr (Blackheath), Dr. A. P. Stewart, Dr. Aldis, Dr. Fowler, Dr. Ogle (Derby), Mr. Ernest Hart, Dr. George Harley, Dr. Manley (West Bromwich), Dr. F. C. Webb, etc.

Dr. RUMSEY (Cheltenham) stated that, as Chairman of the Section of Public Health at the last meeting of the British Medical Association at Newcastle, he was asked to explain the object of the deputation. It was originally intended to seek an interview with the President on the subject only of the registration of disease; but he (Dr. Rumsey) was requested to ask leave that the deputation might address themselves to that subject in connection with medical Poor-law relief and the relief afforded at public institutions at the public cost. The speaker, having handed in the resolutions given above, proceeded to say that the general question would be spoken to by others, and he would merely remark that a registration of diseases was necessary for the proper administration of general medical relief; that it was essential as the basis of any sanitary legislation; and that it was essential to science. The proper organisation of medical relief would involve the adoption of the dispensary system as it existed in Ireland—a system which had been proved, after many years' experience, to promote a proper registration of sickness. But such dispensary system would involve the revision, so to speak, of the organisation of our many medical charitable institutions, which, he might almost say, pauperised the population of this country. The deputation were not such philanthropists as to say that the proposed registration of diseases should be performed by medical men without payment; and, as it would cost something, they proposed to leave to the legislature the task of deciding how the expense should be defrayed.

In reply to Mr. Göschén, Dr. Rumsey said that the large London hospitals were not directly represented on the deputation.

Dr. SIBSON said that St. Mary's Hospital would be glad to aid any central scheme of getting a general registration of diseases of the hospitals; and he had no doubt the same remark would apply to all the others, as registers were kept in all.

The PRESIDENT said that, as the deputation appeared to be a very influential one, he was anxious to know how far they contemplated carrying this proposed measure.

Dr. SIBSON said: It is my assigned duty to bring before you the importance of establishing a general Registration of Disease in connection with the Registration of Births and Deaths. As you are aware, the deaths of the civil population are now registered, but not their diseases. The information gained to medical science as regards the causes of disease, and the consequent improvement of the public health derived from the registration of deaths, under the active, thoughtful, and practical guidance of Dr. W. Farr, can scarcely be over-estimated. The registration of diseases, which is neglected in the civil population, is carried on in the army and navy from day to day, and is presented in both services in weekly, quarterly, and annual returns. These returns, in their present complete form, have been gradually perfected in the army by General Tulloch and Dr. Balfour, in the navy by Dr. Bryson and Dr. Mackay, and in the Indian service by Sir Ranald Martin. The statistical departments of the army and navy are directed by Dr. Balfour and Dr. Mackay; and the Directors-General of the services, Sir T. G. Logan and Dr. Armstrong, obtain from them information of the first importance in pointing out the causes and places of disease. There has thus been a material lessening of the sickness, invaliding, and deaths, in the services. Thus a large increase has been made in the effective strength of the army and navy, and their expense to the country has been greatly diminished—for the soldier and the sailor cost more

when sick than when in health, and their invaliding and death lead to a large proportion of the outlay for those services. What we now submit to you is the great importance of establishing in civil life, and especially among the pauper population, a similar scheme of registration of sickness to that which is now practised with so much success in improving the health and efficiency and lessening of expense in the army and navy. The sanitary character of every station, every barrack, and every ship, is accurately known. The advantages of such a scheme of registration of disease will suggest themselves at once to your own mind; but you will allow me to specify some of them. In the first place, the proposed registration of disease, if carried into effect, will enlarge and correct our knowledge of disease itself, and especially of its causes, and so enable the medical profession more effectually to remove those causes, thereby lessening disease. And here I would beg to invite your attention to a paper written by Dr. Ransome on "Epidemics studied by means of Statistics of Disease", drawn up chiefly from returns similar to those that we are anxious, through your agency, to have systematically supplied from the sick pauper population. In the second place, the registration of disease will enable the medical officer of health to put his finger at once upon the spot or district in which any epidemic disease may show itself or be rife; to inquire promptly and with precision into the causes of that disease; and to take immediately the right steps to remove those causes, and so to stamp out the disease. In the third place, the registration will acquaint him also with the places or district in which certain acute and chronic diseases are rife, and the employments which favour them; and, by the study on the spot of the causes that make such localities and employments liable to those diseases, it will enable him to suggest the removal of those causes, with the admirable effect of improving the standard of health and power to work in those places. I need not point out to you that sickness and death mean pauperisation—temporary to the rich man and his family, but permanent to the family of the dead. That labour which is the source of wealth to the State as well as to the man, is suspended by sickness, which impoverishes the individual and puts the State to expense. Another great advantage of this registration of disease, and one that will come immediately home to yourself, is the power that it will give to you, or to those who may hold your office, as well as to members of the legislature, to connect at once the tides of increase in sickness with the following tides of increase in pauperism, and to apply prompt remedies for the removal of the causes of such sickness. Let me also point out the importance, indeed the necessity, of employing an uniform nomenclature of disease in the preparation of these returns. Thanks to the labours of the Royal College of Physicians, that nomenclature is secured. The medical services of the army, navy, and of India, and the Registrars-General of England, Scotland, and Ireland, have adopted that nomenclature. The present Government, through the Registrar-General, have sent a copy of that nomenclature to each medical officer in the army and navy, and India, and to each registered medical practitioner in England, Scotland, and Ireland. You have thus at hand a common vocabulary for the keeping of such registers. You will see in these forms [handed in] that the medical officers of the army and navy give weekly, quarterly, and annual returns. It is important that the method followed in making returns in civil life should be similar to those employed in the public services, so that those returns may be immediately compared with each other, for unity is the basis of all statistics. The speaker, in conclusion, urged that on the score even of lessening disease, and thus lessening pauperism, it would be wise economy on the part of the State to adopt the system of registration that was proposed.

Dr. RANSOME (Manchester) pointed to the simple fact that it was only by some such registration of disease as was asked for, that the medical profession could obtain a knowledge of those diseases which were the scourges of the population. If the poison of typhus fever could be found out, no doubt a vast benefit would be conferred upon humanity; but the discovery of the manner in which that poison was disseminated and transmitted to vast numbers of the population was of immediate importance, and this was readily practicable by means of the registration asked for. He enumerated various places where the registration had been for some years carried out voluntarily, and said that the result had proved the value of the plan. The scheme was exceedingly simple, he said, and he described to the President the manner in which the returns were made up weekly in the places mentioned.

Mr. GÖSCHÉN asked if, on the area being enlarged, greater time would not be required, and the value of the returns thus lessened.

Dr. RANSOME said the health-officers proposed to be appointed could obtain the returns, and the extent of area would make little difference.

Mr. GÖSCHÉN remarked that this involved, then, the creation of health officers; and he asked if the returns could not be gathered under the existing laws.

Dr. RANSOME replied that they could not, except in the places where there were health-officers.

Mr. GÖSCHEN asked if any estimate had been made of the cost attending the collection and publication of these returns?

Dr. RANSOME replied that the cost would be very slight, compared with the value received.

Mr. GÖSCHEN said that there were about four thousand Poor-law medical officers; and he should be glad to hear what it was proposed they should be paid for making these returns. The medical gentlemen before him were better judges than he could be of what would be fair pay for this work.

Dr. RANSOME suggested that Dr. Joseph Rogers could answer that question; and he added that the returns would be more valuable if they were made quickly.

Mr. GÖSCHEN said he perfectly understood that, and also that the greater speed would entail greater cost. The arguments in favour of speedy returns were such that nothing could be said against the proposition made to him; and the next question was that of cost. It was a matter of great importance to see if the scheme thus placed before him could be carried out; and if the medical officers, especially those of the older school, would fall into it as readily as it was assumed they would.

Dr. MORGAN (Manchester) had had practical experience of the value of disease registration as carried out in several institutions, including hospitals and prisons; and over and over again he and medical friends had been enabled to set their fingers on the commencement of what would otherwise have been wide-spreading epidemics, but which, by being forewarned, they were able to stamp out by the taking of active measures. Only in last September about two hundred cases of relapsing fever occurred in Manchester. The returns were sufficient to show the condition of the population; and in consequence of the measures which were taken only five deaths occurred. Another disease which had been arrested in the same way was small-pox. Now, if these returns had not been made, nothing would have been known of these dangerous diseases until they had spread. By such returns the medical profession would be able to test the result upon the public health of the degrees of heat and cold. As to the cost, he had spoken to some medical officers, and he believed they would be satisfied with something like three guineas a year for the extra trouble involved. The value of these returns would be in the fact that they were made by the men who actually visited the cases.

Dr. W. FARR said that, as every one had agreed as to the importance of these returns, he should not press that point; but the question of cost having been raised, he might say that whatever they would cost they would be well worth the money to the public. The Government had shown the value it attached to registered facts.

Mr. GÖSCHEN said he wanted to know whether this registration was carried out abroad—whether, in fact, we were in advance of or behind other nations.

Dr. FARR said that in foreign hospitals returns were made when diseases ended fatally; and no other country was in the position of this country in having a very large organisation of medical officers.

Dr. J. ROGERS, in speaking of the question of Poor-law medical relief in connection with the registration of disease, said that he believed no scheme would work properly or well even for registration of disease until the whole Poor-law medical system had been recast. He proceeded to speak of the great variations in the Poor-law medical districts, as shown in the populations and areas; and he said that, whereas in some places the Poor-law officer was paid at the rate of eightpence a case, in another he was paid at seven shillings a case. He held that to throw the making these returns upon the poorly paid officer would be an intolerable burden; and he proceeded to urge that in Ireland, where medical relief had been increased, pauperism had been lessened, and there had been a diminution of disease. He urged, too, that the whole pay of the Poor-law medical officers should come out of the Consolidated Fund, instead of half as at present, by which all classes would be made to pay, and the medical officers would be relieved from serving Guardians as servants. He advanced other arguments to support of his views; and in reference to the question of cost, he said he thought the returns should be paid for in proportion to the number of cases registered, the minimum weekly payment being half-a-crown.

Mr. GÖSCHEN said there was a great difference between that estimate and the estimate previously given. He demurred to the idea seemingly held by Dr. Rogers that the extent of population was a guide to the pauperism of a place. He asked if Dr. Rogers thought the returns could be made for £60,000 or £70,000.

Dr. ROGERS thought that amount would be sufficient; but he had never gone into that question.

Mr. GÖSCHEN said it was very important for the Government to

know what the Medical Officers thought they should have for making these returns.

Dr. STALLARD addressed the President with respect to combining the dispensaries with the other institutions in these returns. He said such registration would show that 2,000,000 of people were attended without cost at our London hospitals and dispensaries, and there was little doubt a great deal of this was an abuse of charity. He could not say what would be a solution of this difficulty, but he could say that it could not be done away with unless there was a full reform of the Poor Law. He thought the Poor-law medical officers should have time to give attention to their cases to see what was the matter with them. Many Poor-law medical officers had so much to do that they did it badly; and it was even said they sent cases of fracture to the Fever Hospital. [A laugh.] There should be a modification in the forms of the Poor-law Board registration by the Poor-law medical officers, and to his mind registration of disease would be of little value until there was a full reform of the Poor-law.

Mr. GÖSCHEN said Dr. Stallard and Dr. Rogers had said that there would be little value in registration unless there were other changes as well. Did these statements accurately represent the feeling of the deputation?

Dr. STALLARD said he should like to see the registration of disease at once adopted, but still he thought it would be of more value if the changes indicated were carried out.

Dr. SIBSON desired at once to say, on behalf of the portion of the deputation representing the British Medical Association, that they did not think the Poor-law medical officers incapable of making correct returns; and he further held that, if those officers were called upon to make these returns, they would prove to the President that the Poor-law medical officers were doing their duty.

Dr. ROGERS said that he certainly thought the registration of disease would not work so well as if the Poor-law medical service were recast.

Dr. SIBSON.—Then we are perfectly against you in that view. [Hear.]

Dr. ANSTIE said he thought the registration of disease was a proposition which might at once be carried out, and, as to its value in the abstract, he had no doubt whatever. He had had enough experience in the administration of hospitals, in the out-patient department especially, to show him the importance of such a system. It was no common thing to have people going to two, three, or four hospitals at once, and he had had many hospital patients under him who had come more as a matter of medical jollification than for treatment of disease.

Mr. GÖSCHEN.—Do you administer wine or stimulants to out-door patients?

Dr. ANSTIE replied that the hospital medical officers did not give stimulants to out-patients.

Mr. GÖSCHEN said he asked the question, because he found that the medical officers of the Poor-law were ordering large quantities of stimulants to the out-patients.

Dr. ANSTIE said that the hospitals could add their returns of out-patient sickness to the returns.

Mr. GÖSCHEN inquired whether the Governors of the institutions would care about it, and whether the fact of the Government having ever so slight a connection with the hospitals would not affect the subscriptions.

Dr. ANSTIE acknowledged that the Governors were generally very little alive to the value of these questions, but he hoped that they would see the importance of this registration.

Mr. RANDOLPH ROBINSON, a gentleman connected with the hospitals as a Governor, also advocated the system of a registration of diseases in both hospitals and other institutions.

Mr. CAWLEY, M.P., said that whatever the cost might be an efficient system was of far more importance than any money value. He also urged that the registration of death might be made more accurate by a subdivision of the present districts; and that in this way only, in large districts, the very extensive prevalence of disease in some portions of them could be effectively pointed out.

Dr. LYON PLAYFAIR, M.P., said he had no doubt the House of Commons would be ready to vote the cost of any system the Government might propose, for it had always shown a desire to obtain returns.

Mr. GÖSCHEN said he desired to take the opinion of the deputation upon one point. The Irish Dispensary system had been referred to; now the difference between that system and the English system was that medical relief did not pauperise a person in Ireland, while it did in England. It was very important for the Government and the public to know whether the medical practitioners of this kingdom were in favour of seeing that Irish system, by which every person could obtain a dispensary order, commenced here. It appeared to him that it would change the whole position of the medical practitioners here.

Dr. RUMSEY said the deputation did not contemplate advocating the Irish system in its entirety for adoption in England.

Other members of the deputation having said the same,

Mr. GÖSCHEN said that the question as to the registration of disease was one for the Government and not for his department, and he would have to ascertain the probable cost before bringing the matter to his colleagues' attention. He thought it would be undesirable to go into the matter at all until the report of the Royal Sanitary Commission had been considered by the Government.

The deputation then thanked the right hon. gentleman and withdrew.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following letter has been handed to us for publication.

39, Grosvenor Street, Oct. 11th, 1870.

Dear Mr. President,—As the elections to fill three vacancies in the Court of Examiners will take place shortly, and as I am second on the list of members of Council who have not served on the Court, I wish to state that I consider it my duty to decline at present to become a candidate for election. I have been induced to adopt this course in consequence of the prominent part which I have taken in endeavouring to separate the examiners in anatomy and physiology from those in surgery, on the ground that surgeons who have never taught anatomy and physiology, or who have long ceased to do so, are not the best qualified to conduct the examinations on these subjects. The principle of the separation has since been affirmed by the Council; but, as action upon it has been deferred, a candidature on my part would be inconsistent with the object for which I have contended. I am desirous, however, of acting without prejudice to any claims I may possess to a place on the Court, as examiner in surgery, when the separation is carried out.

I am, dear Mr. President, yours faithfully,

T. B. CURLING.

Sir William Fergusson, Bart., President of the
Royal College of Surgeons.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Tuesday, the 1st day of November, 1870, at 3 o'clock P.M. *precisely*.

* * The following resolution was passed unanimously at a meeting of the Council of the Association, held at Newcastle-upon-Tyne, on August 10th, 1870.

"That, in the opinion of the Council, it is of the utmost importance that the Secretaries of the Branches should attend regularly the meetings of the Committee of Council; and they recommend that the travelling expenses of the Secretaries should be paid by their respective Branches."

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, October 17th, 1870.

BATH AND BRISTOL BRANCH.

THE first meeting of the above Branch for the session, will be held on October 27th, at the Royal Hotel, College Green, Bristol.

The following papers are expected. 1. The Position of Medical Men receiving Resident Nervous Patients. By Horace Swete, M.D.—2. Case of Recovery from General Dropsy. By Charles Steele, Esq.—3. Case of Pyelitis from Injury. By R. W. Tibbits, M.B.—4. The Treatment of Ulcers by Transplantation of Skin. By Nelson C. Dobson, Esq.

EDMUND C. BOARD, *Honorary Secretary*

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

THE annual meeting of the Section will be held at the Midland Institute, Birmingham, on Friday, October 28th, at 3 P.M.

BALTHAZAR W. FOSTER, M.D., } *Honorary Secretaries*
T. VINCENT JACKSON, }

Birmingham, October 19th, 1870.

LONGEVITY.—The obituary of the *Times* of Wednesday last contained some rare illustrations of prolonged existence in four ladies and two gentlemen, whose united ages amounted to 523 years, giving an average of eighty-seven years and two months. Of the ladies, the youngest was 81 and the eldest 90 years of age. The men were 84 and 91 years of age.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, October 13th, 1870.

Dubois, Louis Victor, Mauritius
Hardman, William, Blackpool
Newington, Frank Enefer, Tenterden

The following gentleman also on the same day passed his first professional examination.

Wright, Francis, St. Mary's Hospital
As an Assistant in compounding and dispensing medicines.
Roberts, Joseph Elliott, Great Ormond Street

MEDICAL VACANCIES.

THE following vacancies are announced:—

ADDENBROOKE'S HOSPITAL, Cambridge—Surgeon.
AYLESBURY UNION, Bucks—Medical Officer for District No. 7.
BICESTER UNION, Oxfordshire—Medical Officer for the Piddington District.
BIRMINGHAM GENERAL HOSPITAL—Resident Medical Officer: applications, 27th; election, Nov. 4th.
BISHOPS STORTFORD UNION, Herts—Medical Officer for Pelham District.
BRIGHTON AND HOVE DISPENSARY—Resident House-Surgeon: applications, 31st; election, Dec. 6th; duties, Jan. 3rd.
BRISTOL ROYAL INFIRMARY—Assistant House-Surgeon: applications, Nov. 12th.
BURY UNION, Lancashire—Medical Officer for the Pilkington District.
CARNARVON UNION—Medical Officer and Public Vaccinator for the Llanidan District: applications, Nov. 4th; election, 5th.
CASTLEREA UNION, co. Roscommon—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Frenchpark Dispensary District: 31st.
CHARING CROSS HOSPITAL—Surgeon-Dentist: applications, 26th.
DERBYSHIRE GENERAL INFIRMARY, Derby—House-Surgeon: applications, Nov. 5th.
DELTING, Shetland—Parochial Medical Officer.
DURSLEY UNION, Gloucestershire—Medical Officer for District No. 3: applications, 26th; election, 27th.
ENNISTYMON UNION, co. Clare—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Miltown-Malbay District.
FOREHOE INCORPORATION OF THE POOR, Norfolk—Medical Officer for District No. 2.
HALIFAX INFIRMARY AND DISPENSARY—Assistant House-Surgeon: applications, 25th.
IRONBRIDGE DISPENSARY—Surgeon.
KING'S COLLEGE, London—Professor of Chemistry.
KINGSTON UNION, Surrey—Medical Officer for the Moulsey District.
LISMORE UNION, co. Waterford—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Ballyduff Dispensary District: 24th.
MADELEY UNION, Shropshire—Medical Officer for the Dawley District.
MIDDLESEX HOSPITAL—Assistant-Physician.
MILTOWN-MALBAY, co. Clare—Surgeon to the Constabulary.
MORPETH DISPENSARY—House-Surgeon: applications, Nov. 25th; election, Dec. 9th.
POOLE UNION, Dorset—Medical Officer for District No. 1.
QUEEN ADELAIDE DISPENSARY, Bethnal Green Road—House-Surgeon: applications, Nov. 1st; election, 4th.
QUEEN'S HOSPITAL, Birmingham—Honorary Obstetric Officer: 28th.
REETH UNION, Yorkshire—Medical Officer and Public Vaccinator for the Muker District: applications, Nov. 3rd; election, 4th.
ROYAL FREE HOSPITAL, Gray's Inn Road—Junior House-Surgeon: applications, 26th.
ST. BARTHOLOMEW'S HOSPITAL MEDICAL COLLEGE—Professor of Chemistry.
ST. GEORGE DISPENSARY, Mount Street, Grosvenor Square—Physician-Accoucheur: applications, 25th.
SOUTHEND, Argyleshire—Parochial Medical Officer.
STRABANE UNION, co. Tyrone—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Dunamanagh Dispensary District: 24th.
THAME UNION, Oxfordshire—Medical Officer for the Brill District.
TOTNES UNION, Devon—Medical Officers for the Dartmouth and Townstal Districts.
WIGTON UNION, Cumberland—Medical Officer for the Caldbeck District.

THE STAMFORD AND RUTLAND INFIRMARY has received a donation of £100 from the executors of the will of Mrs. Deeker, in compliance with her wish expressed verbally, but not mentioned in the will.

BABY-FARMING.—At a preliminary meeting held October 14th at the chambers of Mr. W. T. Charley, M.P., 5, Crown Office Row, Temple, it was resolved to establish a society to be called the "Infant Life Protection Society," on the model of similar societies in France, having for its first object the introduction of a Bill into Parliament for the registration and supervision of nurses who receive children of others into their homes, and of the children entrusted to their care. Mr. W. T. Charley, M.P., was requested to act as treasurer *pro tem.*, to whom contributions may be sent; and Mr. J. B. Curgenven, of 11, Craven Hill Gardens, Hyde Park, and the Rev. Oscar Thorpe, M.A., vicar of Christ Church, Camberwell, as honorary secretaries. The next meeting will be held on Tuesday, November 1st, at 3 P.M., at the rooms of the "National Association for the Promotion of Social Science," 1, Adam Street, Adelphi, and all those interested in the subject are invited to attend.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. After the casual communications, Dr. Richardson on "The Medical Aspects of the Germ-Theory."

WEDNESDAY.—Hunterian Society, 8 P.M. Adjourned discussion on Mr. Bryant's paper on Pyæmia.

FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Mr. J. Slade, "On the Microscopical Characters of Cannel Coal."—Clinical Society of London, 8.30 P.M. Dr. Sutton, "Two Cases of Scurvy"; Mr. Brudenell Carter, "Cases of Optic Neuritis"; with other papers.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

SYMPATHETIC INK.—Mr. R. Hogg, of 9, Albion Place, Hyde Park, has forwarded to us a sample of sympathetic ink for writing on post-cards, which becomes visible when the card is heated by the recipient. The fluid, unless we are mistaken, is the well-known solution of chloride of cobalt. It answers its avowed purpose very well.

WE are induced by pressure on our space to postpone the publication of the second part of "A Surgical Visit to the Seat of the War"; Review of the Sanitary Report on India; the Proceedings of the Medical Society of London; and other articles and communications.

BABY-FARMING.

IR.—There was a very humane leading article in your number of October 15th, on the fate of the unfortunate woman who has passed out of this breathing world. I agree with you heartily that there are so many men and women accessory to the act of baby-farming, that it seems hard that one should suffer for the many. In Paris, in the month of August last, although surrounded by rumours of battles, I made an inquiry into the system of nursing-out babies by Parisian mothers: and, certainly, think that on this side of the channel we may deem ourselves lucky that we have so very little of the evil to contend against.

There are several offices in Paris which undertake to furnish nurses to women who are either too lazy, or too weak, or too busy (or *think* themselves one of these three). Firstly, there is a branch of the Assistance Publique in Paris, called the *Grand Bureau*, which acts as go-between to about 2000 families and country nurses, guaranteeing to the latter, in case the parents do not pay them the small sum of about 25 francs a month (and more than half of the parents neglected to do so in 1864), the sum of 12 francs a month. The mortality of the legitimate children thus put out, and watched by certain doctors and officers, amounted from 1862-66 to 28 per cent., and of illegitimate 33 per cent. That is, nearly one-third of these nurslings die in a year. In addition to the children, put out by the means of the Assistance Publique office, there are now in Paris several other offices for farming out babies. These offices are under the surveillance only of certain medical men, paid by the income the offices receive. Nurses like these bureaux much better than they do the offices under the closer surveillance of the administration, so that far more infants are put out to nurse by means of these offices. No fewer than 9136 infants were thus put out annually, on an average of the years 1860-64. In addition to these two kinds of bureaux, there are a good number of babies given out in Paris to women under no control. These women answer to our own "baby-farmers", to use the word, which seems to have come into fashion of late. M. Husson has calculated that about 3000 infants are nursed out in this last manner. Adding these numbers together, we have about 17000 nurslings in Paris and the country, 14000 of which are sent to the country by means of the offices.

M. Broca estimated, in a speech at the Academy, that the mortality of the children put out by means of the *petits bureaux* is nearly 48 per cent. Now, statistics show us that, in thirty of the departments of France, the mortality of infants is

lower than perhaps in any other European state (is England an exception?); but, in the departments surrounding Paris, the mortality is excessive, owing to the number of nurslings put out by the Parisians. In this country, fortunately, our women have not generally begun to think it a dangerous or unfashionable thing to suckle their own infants, even in London; but I am almost afraid that, if the proposed surveillance of baby-farmers (which you, I think, advocate) take place, they may ere long begin to imitate Parisian ladies.

As to founding hospitals, of course, these are out of the question as a remedy for baby-farming. In Paris, in 1865, of 4887 children abandoned younger than one year, 1516 died under the care of the Foundling Hospital. In fact, the mortality of Parisian children is excessive, since that city loses 39 per cent. of all its children under one year of age annually. There is an immensity of illegitimacy in Paris, which accounts for this great mortality. Society, naturally, cannot expect the mother of an illegitimate child to take much care of it, since it makes it almost impossible for an unmarried woman to get a living for herself, if burdened by an infant. Thus, in a private letter to myself from Dr. Leon Lefort in June last, he informs me that more than one in four of the births in Paris are illegitimate. In some of the foundling hospitals in France as many as 90 per cent. of the infants confided to their care have died in less than a year. Our foundling hospital in Guilford Street is, of course, like many other London charities, a job; and even Mr. Acton was not able to find out whose children got into that favoured spot.

You may perhaps guess from the figures which I cite, that I am not much in favour of the French plan of municipal surveillance of the industry of nursing. Such surveillance has been fairly tried, and appears to me, like the French surveillance of prostitutes, to increase the evil. The mortality of infants in France ought to be (and is, in many of the departments) very small, since there are so few children born that they are usually most tenderly loved by their parents. Thus M. Block, the able statist of France, states that the peasantry habitually limit their families to two children. Hence, if Parisian children die so frequently, we must look to the very surveillance of nurses as one of the causes, and to the extent of illegitimacy as another. With respect to the latter, I very much question whether the non-divorce system of France is compatible with the manners of Paris; and whether the new Government would not do well, as soon as the acute disease of Prussian invasion and its sequelæ are over, to make greater provision for the divorce of unsuitable partners. Of course, the late Government was in duty bound to keep up the institutions to which it owed its existence. The republic is, however, free, I conclude, to choose that form of social arrangement which tends most to prevent crime, and Mr. Conway assures me that in Indiana, where divorce is facile, domestic crime is rare.

As to capital punishment of baby-farmers, it has been well-remarked, that it will probably increase the infanticide of natural children greatly, since nursing women will now raise their prices for taking in children, to cover all risks. Dr. Thompson Dickson, in a very able recent paper on the subject, points to the fact that in Scotland there are fewer infanticides than in England, and scarcely any baby-farming; although there is in Scotland far more illegitimacy. Perhaps, then, after all, the best plan would be to do away with what are euphoniously termed the *bastardy laws*, and look with greater leniency on the phenomenon of illegitimacy. In this direction, I think, public opinion is moving; and, although public opinion is liable to take fright at times, "E pur si muove."

I am, etc.,

CHARLES R. DRYSDALE, M.D.

99, Southampton Row, W.C., October 17, 1870.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, Sept. 19th; The New York Medical Gazette, Oct. 1st; The New York Medical Record, Oct. 6th; The Boston Medical and Surgical Journal, Oct. 6th; The Madras Mail, August 8th; The Shield, Oct. 15th; The Birmingham Daily Post, Oct. 17th; The Illustrated Midland News, Oct. 8th; The Hampshire Chronicle, Oct. 15th; The Rock, Oct. 11th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Haviland, London; Dr. Ransome, Manchester; Dr. Greene, London; The Secretary of the Ethnological Society; Mr. Gaine, Bath; Mr. J. M. Heward, Stamford; An Occasional Correspondent, Cambridge; Dr. Rutherford, London; Dr. A. Lloyd Owen, Portsmouth; Mr. Worth, Nottingham; The Secretary of the Children's Hospital; Dr. A. Drummond, Birmingham; Dr. Pavy, London; Mr. R. O. Blythman, Swinton; Mr. Mayo, Winchester; Dr. Elliott, Hull; Dr. Lewis A. Sayre, New York; Mr. Roger Eykyn, London; M.A. Cantab., Yarmouth; Mr. Charles W. Thorp, Todmorden; Mr. Bushnan, Chalons; Messrs. F. C. Calvert and Co., Manchester; Dr. Tessier, Tynemouth; Dr. Lodge, St. Asaph; Sir Dominic Corrigan, Bart., M.P., Dublin; Mr. C. G. Wheelhouse, Leeds; The Secretary of the Quekett Microscopical Club; Mr. Chas. W. Wood, Woodhouse Eaves, Loughborough; Dr. Phillips, London; The Secretary of the Royal Medical and Chirurgical Society; Messrs. J. and G. Johnston, London; Mr. J. J. Iltott, London; Mrs. Ashforth, Tunbridge Wells; Messrs. Hitchcock and Garrad, London; Dr. Bell Fletcher, Birmingham; Dr. Moriarty, Youghal; Mr. Drummond, Birmingham; Dr. H. J. Yeld, Sunderland; Dr. Duckworth, London; Dr. W. C. Arnison, Newcastle-on-Tyne; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. David Ferrier, London; Our Paris Special Correspondent; Mr. Curling, London; Messrs. Coleman and Co., London; Dr. J. H. Tylecote, Sandon, Staffordshire; Dr. H. Barnes, Carlisle; Dr. J. Sloane, Leicester; Dr. J. Hughlings Jackson, London; Mr. De Berdt Hovell, Clapton; Dr. Neil Hancock, Dublin; Dr. Ogston, Aberdeen; Dr. C. J. B. Aldis, London; Dr. J. Rogers, London; Dr. Playfair, London; Dr. Falconer, Bath; M.R.C.S. Eng.; Dr. Kelly, Taunton; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; The Secretary of the Faculty of Physicians and Surgeons of Glasgow; Dr. Aveling, Rochester; Mr. T. Watkin Williams, Birmingham; Dr. J. Milner Fothergill, Leeds; Dr. Smart, Penge; Mr. A. Duncan, Glasgow; The Secretary of the Clinical Society; Mr. George May, jun., Reading; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Styrap, Shrewsbury; Dr. Pitt, Norwich; Mr. J. White, Nottingham; Dr. Elliston, Ipswich; Dr. C. Harrison, Lincoln; Dr. Bryan, Northampton; Mr. S. Wood, Shrewsbury; Dr. Whitmore, London; Dr. Graily Hewitt, London; Mr. A. B. Kernot, Muker; Mr. Stonard Edge, Exeter; Mr. John Gamgee, London; The Secretary of the Royal Horticultural Society, London; etc.

ABSTRACTS OF LECTURES

ON THE

GEOGRAPHICAL DISTRIBUTION OF DISEASES IN ENGLAND AND WALES.

Delivered at St. Thomas's Hospital, London.

By ALFRED HAVILAND, Esq.

[In the first lecture, which was delivered on the 11th instant, a short history of the subject was given, and was illustrated by a sketch of the general distribution of Heart-Disease and Dropsy throughout England and Wales. On the 23rd, the geographical distribution of heart-disease and dropsy formed the subject of the lecture, which was illustrated by several coloured round maps and thin coloured proofs from the copper plate of the map which is now nearly ready for publication by Messrs. Keith Johnston.]

During the ten years 1851-60, there died in England and Wales from all causes, 4,210,715 persons, out of a mean population, calculated for the decenniad 1851-61, of 18,966,916. During the same period, 236,973 deaths were attributed to heart-disease and dropsy, according to the Registrar-General's Returns, which are based upon the cause-of-death certificates given by legally qualified medical practitioners; the deaths, therefore, from these combined causes, amounted to more than one-seventeenth of the whole mortality.

Compared with the death-rate from other causes, that from heart-disease and dropsy holds a high place in the order of mortality; for, although phthisis claims annually a number of victims doubly greater, yet the sum of those who succumbed to cholera, diarrhoea, and dysentery, during the same period, did not exceed it, whilst that from small-pox and scarlet fever fell short of it by 28,470 deaths.

England and Wales are divided into eleven registration divisions, each of which represents a group of counties, which are again subdivided into union districts. During the period selected, the ten years 1851-60, each union district had its population carefully estimated according to the death and birth rates, between the census of 1851 and that of 1861. This estimated mean population forms in the Registrar-General's *Supplement to his Twenty-fifth Annual Report* a standard which enables us to calculate what proportion the deaths of any district bear to the number of those living within its boundaries: for instance, if there have died during the decenniad selected, in a district having a mean population of 10,000, a hundred persons from any one cause of death, heart-disease for instance, by dividing the 100 deaths by the number of years over which they were spread, we arrive at the average annual rate of mortality, which would be 10 to every 10,000 living. The numbers, therefore, that I use are *proportionate*, not *absolute*; and hence it is all the more necessary that the gross sum from which they are deduced should be as large as possible. Until the present time it was impossible to chartographise disease, inasmuch as the numbers were not sufficiently large, and those which had been collected were not in a suitable form.

The mapping of England and Wales into 11 divisions, 53 counties, and 625 union districts, affords the means of analysing the distribution of heart-disease or of any other cause of death. By this threefold division we are enabled to sift the facts through three gauges of different degrees of fineness. In the first place, we see what proportion the death-rate from a cause of death bears to the population in each of the eleven divisions; we colour blue or red those divisions which are above or below the average, and then study this gross distribution carefully. The next process is to colour the counties in the same way, and observe whether the distribution at all coincides with that of the divisions; and the third process is to discover whether the proportional mortality of each county is influenced by the mortality in the districts. Having done this, we again review our work, and calculate the effect of each of the many causes surrounding us in the production of the distribution, which our coloured map reveals. If during this scrutiny we discover a general law regulating the distribution in each of the three divisions, our last duty is to crucially test the effects of this law. separate the real from the apparent, study the exceptions, and examine their relation to the assumed law; I say assumed law, for we must remember that until it has been proved we ought not to regard it as a law at all; at the same time, it must be remembered that in physical investigations some hypothesis is requisite, in the first instance, to aid the imperfection of our senses; and when the phenomena of nature

accord with the assumption, we are justified in believing it to be a general law.

The Geographical Distribution of Heart-disease and Dropsy in the eleven Registration Divisions.—If we take a map whereon the eleven divisions are marked out, and colour in different shades of blue and red, each according to the mean average annual rate of mortality to every 10,000 persons living, we shall find that six will be red or below the average, and five blue or above the average. The red or healthy divisions (as far as regards heart-disease, at least) are—I. London; IV. The Eastern Counties; VII. The North Midland; IX. Yorkshire; VIII. The North Western; and XI. Monmouthshire and Wales. These red divisions are all contiguous, and form an arch from the north of the river Thames to the north of the river Severn. The blue or unhealthy divisions, or those in which the mortality from heart-disease is greatest, are—V. The South-Western; II. The South Eastern; III. The South Midland; VI. The West Midland; and X. The Northern Counties.

Such a simple map as that which I have described draws our attention to several facts, which will have to be analysed in the sequel. Not one of the divisions is coloured so as to indicate either the greatest or least mortality; there must, therefore, be some parts of each blue division having a low rate of mortality, and in some parts of each red division a high rate. How these parts are disposed, and by what laws they are governed, can only be seen in the next stage of our inquiry. We see that all the six red divisions have an extensive sea-board, excepting London; which, however, lies on the bank of the largest tidal river in our country. The westerly red divisions present themselves to the prevailing south-westerly, westerly, and north-westerly sea-winds, which have traversed a wide expanse of ocean. The easterly look towards the German Ocean, and afford every facility for the free access of the north-easterly sea-winds. The five blue or high-mortality divisions embrace a large number of really midland counties, which, from their very position, do not enjoy a pure and uncontaminated sea-wind. Like the red divisions, the blue comprehend an extensive seaboard—the whole of the south coast, the north coasts of Cornwall, Devon, Somerset, and Kent, and the eastern coast of Northumberland and Durham.

These are the bare facts which strike the eye at once when looking at a map showing the divisional distribution of heart-disease.

England and Wales are divided into eleven Registration Divisions. Two only of these divisions are strictly midland (south midland and west midland), whilst all the other nine have an extensive coast-line. The two midland divisions have a mortality from heart-disease and dropsy above the average. Of the nine coastal divisions, three (south-eastern counties, south-western counties, and northern counties) have a high rate of mortality from heart-disease and dropsy, and six a low rate (London, eastern counties, north midland counties, north-western counties, Yorkshire, and Wales). The low mortality in two-thirds of the coastal districts is suggestive that proximity to the sea-coast, and the winds directly received from the ocean, may influence the causes of heart-disease. Three of the coastal divisions, however, having a high mortality and an extensive seaboard, it was necessary to compare the characters of the respective coast-lines, in order to ascertain what were coincident with high and what with low mortality, on the principle that the effects of a climatic element with regard to the causation of disease must be looked for in those localities where there is the least hindrance to its full operation.

On comparing the characters of the coast-line which formed the boundaries of the divisions having a high, with those that have a low, mortality, it was shown that the following characters were coincident with a high mortality: a precipitous and rock-bound coast, having few inlets, which, when they do exist, are, like the courses of their river and valley system, at right angles to the prevailing winds and the current of the tidal wave. These characters are predominant on the coast of the Northern Counties Division (X), as well as on the two Southern (II, V).

On the other hand, it was found that a low rate mortality obtained along the eastern and western coasts of England; and that it was coincident with low or shelving coasts, valleys and rivers having a direction in their course favourable to the free access of prevailing sea-winds and tidal currents, and the existence of numerous sea-inlets opening into wide vales, which admitted freely a thorough afflux and eflux of powerful winds, from whatever quarter they might blow.

Now, if these physical characters be merely coincident with certain rates of mortality from heart-disease, it will be evident that, on a stricter analysis of these great eleven divisions, we shall find the apparent relation either considerably modified or perhaps disappearing altogether. Having sifted our facts through the first series of coarsely defined divisions, I shall proceed to the second process of our analysis—the division of England into Registration Counties.

The Geographical Distribution of Heart-Disease and Dropsy in the Registration Counties.—England and Wales are divided into fifty-three registration counties; of these twenty-seven are coastal, the remaining twenty-six being more or less inland, and divisible into inland and midland. Of the twenty-seven coastal counties sixteen have a low rate, and eleven a high rate of mortality. With regard to the twenty-six inland counties, six only have a mortality below the average; and it is noteworthy that all these, without exception, are contiguous to coastal counties, which have free access from the sea through inlets, such as the Wash on the eastern side, and on the Welsh side the inlets of the Dovey and other rivers from Cardigan Bay, or else are so elevated as to receive the full afflatus from the sea without interruption. The remaining twenty counties in which the death-rate from heart-disease is great, are all more or less protected; those counties whose towns and villages lie in deep and well sheltered valleys, such as Herefordshire, Berkshire, Derbyshire, and Wiltshire, being characterised by the highest degree of mortality.

The Relative Mortality of the Coastal, the Inland, and the Midland or Central Counties.—If we group the counties in the following manner, we shall find that a high death-rate from heart-disease and dropsy is also coincident with an inland or sheltered position, and that there is a certain progressive increase of mortality from the circumference of our peninsula towards its more central localities. The mean annual mortality of the entire series of the twenty-seven coast counties is 11.9 to every 10,000 living; the mean annual mortality of the twenty inland counties, viz., those which are situated between the coastal and the midland counties, is 12.5 to every 10,000 living; and the mean annual mortality of the six midland or central counties is 15.1 to every 10,000 living. It was shown that the coastal counties in which a low mortality from heart-disease is registered, are more numerous than those where the death-rate from this cause is above the average; that the counties most exposed to the prevailing winds and most free from obstructions to their full operation, have the least mortality, and that those bordering the south coast, which have barrier-like rocks and other characters tending to interfere with the full sweep of the sea-winds, are those only which have a high mortality; that, out of the twenty-six inland counties, which are all more or less protected by those bordering the coast, six only have a mortality below the average, and these are contiguous to coastal counties; and, lastly, that the counties in which the mortality from heart-disease is greatest are those that are the most inland or the most protected by their physical surroundings.

It remains for us now to test these coincident facts, by submitting the counties themselves to a similar analysis—viz., by estimating the relative amount of mortality in each of their 625 union districts, after which we shall be enabled to see if the remarkable coincidences which we have noted in the divisions and counties between their mortality and their free exposure to, or seclusion from, the sea-air, are still existing. If they be, we shall be enabled to follow them as minutely as the division of England into 625 parts will enable us. Beyond this we have no further data to go, and no minuter division on which to depend.

The Geographical Distribution of Heart-Disease and Dropsy in the Six Hundred and Twenty-five Union Districts of England and Wales.—We now come to the last analytical process—the division of the counties into districts. Here, again, the artificial system of boundary lines is more perplexing than in either of the other two; still, we cannot help it, but only regret that so much valuable information should be wasted, which, had a natural system been adopted, would have been a grand acquisition for the student of the medical geography of England. It is shown that there are three coast lines around England and Wales—the east, the west, and the south; and that they are composed of one hundred and thirty-three registration districts; of these, eighty-three have a mortality below, and fifty above, the average annual rate, and that, therefore, the coastal districts agree with the coastal divisions and coastal counties as to the coincidence of proximity to the sea and low mortality from heart-disease and dropsy. When the three coasts are compared, we shall find that eastern and western have the most extensive as well as the greatest number of sea-inlets, and that the south has but one inlet of any importance, all the others being limited as to their extension inland, and opposed to the general direction of the sea-winds and tidal waves so far as regards their axis. The east coast is comparatively low, and throughout a large area offers no obstruction whatever to the free access of the sea-winds; and the west coast, although more rocky, has innumerable inlets, and inland surface sloping upwards instead of downwards from the sea, so that it presents to the prevailing winds—especially on the Welsh, Cheshire, Lancashire, and Cambrian coasts—every opportunity of fully flushing the valleys when they blow.

Coincident with the great number of sea-inlets and the low coast line on

the eastern side of England, we find a low mortality in twenty-nine out of forty-one districts.

Coincident with the physical facilities afforded on the western coast for a full purging by the strong winds from the Atlantic, of the air-sewage from the valleys, it will be seen that, out of the fifty-two districts from Redruth to Wigton inclusive, forty-two are *below* the average and only ten *above* it. And lastly, coincident with the rocky and precipitous coast of the south, an absence of important sea-inlets, and the courses of the rivers being at right angles to the prevailing winds, we found that, of the forty districts, twenty-eight have a high mortality.

We find, therefore, that the coastal registration districts, as a rule, have a low mortality from heart-disease and dropsy; and this is in conformity with what has already been observed in the registration divisions and counties.

It was shown that the inland districts have a higher mortality than the coastal; the low mortality inland districts, however, on both the eastern and western sides of England, are to be found contiguous to those which border the great sea-inlets, such as the Thames, the Wash, the Bristol Channel, and the mouth of the Humber, and the coast, as well as where there is elevated ground, admitting of free ventilation on all sides.

The midland groups of districts, which are not intersected by the great sea-inlets, but are protected by high ranges of hills on all sides, have the highest mortality. And lastly, the insular and peninsular districts, which are necessarily the most exposed to the sea-winds of all the districts, have a very low mortality from heart-disease and dropsy.

We have thus seen that the same general law obtains throughout the three divisions of England and Wales into registration divisions, counties, and districts, viz., that wherever the prevailing sea-winds have uninterrupted access, as over a flat or elevated country, or up broad vales or valleys, there we find a low mortality from heart-disease; and that, on the contrary, in places where the tidal wave has no access, where the rivers run at right angles to its course or to that of the prevailing winds, there we find the highest mortality from this cause of death.

CLINICAL MEMORANDA.

VACCINATION UPON THE LEG.

MOST persons must have observed instances in which vaccination upon the arm has been followed by an unsightly cicatrix from ulceration or other cause consequent upon the operation. Sometimes an excavation or deep pit is perceptible, with a puckering around it, not unlike a pistol-shot wound; with this difference, however, that the colour is uniform with the neighbouring skin of the arm. This deformity in females is a matter of some concern, and is always a source of annoyance when the arm is uncovered. Recently, when taking my summer holiday, an instance of the kind again came under my notice in a young lady who was vaccinated in infancy: the operation was followed by a deep ulcer which penetrated the skin; and, as she grew up, there was no concealing the unsightly spot when she went into company with the arms bare.

The occurrence of this occasional deformity on the arm was so well understood by my lamented friend, the late Dr. Francis Arnoldi of Montreal (who had a large family of daughters), that he was in the habit of performing vaccination upon the leg to avoid it; and this was his invariable custom, in girls at any rate, in a large practice, and usually, as I understood from him, always with good results. I followed his example when in the habit of doing the operation some years ago, and my own children were all thus vaccinated upon both legs. The spot selected for the purpose is the inner surface of the upper third of the leg over the tibia, where there is nothing but integument gliding over the bone. It may be done upon one or both legs, and appears to be less irritating and inconvenient to the infant than when done on the arm. The only objection that can be urged against the situation is that the vesicle is liable to be irritated by the child's feet; but that can be obviated by a little attention on the part of the mother or the nurse. Should any large cicatrix or other inconvenience follow, it will signify nothing in this situation. As I am not aware whether vaccination upon the leg has attracted any attention, as preferable to being done on the arm, I venture to bring it under the notice of those who are in the constant habit of vaccinating children.

Bryanston Street.

G. DUNCAN GIBB, Bart., M.D.

REMARKS

ON A

PECULIAR FORM OF NERVOUS APNŒA:
ITS PHYSIOLOGY AND TREATMENT.

BY GEORGE JOHNSON, M.D.,

Professor of Medicine in King's College; Physician to King's College Hospital.

THERE is a peculiar and distressing form of nervousness about which I have not unfrequently been consulted, and which has still more frequently been brought to my notice in the course of conversation with friends and with patients who have consulted me about other symptoms. In most of the cases that have come under my observation, the nervous affection to which I refer has occurred while the patient has been engaged in reading aloud, with his family, either prayers or a chapter out of the Bible. The reader finds that his heart begins to flutter, while his breathing is oppressed; and his utterance becomes indistinct and broken. With this, there is sometimes more or less of a feeling of giddiness, and a tendency to faintness. Sometimes, by a determined effort of the will, the difficulty and the distress are overcome, and the reader continues and completes the work in hand; but not unfrequently the symptoms become more and more distressing, until the patient, voiceless and panting, is compelled to give in and discontinue the reading. Most of those who have spoken to me on the subject have been men, but I have known the same difficulty occur to women. Several of my patients have been clergymen; and more than one of them, to the distress and alarm of themselves and their congregations, have broken down in the manner described while engaged in reading the service in church. All who have suffered in this way have been of a sensitive and excitable temperament; some have been under the influence of nervous depression or a temporary derangement of health. In most instances, some emotional disturbance has been the immediate exciting cause of the nervous paroxysm; it requires no small amount of resolution and nerve to get through some of the lessons which the clergy have to read to their congregations. In some cases, the recollection of a former attack and a dread of its recurrence have increased the liability to the attacks, and provoked their frequent return. One of the most curious examples of this was afforded by a clerical friend, who one day had to run to his church in order to avoid being late. When he went into the reading-desk, his breathing being still hurried by the recent exertion, he had some difficulty in getting through the first part of the service. His breathing gradually became quiet, the difficulty in reading ceased, and for the time he thought nothing more of the occurrence. On the next occasion, when he began to read the same service, he had gone without hurry into the desk; but the recollection of his former suffering brought back the same distressing train of symptoms—palpitation, difficulty of breathing and of utterance—to such a degree, that for a few minutes he could scarcely continue the service. Again and again, at the commencement of several successive services, the memory of his former distress and a nervous apprehension of its recurrence brought back the same train of symptoms; and several weeks elapsed before he got free from the distressing weakness.

The vexation, annoyance, and even alarm, occasioned by these nervous seizures, are often very great; and the patient begins to fear that he has some serious organic disease of heart or brain.

Now, it is a matter of some practical importance to be able to give an intelligible explanation of the phenomena, and upon this to base the suggestion of a simple and efficacious remedy. The explanation which I am in the habit of giving, and which I believe to be the true one, is this. Some kinds of emotional excitement, while they quicken and disturb the heart's action, partially suspend the breathing. It is the suspended breathing, the partial apnœa, the gradual emptying of the chest by the expiratory effort of speaking, that is the main cause of the increasing distress and the difficulty of articulation. We know, as a physiological fact, that a partial suspension of the breathing involves, as its necessary correlative, an impeded circulation, primarily through the lungs, and secondarily through the whole system; hence the feeling of giddiness, faintness, and increasing sense of exhaustion. That this is the true explanation of the phenomena in question, is proved by the fact that a few deep inspirations, deliberately taken, usually suffice quickly to remove the distressing sensations. A deep inspiration, filling the chest with air, at once renders vocalisation more easy, and the circulation more free; and I repeat that a few deep inspirations quickly lessen and remove the distress which had resulted from a partial arrest of the respiratory movements. I am in the habit of saying

to these patients that, when they are threatened by a nervous attack while reading, they may ward it off, and escape all serious annoyance, if, while continuing to read, they give so much attention to their breathing as to ensure a continual succession of deep inspirations. I tell them to bear in mind that, while the organ is continually emitting sound, the bellows must be regularly and vigorously worked. It scarcely need be said that, if any discoverable bodily derangement or debility appears to contribute to the nervous disorder, this should be treated by suitable remedies.

In connexion with this subject, it is not without interest to remark that most patients, whether men or women, who are subjected for the first time to examination by the laryngoscope, require to be told that, while the examination is being made, they must continue to breathe freely. I had practised laryngoscopy for many months before I discovered that the slight nervousness experienced by most patients on having their throats inspected causes them to hold their breath; and this suspension of breathing soon distresses the patient, and embarrasses the operator. The direction which I now invariably give to my patients is, in substance, this: "While I introduce the mirror and look at your throat, do not hold your breath, but continue to breathe in and out freely." And I do not attempt to introduce the mirror until I see that my patient understands and obeys my directions.

A few days since, while I was discussing this subject with Mr. Ernest Hart, he reminded me of a precisely analogous instance of nervous apnœa. It happens occasionally that, when a nervous patient is about to inhale chloroform, emotional excitement so completely suspends the respiratory movements, that the patient has to be encouraged, and instructed to continue his breathing, before the inhalation can proceed.

THE TREATMENT OF HÆMORRHOIDS.*

By DANIEL MACLEAN, M.D., Glasgow.

AMONG the diseases of the rectum, that abnormal condition of parts which we call hæmorrhoids, and which is popularly called piles, is the most frequent which the medical man in general practice is called upon to remedy; and from its known frequency, the public expect that our profession should be able to relieve those who suffer much more expeditiously and satisfactorily than from less known diseases. So well known is this disease by the public, that there are a great many popular remedies generally used, often in mild cases with benefit, and we are very seldom called upon for advice till the disease has assumed a stage in which ordinary remedies are of no use, and active procedure is necessary at the hands of the surgeon.

Judging from authorities who have written on this subject, notwithstanding the frequency with which this affection is met, a plan has yet to be fallen upon which will bridge over the gap between the treatment of mild cases and that of the most severe. In the former class, we content ourselves with removing the cause—if known—and with the application of innocuous remedies, such as ointments, lotions, etc.; in the latter, we proceed to use what has been called the "opprobrium of surgery"—the knife, ligature, etc.; but any method of treatment which would bridge over the great distance between these two extremes we have not. The very strong objection on the part of our patient to any operative procedure, so great, indeed, that the mention of cutting, tying, clipping, or burning, will cause him to submit to an even greater amount of pain, from the disease under which he labours, than what he would require to suffer under treatment, is a great inducement for us to endeavour to discover some means more efficacious than lotions and lavements, and less heroic than the knife. To point out a method whereby this result may be accomplished, is the reason of this paper being submitted to your notice.

Hæmorrhoids have been divided by authorities into internal and external, and by some we have yet another class called inter-external. These have their names from the position which they occupy in relation to the sphincter ani muscle. The internal are situated within or above the sphincter; the external without or below the sphincter—taking the body in the erect position; and the inter-external occupy a position intermediate to the other two divisions, being placed over the fibres of that muscle.

Piles, in whatever position they are placed, consist essentially of knots or tumours, developed upon a varicose condition of the hæmorrhoidal plexus of veins. "A pile in this state is quite soft and compressible and can readily be emptied by pressure; and, when cut into, it will be found to be composed of one or more cells filled with blood

* Read in the Surgical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

and surrounded with areolar tissue. The appearance of cells is, however, deceptive, and is occasioned by a section of the sacculated and dilated veins which enter into the composition of the tumour. After the piles have existed for some little time, or after they have once become inflamed, the tissues that enter into their composition undergo modifications that induce corresponding alteration in the character of the tumour. The coats of the veins become thickened; their cellular dilatations are filled with coagulated blood; the investing areolar tissue is hypertrophied or thickened by plastic deposit; and, on being cut into, the pile is seen to be composed of a spongy kind of tissue filled with blood." This description of the pathology of hæmorrhoids is that given in *Erichsen's Science and Art of Surgery*, and will generally be admitted to be correct.

Passing over, in the meantime, the obstruction to the return of blood through the portal system of veins, the relaxed condition of the rectum, and anything which is the primary cause in the formation of these hæmorrhoidal tumours, we have an impediment to the onward flow of the blood beyond the tumour, and an impediment to the flow of blood in the tumour itself. The greater the obstruction in the tumour, the greater the uneasiness and pain felt by the patient. This is accounted for by the blood flowing into the tumour, and being unable to leave with sufficient quickness, so that it is thereby held in the sac. This blood being continually forced in, distends the parts, and causes pressure on the surrounding tissues, irritating the nerves. The blood is sent into a vessel in which the channel of exit is the same as that of entrance; and the walls, unable to resist the propelling force of the blood, distend, till the utmost limit of distension is attained. In external piles we have another force brought into play which increases the uneasiness and pain to an unbearable extent; for, in my experience, piles on and external to the sphincter are by far more painful than those above that muscle. The blood in these cases not only fills the external hæmorrhoidal sac, distending the tissues and pressing on the nerves, but also acts as a source of irritation to the fibres of the sphincter muscle, and, causing them to contract, keeps up a painful feeling of irritation in the muscle itself, which also, by its contracted condition, prevents the pile from being emptied, even to the extent that takes place in those tumours above the sphincter.

The internal piles, from their position, have not the same accompaniments as the external; and thus we have in the internal piles a dull aching uneasiness, but in the external piles, an acute lancinating pain, causing severe constitutional disturbance.

Whatever be the size or position of these tumours, their pathological condition is that of a cell or sac with fluid contents. They may contain, in some cases, coagulated blood, effused serum in the cellular tissue, and externally thickened integument; but the condition which is essential to the existence of the hæmorrhoid is the sac with its fluid contents. The other pathological conditions are results, and are not necessarily present. I leave out of account that varicose condition of the rectum, which is sometimes called internal hæmorrhoids, with no distinct tumour. Without the tumour, it may be called "a varicose state of the rectum", as any other part may be varicose from the same condition of the veins; but the term pile or hæmorrhoid can only, with propriety, be applied where there is a distinct sac or tumour.

Seeing, then, that all kinds of piles have necessarily a sac or cell with fluid contents, and that, so long as this sacculated condition continues, you have an abnormal condition of parts with its accompanying suffering; and so long as the vessel or vessels are unable to perform their functions properly, from the continued injection of blood against the already over-strained walls, the obvious mode of treatment is to support the weakened walls, and then empty the sac, as you would do in a case of hernial tumour by a process analogous to the reduction by the taxis. This is a method of treatment not mentioned by authors, but which in my practice I have found eminently beneficial.

I was first led to employ this method of relief in hæmorrhoids in some cases which I had occurring after parturition. I was in attendance on a lady in her confinement who was a martyr to this form of ailment after all her previous labours. From the nature of the labour, I was obliged to keep up steady and uniform pressure on the perinæum. Around the anus there were three large hæmorrhoids, which each of her pains enlarged, accompanied with acute suffering. After delivery, and during my subsequent attendance, she expressed herself as never having been so free from the effects of her labours in the form of piles as at this time.

From this case, I was induced to consider the effect of pressure on piles arising from parturition, and was led to the application of the taxis to this form of tumour.

Hæmorrhoids after parturition generally come on in patients who are of a soft, loose habit of body, or who are, at all events, flabby and relaxed in the perineal region. In treating them, I first get a free evacua-

tion of the bowels by some aperient medicine; and when the effects of the medicine have passed off, I order the parts to be well fomented for a few hours, to relieve as much as possible the irritation and spasm of the parts. I then proceed to apply the taxis to the tumour. Taking a piece of soft, well-oiled cloth, and grasping one of the tumours—if there be more than one—with two fingers and the thumb, thereby encircling the enlargement, and curving the fingers so that they cover the fundus of the pile, I proceed to press the tumour towards the mouth of the sac, with a kneading motion, continuing for a little time until I find the swelling become gradually smaller under the manipulation, and there only remain the thickened integument and whatever effusion of serum may have taken place into the cellular tissue.

In the beginning of the application of this process, the pain is sometimes considerable, but, as the tumour becomes emptied, the pain decreases, and, when it is fully reduced, a great sensation of relief is experienced. The reduction of the first hæmorrhoid being completed, the same procedure is applied to the others in rotation; and, the whole being reduced, astringent lotions or ointments are applied to the part, and the operation is complete.

We are now at liberty to proceed with the removal of the primary cause, if any exist, and there is usually some such cause in cases other than post-parturient. In these last, their acute origin is much more recent, and therefore much more easily reduced; but whatever the cause, the method of treatment is still the same, and will be found of value.

Looking to the pathology of hæmorrhoidal tumours, containing, as they do, a single sac, or a plurality of sacs, with fluid contents; the first principle of treatment is to empty the cavity of its fluid, remove all tension and irritation, and enable the tissues to resume their normal condition.

In external and intero-external piles, there are—if not seen sufficiently early—besides the fluid contents, what I have called the results of the hæmorrhoidal condition, viz., the coagulated or semi-coagulated blood, the infiltrated cellular tissue, and the thickened integument. Having emptied the sac by the process mentioned, I continue the taxis to what remains of the tumour, either at that sitting or at one subsequent, and generally get quit of the static materials. What remains is removed by natural agency. It might be objected that the forcible propulsion of coagulated blood into the current of the circulation would give origin to the formation of an embolism in some distant part, and by that means act as a source of danger to the patient; but, whatever force this objection may have theoretically, it does not hold good in practice, as it might be expected to have shown its evil consequences in the course of the two or three years during which time I have employed the plan. The same or an analogous condition of parts is seen in the veins surrounding a varicose ulcer. You have little knobs at different parts in the course of these vessels, which, from their solidity, size, and shape, can only be coagulated blood obstructing the venous return, and keeping up the congestion surrounding the ulcer. By applying the kneading process, and causing the patient occasionally to do the same, you gradually reduce the amount of hardness in the part, and ultimately remove the occluded state of the vessel, but in no case does the patient suffer afterwards from embolia.

In internal piles, the application of the taxis is conducted in the same manner, but here it is necessary to cause the extrusion of the tumours, and this can be done as in the removal by the ligature, by passing an injection of tepid water into the rectum, and then getting the patient to expel them by straining, when the same process is gone through as in external piles, and, on the return of the bowels, we attend to the constitutional disorder and give injections of astringent lotions, etc.

When the internal variety of this tumour takes place in females who have had children, the reduction of the swelling may often be accomplished through the walls of the vagina, more especially if the parts are relaxed, which in the majority of women is the case.

Before concluding this paper, I will make a few remarks on this style of treatment compared with that usually recommended in this affection.

In all cases, whatever method of treatment or operation is followed, the plan above described should precede that treatment or operation. In some cases, the necessity for further operative procedure will be removed, and where operation is necessary, the risks and annoyance are reduced to their minimum.

In simple conditions of internal hæmorrhoids, where by straining the tumours are protruded, we are recommended to apply a lotion or ointment, and return them to the bowel; but if they be first reduced by the taxis, these applications will have a much more powerful influence over the condition of the parts, and tend to prevent their recurrence.

Where the tumours are such that we are recommended to apply leeches, or use the lancet to remove the pressure caused by their distension with blood, by the method which I have proposed, the same result is accomplished by removing the blood through an opening already

formed by nature, without the necessity of forming an artificial one, and the subsequent treatment is the same as in simple cases. There is this other advantage—besides the objection of the patient to the knife or leeches—that he is not required to remain in bed any time to the neglect of duty. The reduction of the tumour may be accomplished in the evening, and after a night's rest he may attend to business in the morning. There is also the advantage of applying the local remedies to an unbroken surface, thus avoiding the risks which sometimes follow.

I might here remark in passing, that some hours of an interval should be allowed to intervene between the injection of astringent lotions and the administration of aperient medicine. Time is thus allowed for the accumulation of the natural mucus of the rectum, which will facilitate the passage of the feces, and in this way prevent the straining which often develops these tumours.

In cases where it is thought advisable to operate on these tumours by the clamp, ligature, etc., by first applying the taxis you may remove the necessity for the operation; but where other circumstances determine the operation, such as a relaxed condition of the parts, you reduce the pain and uneasiness considerably.

In hæmorrhoids ending in suppuration, of course the taxis cannot be applied, as the pile has become an abscess, and must be then treated according to the principles of treatment laid down for suppurating tumours.

WOUND OF THE ELBOW-JOINT TREATED ACCORDING TO THE ANTISEPTIC SYSTEM.

By ANDREW MARSHALL, M.D., Preston.

THE following short report of a case which occurred in my practice some time ago seems to me sufficiently interesting to be recorded.

On the afternoon of August 12th, 1869, A. B., a boy, 13 years of age, was brought to my house in consequence of an injury which he had received in a cotton-mill. He stated that, when sweeping the floor behind some machinery, a revolving-wheel caught his right arm, inflicting a wound over the posterior aspect of the elbow-joint; and he was alarmed by seeing the end of the bone sticking out.

On examination, I found in the situation indicated a wound three and a-half inches long: the elbow-joint was freely opened, and the articular ends of the humerus and ulna exposed. So far as I had observed, no account of a wound of a joint treated by the antiseptic method had at that time been published. Believing, however, in the germ-theory propounded by Professor Lister, and having previously witnessed the beneficial results obtained by the antiseptic treatment of ordinary wounds, I resolved without hesitation to adopt that treatment in this severe, and, so far at least as the joint was concerned, dangerous injury. Accordingly, I freely and fearlessly injected the aqueous solution of carbolic acid (one part of the acid to twenty of water) into the joint, where it was retained by my assistant holding the edges of the wound together while I freely moved the articulation, so that the lotion might be insinuated into every part of it. The lotion was then squeezed out; and, in order to ensure the destruction of any septic germs which might still lurk in the recesses of the joint, this part of the process was repeated. The edges of the wound were well washed with the lotion, and brought into apposition by wire sutures previously steeped in the same antiseptic fluid. The point of the syringe was introduced between the stitches and the joint once more injected with the lotion as before. A small piece of lint soaked in the carbolised oil (one part of acid to forty of oil) was placed over the wound, and the whole joint was enveloped in a similar covering; a piece of sheet gutta-percha covered this, and then a bandage soaked in the same oily solution was applied from the fingers to above the elbow-joint. The boy was put to bed, his arm placed on a pillow in the extended position, and his mother ordered to keep the dressing constantly wet with the oil.

August 13th, 10 A.M.—The patient was slightly feverish, and complained of thirst. Pulse 100, tongue furred. He had no pain in the limb, and there seemed to be no swelling.

August 14th, 11 A.M.—The feverishness had entirely disappeared. The patient expressed himself as being quite well. He had no pain.

August 21st.—The patient had continued quite well since the 14th. He had no pain in the joint. This afternoon the dressings were taken off for the first time in the presence of a medical friend. The wound was found to have completely united by the first intention. Not a drop of pus was present. The joint was not swollen. The antiseptic dressings were reapplied in a similar manner, and the limb maintained at rest in the same position as before.

August 24th.—The dressings were removed to-day for the second

time. The joint was apparently quite well. The stitches were taken out and the dressings reapplied.

August 28th.—The dressings were removed to-day for the third time, and it was not considered necessary to reapply them. The movements of the joint were perfect. A little ointment was applied over the line of cicatrix. The boy was allowed to resume his work in the following week.

A result so satisfactory could not, I think, have been attained in so short a time by any other than the antiseptic system of treatment. I am quite aware that the details narrated above are not in accordance with the present mode of applying antiseptic dressings. I never dress wounds in the same manner now. A much less troublesome and much more elegant method is now adopted. I had not then heard of Lister's antiseptic sutures, with which I now always stitch wounds, and I had none of his antiseptic plaster at hand. But the treatment was in every particular strictly in harmony with the principles which Professor Lister has all along advocated. The result was everything that could have been desired, and everything that the antiseptic treatment promises to realise in such cases. There was a rapid recovery without putrefaction in the wound, and, after the first twenty-four hours, without any local or constitutional disturbance whatever.

From this and several other cases equally satisfactory I have been led to place implicit confidence in the antiseptic system, and I am persuaded that nothing is necessary to ensure success except a firm belief in the germ-theory and a careful application of the treatment founded upon it.

THE PHYSICAL NATURE OF VITAL ENERGY.

By LIONEL S. BEALE, M.B., F.R.S.,

Professor of Pathological Anatomy in King's College; Physician to King's College Hospital; etc.

THE conviction that it is "*only* by recognising the *physical nature* of *vital* energy that we can ever hope to establish therapeutics on a firm and sound basis" has, perhaps, led Dr. Ferrier* to express himself rather decidedly against some views which I ventured to put forward some years ago, but which I am ready to give up as soon as convincing evidence shall be adduced in favour of the physical doctrine of life.

If Dr. Ferrier will explain what is meant by "molecular organisation" and "molecular machinery", he will serve the cause he has at heart far better than by attacking me; for, as he must have gathered from many of my remarks, I am quite as anxious for light as anyone can be. What I desire is to learn in what particulars the "*living*" resembles and differs from the "*non-living*". I am quite ready to admit that one living thing is only some other living thing, or dead thing, or non-living thing, "*variously modified*" "under sundry circumstances", by "*subtle influences*"; but I should certainly like to have the meaning of these very comprehensive phrases explained. A man may be said to be but dust "*variously modified*"; but consider what is comprised in the "*variously modified*"! And perhaps I may be permitted to ask why, if it is right to attribute the marvellous phenomena of nutrition to "*subtle influences*", am I to be condemned because I prefer to employ provisionally the simple term "*life*" or "*vitality*" or "*vital power*"?

It is *possible* the "molecular machinery" may be discovered; but at present it is absolutely unknown. It has never been seen, and no one has yet told us what it looks like even in his imagination. But yet I must admit that it is *possible* such machinery may be beyond the microscopic limit. The imagination of *highly gifted persons* may be able to conceive the structure and mode of action of the molecular machinery of the existence of which they are perfectly certain, although it has not yet been rendered evident even to their senses. Nay, I will admit further, that a *sufficient* intelligence might be able to predict from the properties of its component parts the characters which the offspring of any given piece of "molecular machinery" will assume after it has continued to grow and multiply, say for a thousand years. But do such suggestions enable us to unravel the mystery of the life of even the simplest thing now alive, or to determine in what particulars a *living* particle differs from the same particle *dead*; or why a portion of a mass of living matter moves upwards as well as downwards, or in what manner it takes up non-living matter, and communicates to this its own properties, and divides into separate portions, every one of which possesses equal powers? It may be answered, "These phenomena are due to the properties of the molecular machinery which has long been known to exist in the imaginations of highly gifted persons; and, although as yet no one has succeeded in actually producing such machinery artificially, the efforts of philosophers tend towards such a con-

* Introductory Lecture on Life, etc. (BRITISH MEDICAL JOURNAL, Oct. 22nd).

summation"! But surely no observer, no worker at science, will feel satisfied with such statements as these; and a few will probably agree with me in thinking that, although it be in a sense unphilosophical, it is neither inconsistent nor absurd, to entertain the opinion that the vital phenomena of living matter which was derived from pre-existing living matter are due to a peculiar power; although at the same time I object to accept the view that the action of a steam-engine, which was not produced by a pre-existing steam-engine, is due to a "steam-engine principle"; and I confess it appears to me very extraordinary that many advocates of the physical theory of life cannot be convinced that the analogy they draw between a machine, which does not make itself, or grow, or multiply,—and living matter, which seems to do all these things, is so very slight as to be beyond every limit except that of the fancy. If those who support the view which Dr. Ferrier so strongly advocates could explain by physics and chemistry (a) *the movements*, (b) *the growth*, and (c) *the division of any particle of living matter of any organism in this world*, they might have some excuse for the very positive statements they make about the *physical theory of life*.

People are beginning to doubt whether, after all, living things are really so like machines and crystals and physical bases, and complex albuminoid matters in a state of rapid chemical change, as they have been led to believe them to be. And people are also beginning to doubt if those who have spoken so positively on the physical side really know much more than any one else knows about the nature of life; although, from their very decided manner, it was natural to believe they possessed very peculiar and perfect knowledge of the subject. Whether the physical theory of life would have resisted much better the "*furious onslaughts*" that have been made against it, if some other course had been pursued, is a matter of opinion; but it is quite certain that some of the strongest supporters of the doctrine are modifying their views, and are preparing to modify them still further. Those who have watched for ten minutes, under a high magnifying power, the varied movements of living matter, and have thought a little over the question of the nutrition of that living matter, will not easily be brought to believe that such phenomena are due to physical and chemical changes only. The number of such observers increases daily.

CASE OF RHYTHMIC CHOREA OF THE RIGHT ARM AND HAND: WITH PARTIAL PARALYSIS OF THE RIGHT SIDE OF THE HEAD AND THE LEFT LOWER EXTREMITY.*

By R. H. B. WICKHAM, F.R.C.S. Ed.,

Assistant Medical Officer of the Royal Edinburgh Asylum for the Insane.

G. J., aged 77, was admitted into the Royal Edinburgh Asylum on the 22nd July, 1870. He is married, a baker, and resided last in St. Cuthbert's Poorhouse. About three weeks before admission, his mental health, which had previously been good, gave way, and he was admitted to this asylum labouring under the following delusions. He thinks himself the proprietor of the hospital attached to the poorhouse, and the owner of considerable property besides. He orders the other patients about to do his bidding. He says he is a Jew, and that his brother Jews are keeping guard over his money, which is locked up by them in Edinburgh Castle. Certain spirits appear to him from time to time, and put poison into his legs, and tell him to go to hell, for he has no business to go to heaven, as he is not a Jew. They also put searching questions to him about his estates, which he refuses to answer, being of opinion that they inquire for no good purpose.

The patient is a hale-looking old man, of rather above the average height, being about five feet ten inches. When spoken to, he answers questions readily and intelligently. He stoops a little in walking, but not more than usual in men of his age. The right side of the face droops slightly, especially at the eyebrow and the angle of the mouth. The tongue, when protruded, keeps well in the middle line, except for about an inch at the tip, which turns off at a sharp angle to the right. This state of matters is not affected by pinching and kneading it, nor by forcibly directing it to the left side, as it immediately returns to its former position. On examining the inside of the mouth, the uvula is observed to droop to the right side, and the arch of the right half of the posterior buccal orifice is about the eighth of an inch or more lower than on the left side. The pupils dilate equally, and the hearing is good on both sides.

The arm on the left side presents no peculiar features, except slight tremulousness; but that on the right is markedly tremulous, and is being

constantly put through a series of rhythmic movements, beginning when the patient converses and ceasing when his conversation is over. These movements are made in the following order. He holds the right arm at semiflexion, the hand being supinated, and the humerus being nearly perpendicular from the shoulder. He then draws back the elbow, and when it is at its full retraction he suddenly pronates the hand, raising the elbow at the same time until it is on a level with the shoulder, when he brings the arm forward until the humerus is restored to its perpendicular position, finishing the movement with a rapid supination of the hand. During this evolution the fingers perform independent motions, the forefinger not moving so freely as the others. These movements are confined to a flail-like action of the middle, ring, and little fingers, the forefinger and thumb being held steady. From time to time the arm is not concerned in the evolution at all, the movements being confined to the forearm and hand. When the patient is silent no movement of the arm is observed, but he seems quite unable to speak without performing the automatic actions already described. When answering simple questions, he confines himself to the movement of the hand and forearm; but, when he is pressed on the subject of his delusions, the upper arm is called into requisition.

In walking, the left leg drags very much, and he is unable to place it in front of the right. He seeks support from objects such as the wall, chairs, tables, etc., using either hand indifferently, and apparently deriving as much support from the one as the other. He seems to experience considerable difficulty in sitting down—standing with his back to the chair, and leaning back without bending the hips, until his hands touch the seat, when he lets himself drop. In getting up again, he pushes himself up off the chair with a jerk.

There is no history whatever of the case; but I have little doubt that the patient has suffered from a paralytic seizure at some period of his life; and, from its not being referred to in his schedule, I am inclined to think that it cannot be recent, as such an occurrence would in all probability have been mentioned by the parochial officers. The most important feature in the case is his inability to carry on any conversation without performing the movements which I have endeavoured to describe. It would appear that he has partially lost the power of procuring proper words at command to express his ideas, and endeavours to make up for the want of them by these gestures. When talking about his age, or other simple matter, he only uses the hand and forearm, as I have said, and when he becomes interested in a subject he brings the upper arm into play. But he does not appear to be capable of being interested in anything except the subject of his delusions; and, consequently, the regularity of the movements may be accounted for (if they are emotional) by the fact that he is incapable of more than one series of emotions.

A NEW INSTRUMENT FOR SECURING THE PEDICLE IN THE OPERATION OF OVARIOTOMY.*

By GRAILY HEWITT, M.D., F.R.C.P.,

Professor of Midwifery in University College; Physician-Accoucheur at University College Hospital; etc.

SURROUNDED as this operation of ovariectomy is with difficulties of various kinds, one of the greatest of these is unquestionably the treatment of the pedicle: not merely the securing of the vessels enclosed therein in such a way as to prevent hæmorrhage, but the dealing with it in such a manner as shall best conduce to the prevention of the pyæmic complications attendant or liable to be attendant on the healing of the wound.

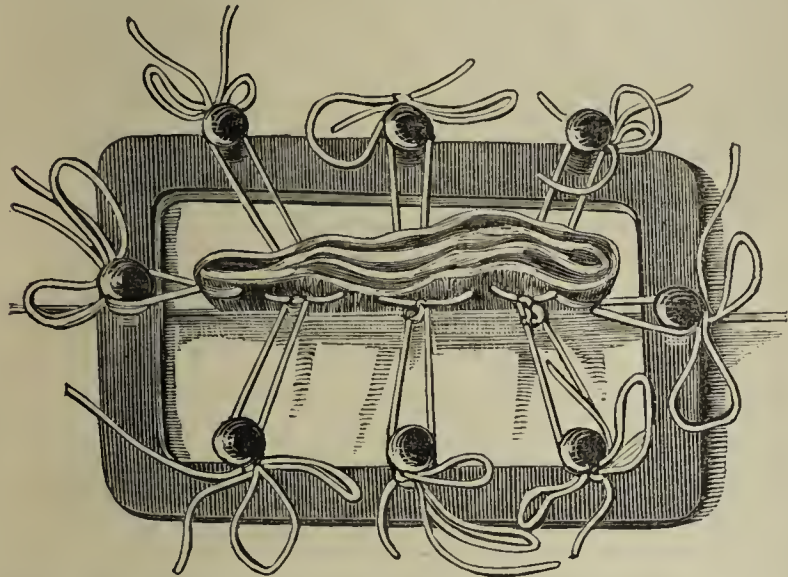
For the purposes of the present paper, I assume that the best method of securing these two results consists in bringing the pedicle to the external wound, and there fixing it; considering as I do that, on the whole, this method is attended with less risk of secondary hæmorrhage; while it does not appear to be, judging from the results—the magnificent results, they may be termed—of Mr. Spencer Wells's practice, more liable, at all events, than others to the pyæmic complications. Mr. Wells has largely employed, as is well known, the *clamp* in his operations. My experience, a far more limited one than Mr. Wells's, has made me acquainted with difficulties which seem inseparable from the present manner of clamping the pedicle, and which have given me no little trouble in some of the operations I have performed, and in which the clamp was used. The clamp, by its shape and form, hides from view the part of the wound immediately beneath it, and it is diffi-

* Read in the Psychological Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

* Read in the Midwifery Section before the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

cult to dress it and keep it clean and dry; while in cases of short pedicle it produces troublesome pressure on the edge of the wound, and leads occasionally to ulceration and sloughing from such undue pressure. The newest form of clamp, though less liable to these objections, has another, which I have practically had experience of—viz., that it is liable to slip, and allow the pedicle to escape altogether.

The instrument and method I now suggest may be described as follows. A framework of steel, shaped something like a shoe-buckle, measuring two inches and a half by one inch and three-quarters; the piece of steel of which the framework is made being two-eighths of an



The accompanying wood-cut shews the instrument the actual size. A piece of leather is represented tied in the manner the pedicle is intended to be secured.

inch wide and one-eighth of an inch thick, is provided with studs or buttons eight in number, three on two sides, and one on each of the other two sides. These buttons project three-eighths of an inch from the steel framework. It is to be used in the following manner. The pedicle, having been roughly trimmed, is perforated by a needle, armed with a double strong thread or whipcord ligature in two or three places, according to the width of the pedicle. It is then tied in segments; and the opposite ends are secured to the buttons of the framework above, one by one. The pedicle is now surrounded by the framework, while the cut edge of the pedicle is freely open to inspection and treatment in the centre; the tightness with which the ligatures are applied keeping the pedicle from slipping into the abdomen. In fact, the ligatures now act precisely as the tongue of a shoe-buckle.

The advantages of this method are, I think, sufficient to commend it. The wound can be more readily dressed; the pedicle is at all times accessible; the framework makes no pressure whatever on the edge of the wound at the point where the pedicle emerges; and the healing and covering in of the whole wound will be facilitated. There can be no question that dryness of the parts around the wound is most essential to the prevention of pyæmia; and it is exceedingly difficult to secure this with the ordinary clamp.

My first idea was to employ wire for the pedicle; but I find that strong twine is preferable, and infinitely more manageable. Messrs. Mayer and Meltzer have constructed the instruments herewith exhibited.

PROPOSED TESTIMONIAL TO DR. DUDFIELD.—A subscription has been entered upon in order to present Dr. Dudfield with a testimonial on his resigning the office of Honorary Secretary to the Poor-Law Medical Officers' Association, which office he has discharged for four years with the greatest zeal, tact, and ability, and thus contributed in no small degree to the success of the Association. Mr. Benson Baker, 42, Grove Road, Regent's Park, has consented to be treasurer to the "Dudfield Testimonial Committee," and will receive subscriptions.

HOSPITAL SUNDAY IN MANCHESTER.—The Society promoting this institution met lately at the Town Hall, Manchester; Mr. J. Grave, the mayor, presided. It was said that the total raised last year in support of the hospitals by collections in places of worship and by subscriptions was £5,540, and it was resolved that the third Sunday in December next be fixed upon as "Hospital Sunday" for this year, when a more extended effort on behalf of these charities should be made. It is proposed that this effort should cover a circuit of thirty miles round Manchester.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

NOTES ON CASES OF DISEASE OF THE NERVOUS SYSTEM.

(Under the care of Dr. HUGHLINGS JACKSON.)

Hemiplegia from Cerebral Hæmorrhage in cases where there is Valvular Disease of the Heart.—The mere fact that hemiplegia has occurred in a person, even a young person, the subject of valvular disease of the heart, must not alone lead one to the diagnosis of embolism. The mode of onset is the important matter in the diagnosis of the nature of the lesion in all cases of hemiplegia. If we learn that the patient had been deeply insensible for many hours, or, more generally, if he had been for some time in the "apoplectic condition", the diagnosis of cerebral hæmorrhage is at least as likely as that of plugging, notwithstanding that there is valvular disease. The bleeding is from an aneurism of the middle cerebral artery, or from a branch of it. It is true that, as a rule, such aneurisms burst outside the brain, and do not produce hemiplegia, but now and then they imitate, so to speak, ordinary cerebral hæmorrhage, and break up the motor track. Dr. Hughlings Jackson's observations confirm the opinion of Dr. John W. Ogle and Dr. Church as to the association of aneurisms of the larger cerebral arteries with vegetations on the heart's valves. Dr. Hughlings Jackson thinks that the kind of defect of speech which sometimes accompanies hemiplegia is useful evidence as to the *pathological* nature of the lesion. *Loss of speech*—loss excepting the patient's stock word or phrase—is in favour of hæmorrhage. Still, plugging will produce complete and permanent loss of speech. If the patient recover, and if during recovery he make frequent mistakes in words—the so-called loss of memory for words—articulating them clearly, Dr. Hughlings Jackson thinks the diagnosis of plugging more warrantable than that of clot.

Differences in Nervous Symptoms from Differences in the Pathological Nature of Lesions.—It may seem at first glance that the *pathological* nature of the lesion is of no consequence so far as the kind of symptom goes. Of course, if the very same part of three nervous systems were suddenly destroyed by three different lesions, the resulting symptoms would be the same in the three cases. But practically this does not happen. Although clot, softening from embolism, and tumour, may each damage the region of the corpus striatum, they do not affect the very same parts of this region, and they do not act on it in the very same way. For instance, clot destroys locally, it destroys suddenly, and it squeezes quickly. It mostly destroys more or less of the corpus striatum, and mostly leaves convolutions undamaged, although split off from the motor centre. Softening from plugging occupies arterial districts, and different districts, according to the branch of the Sylvian artery plugged. It may affect convolutions as well as the motor centre. Moreover, it will *alter* the nutrition of some parts whilst it arrests that of others. After partial, or seemingly complete, recovery from hemiplegia due to embolism, the patient becomes occasionally liable to chronic convulsive seizures, beginning in the face, or arm, or leg of the side previously paralysed. This liability does not occur from clot. A tumour may grow anywhere in the district; and, if it grow to a large size very slowly, even in the convolutions near to the corpus striatum, it need produce no symptoms. Nervous organs bear slow squeezing very well indeed; they resent sudden squeezing. The slow growth of tumours may, Dr. Hughlings Jackson thinks, account for the absence of speech-defects in some cases of disease (especially syphilitic disease) near to the left corpus striatum.

The *altered* nutrition above spoken of is probably owing to blocking of small arteries, which leads to congestion and even to extravasation *beyond* the block. Hence, in cases of embolism of a large branch of the middle cerebral artery, we occasionally find not only softening and destruction of fibres, but also evidences of rupture of small vessels—"red softening" in the convolutions. Sometimes a considerable part of the pia mater is stained of an ochre colour from old extravasation. The expression "*altered nutrition*" is used because, although "*increased nutrition*" will result from a locally increased quantity of blood, such congestion will in all probability lead to new matter of Composition, differing from, although of the same Constitution as (using these words in their chemical sense), that of health.

Does Disease of the Cerebellum lead to Loss of Sight?—The difference betwixt a tumour and softening from embolism, with regard to the

production of certain secondary symptoms, is very great. So far as Dr. Hughlings Jackson has observed, double optic neuritis never occurs along with softening from embolism of the middle cerebral artery, but it nearly always occurs with tumours—they are usually syphilitic—in the region which this vessel supplies. It is one of the results of a local encephalitis. It is sometimes discussed whether disease of the cerebellum produces loss of sight or not. The evidence is that it sometimes does and sometimes does not. The word “disease” is vaguely used. Softening rarely if ever does, tumour nearly always does. (Cases of tumour so placed, or so large, as to lead to pressure on the corpora quadrigemina, are excluded from consideration.) In more general terms, *destruction* of the cerebellum does not, but irritation (encephalitis about a foreign body, or irritation propagated in vaso-motor regions?) does. Then the word “produce” is used vaguely also. The existence of blindness along with disease of the cerebellum is no proof that the disease has destroyed any “centre for sight”. The blindness depends on inflammation of the optic nerves. This is not a mere verbal refinement. It is quite certain that there may be very abnormal ophthalmoscopic appearances when the patient can read the smallest type, and when he considers his sight to be quite good. Moreover, blindness may not follow such inflammation. The nerve-fibres of the optic nerve-bundle are not *in fault*; they *suffer* from the faults of the other ingredients of the bundle. This inflammation, Dr. Hughlings Jackson believes, is brought about by frequent and irregular contractions of the arteries supplying the nerve-trunks, the contractions being the results of discharges of unstable grey matter in the part of the brain diseased. (Sudden attacks of temporary loss, or of great defect, of sight are not very uncommon in the onset and course of cases of optic neuritis in physicians’ practice.) In considering the manner of production of changes of nutrition through the intermediation of vaso-motor nerves, we have not to think merely of persistent contraction of arteries as the result of a continued irritation of the vaso-motor nerves, nor merely of permanent dilatation, the result of palsy of these nerves. For nervous discharges—of grey matter, at least—are intermittent; and if, in cases of tumour, much grey matter be involved in the local and secondary encephalitis, there will be not only excessive but many repeated discharges. Thus orderly rhythmical nutrition of the nerves will be impossible. With regard to the position of disease producing optic neuritis (and other symptoms of its class—*i. e.*, secondary symptoms, the results of a local encephalitis), the question whether white or grey matter is involved is of more importance than the question whether the cerebrum or the cerebellum be the seat of disease. Admitting, as is most probable, that the optic nerves have connexions—probably very indirect connexions—with the cerebellum, as they have with the cerebrum, it is still maintainable that destruction of great part of one lobe of the cerebrum or of the cerebellum produces no defect of sight. But nervous organs are connected not only by nerve-fibres but also by arteries (indirectly by vaso-motor nerves). Hence, whilst *destruction* of no part of the cerebrum or cerebellum leads to loss, nor even to defect, of sight, irritation by tumour in any part of either may lead to inflammation of the optic nerves, on which inflammation blindness usually—not always—follows.

Speech-Defects in Healthy Persons.—An attentive observer will find that many people who are in good health make, now and then, mistakes in talking of various kinds. One not very uncommon mistake is transposition of words—*e.g.*, “get a cash chequed”, for “get a cheque cashed.” Another is transposing syllables, or rather sounds—*e.g.*, “Mukes from Boodie’s”, instead of “Books from Mudie’s”; “skinal pord”, for “spinal cord”; “patheter cased”, for “catheter passed.” It is to be observed, however, that this is more than mere transposition. The word transposed seems to take on, so to speak, the habits of the word it misplaces; thus “cheque” becomes “chequed”. It is an old joke to ask a child to repeat “boiled fowl” very rapidly. Unless the child’s mental gymnastics be very good, the words soon become “boiled foil”, “bowled foil”, etc. Dr. Hughlings Jackson believes that such mistakes as the above are owing to slightly imperfect co-ordination in the action of the two sides of the brain.

Remarks on Utterances of Speechless Patients.—It is a matter worthy of careful consideration that the words to which a “speechless” patient is limited are usually “yes” or “no”, or both. These words embody propositions (yes=it is so); and thus it may be said that the “speechless” patient does speak. Yet in some cases he *utters* these words, and does not *speak* with them. They are rather of interjectional than of propositional value, and are used largely by speechless patients as vehicles for the variation of vocal tones by which emotion may be exhibited. Nevertheless, the patient frequently does speak with them; he asserts and dissents. But it must be observed that “yes” and “no” are the most general of all propositions, and in this respect border on interjections. Although “yes” is used to give assent to particular

statements, it will serve for assent to any statement, and is indeed used now and then by healthy persons, quite as much in an interjectional manner, to express a state of pleasure in agreement. It is, so to speak, an automatic proposition. Something similar is to be observed with regard to writing. The signature is the most automatic of all writing processes; we find that the speechless man may sign his name readily when he can write nothing more. These observations are in accordance with the wider observation, that parts which suffer least in paralysis from disease of the brain are those which have the more automatic—the less special—uses. Moreover, these parts recover sooner. Thus, in the commonest form of hemiplegia, the leg suffers less and recovers sooner than the arm, and the upper arm than the forearm. In the less common cases, where the leg is more and longer paralysed than the arm, there is at least often an order of recovery. In these cases, Dr. Hughlings Jackson believes that the hand recovers faster than the upper arm. Such facts evidently bear on localisation, if by this word is to be understood the plan of structure of the nervous system and its parts, and not the localising of so-called faculties.

[To be continued.]

REVIEWS AND NOTICES.

ON FOOD: its Varieties, Chemical Composition, Nutritive Value, Comparative Digestibility, Physiological Functions and Uses, Preparation, Culinary Treatment, Preservation, Adulteration, etc. By H. LETHEBY, M.B., M.A., Ph.D., etc., Professor of Chemistry in the College of the London Hospital, etc. London: 1870.

DR. LETHEBY has in this volume reprinted his Cantor Lectures, originally given before the Society of Arts. The book is full of valuable information, and is written in a style which makes it interesting reading. The lectures were addressed to a non-professional audience, and are well adapted for the perusal not only of medical students, but of the general public.

The first lecture concerns the nutritive values of different foods, and contains some useful tables showing the ratio of nitrogen and other substances in a large number of the articles in common use as such. After remarks on the fallacies which attend the attempt to ascertain the real value of any given food by chemistry alone, the author proceeds to examine some of the more important in detail. To potatoes he awards the prize as to cheapness, and calculates that upon them an adult may sustain life—*i. e.*, obtain all the carbon and nitrogen required—at a weekly cost of rather less than eightpence. This low estimate is, however, got at by supposing the labourer’s wife and family to be cultivators, and, of course, unpaid. At the price of a halfpenny a pound, a potatoe-diet would cost half-a-crown a week. An extraordinary discrepancy we may note between the chemist’s estimate of the value of fish as nutriment, and that formed by those who eat it. In a table of animal foods at page 4, in which human milk is taken as a standard, and is supposed to be represented by 100, we find mutton rising to 773, salmon to 776, beef to 880, pork to 893, turbot to 898, and, highest of all articles mentioned, herring to 914. Thus the latter, which is popularly considered a very poor food, has a nutritive equivalent more than three times as high as that of yolk of egg. Nor does any difference in the relative ease of digestion help us, for herring is generally supposed to be much lighter than either salmon or egg. Our author does not attempt any elucidation of this puzzle, nor does he even advert to it. At page 43, we find the following paragraph. “Fish is not a favourite article of diet with the labouring classes, unless it be salted or smoked, and then it is chiefly used for its flavouring qualities. There is a prejudice that it has no nutritive strength, and it arises perhaps from the circumstance that it does not easily satisfy hunger, and is quickly digested; but the inhabitants of our coasts use it largely as food.” In Table I we find that, to yield 1,220 grains of nitrogenous matter, 6,740 grains of white fish are required, and only 2,723 of skim-cheese. This seems, again, to differ so much from what we find in Table II, that we cannot but suspect that we are in ignorance of what is meant by “nutritive equivalent”.

At page 37, we learn that the Paris population consumes per head nearly twice as much meat as that of London: the proportions are 7 ounces and 4½ ounces respectively. This is very different from the popular impression, but may, nevertheless, be true. We feel, however, the less compulsion to believe it, because the figures on this page appear to have been engaged in some strange pirouette. Thus, one sentence tells us that “in this metropolis, indoor operatives eat meat to the extent of 14.8 ounces per adult weekly”; and another, that, according

to Dr. Wynter, every man, woman, and child, averages $4\frac{1}{2}$ ounces per day. Thus, whilst children and women average nearly 31 ounces a week, "indoor operatives" eat less than 15. This is simply incredible, and proves either that the statistics are of no value whatever, or that a misprint has crept in. We have been unable to detect the latter; and as there is nothing in the text to imply that the author is aware of the extraordinary discrepancy of the statements, we are left in bewilderment. It will be seen that one assertion is, that a London operative eats meat each week at the rate of less than 15 ounces, whilst every member of the Paris population, old and young, eats nearly 50! We do not know exactly what a "figure-dance" is, but suspect that this is about what is meant.

Another example of statistics so expressed that it becomes difficult to understand their lesson, occurs at page 32. It is there stated, respecting milk, that "76 per cent. of" the labouring classes of England make use of it; 83 per cent. take it as buttermilk, and 53 per cent. as skimmed-milk." Does this mean definitely that 76 per cent. take milk with the cream in it, and that almost all these use it also as buttermilk, and most of them as skimmed-milk likewise? If it does, it might have been more clearly expressed. We should like also to know what is meant by "the labouring classes". If the town as well as the country population is comprised, we find it certainly very difficult to credit the statement that 83 per cent. drink buttermilk, having supposed that the use of this latter article had become very infrequent, excepting in farm-houses.

At the end of this chapter, the author gives us interesting facts as to consumption of food in London—a subject which his position as medical officer to the City gives him special opportunities for investigating. He states that 4000 sheep, nearly 700 oxen, and about 90 calves, are daily brought to the metropolis. The text states that we receive also 4200 tons of fish; but this quantity is so much in excess of our powers of belief, that we ventured to trouble our friend, the learned author, with a query, and have his authority for reducing the figure to 800. We have here another instance of the danger of errors in the use of figures. On this matter we may just add that, if this estimate of food-supply is to be useable, we ought to have clear information as to what the term "this metropolis" includes. Does it take in the suburbs? and does there exist machinery by which the total quantity of meat which reaches our London tables can be ascertained? The quantity of fish (800 tons) still seems out of probable ratio with that of beef and mutton (beef 350 tons, and mutton 160). Does some of the fish go out of London again? and do the facilities for estimation at Billingsgate exceed those offered by the meat-markets? We are incredulous that Londoners eat more fish than they do of beef and mutton put together. Dr. Letheby himself admits that amongst the labouring classes fish is not a favourite article of diet unless it be salted or smoked, and that even then it is chiefly used for its flavouring qualities.

Lecture II deals with the comparative digestibility of food, and is a very valuable one, though still with traces every here and there of hasty writing. The third lecture will be of great interest, especially to heads of large families, and to those concerned in the management of public institutions, since it gives excellent advice and information as to the construction of dietaries, times of meals, and the preparation of food. Lecture IV deals with the preservation of food, and gives an account of most of the more successful efforts which have been made to solve this most important problem of modern life. The latter half of this lecture concerns unwholesome and adulterated food—a topic on which Dr. Letheby is more especially at home. His opinions as to the dangers of using the meat of diseased animals, and to the effects of the more common adulterations generally, seem to us eminently judicious, and are by no means of the alarmist character.

Throughout the book we find items of interesting historical information interspersed; and usually this is of a reliable character. Through a slip of the pen at page 181, Shakespeare and Ben Jonson are stated to have been frequent visitors to the "Grecian" Coffee-house. Now, they may have visited a tavern of that name; but certainly neither the one nor the other ever drew inspiration from either tea or coffee, inasmuch as they both lived nearly a century before the introduction of the latter into England.

In concluding our notice of this work, we can only express our regret at having found so much which seemed to tempt criticism. We may assure the reader, however, that the faults constitute a very small part of the whole, and that, if he read with judgment and some scepticism, he will find Dr. Letheby a pleasant and trustworthy guide to a fair knowledge of the subject of food. This subject is, however, such a very important and interesting one, that we cannot but hope that Dr. Letheby will soon publish an enlarged and corrected edition. A comprehensive and really accurate treatise on the articles which we eat would be very acceptable both to the public and to the profession.

A HANDBOOK OF MEDICAL MICROSCOPY. By JOSEPH G. RICHARDSON, M.D., Microscopist to the Pennsylvania Hospital; Secretary of the Biological and Microscopical Section of the Academy of Natural Sciences; etc. Pp. 333. Philadelphia: Lippincott and Co. 1871.

THIS is a book intended for those who are not adepts in microscopical research. It has been written with a view to meet a growing want, and under the influence of an impression which ought to become more general, to the effect that "at least one-half of the cases of disease which physicians are called upon to treat would have some light thrown upon their nature by a careful examination of the renal secretion, sputum, blood, etc., with the microscope", and that, therefore, "an earnest and conscientious practitioner of medicine can scarcely discharge his whole duty to himself and his patients without frequent resort to such investigations". But, although the book is especially destined to meet the wants of those who are at present inexperienced in microscopical work, it is, on the other hand, a more than usually complete compendium of what is already known concerning the microscopical characters of the various secretions. The author has striven, with considerable success, to bring his book up to the level of the knowledge of the day, and shows a wide acquaintance with English and foreign literature on these subjects. Its outward dress is excellent, and we may congratulate Messrs. Lippincott on the very satisfactory manner in which their recent publications are produced. It is illustrated by thirty fairly good wood-engravings, though there might have been more with advantage.

NEW BOOKS AND NEW EDITIONS.

MR. ARTHUR MYERS' views on the influence of tight clothing and bad accoutrements have already been brought before our readers *à propos* of his communications to the Pathological Society and to this JOURNAL. In his *Alexander Prize Essay on the Etiology and Prevalence of Diseases of the Heart among Soldiers* (Churchill and Sons), he has thrown together the evidence collected by Maclean, Parkes, Aitken, and Lawson, with clearness and precision. To this he has added the results of his own observation with the sphygmograph, and a special attack, which is clearly well founded, upon the tight collar. It is not only a reliable and suggestive monograph, which does credit to its author as a surgeon, but it is so written that military authorities can, and we hope will, be influenced by the body of evidence of which it affords an interesting and pointed summary.

DR. JOHN CHIENE'S *Contributions to Surgical and General Pathology* (Edinburgh: Livingstone) include a very interesting case of oblique and direct inguinal hernia occurring at the same side of the abdomen—an extremely rare combination, which he describes with care, and illustrates with skill and research; a suggestive note on a case of intraperitoneal hernia; and some well written and philosophic monographs of anatomical anomalies and malformations. They are solid, carefully written papers, showing the exactness, research, and practical application of scientific detail to surgical manipulation, which become a good anatomist, and go to make a sound and trustworthy surgeon. They are good specimens of the Edinburgh school of work, than which there is none better in Great Britain.

WITH an affectionate expenditure of costly and luxurious typography Dr. LONSDALE has clothed the *Life of Dr. Heysham*, the Carlisle physician and statist, in a form which at once attracts and delights us. Dr. Heysham is best known as the collector of the vital statistics on which the famous and invaluable Carlisle Life-tables are founded. How noteworthy a figure he was among Carlisle worthies—how lusty, vigorous, and well-chiselled his character and life—none can know who do not read Dr. Lonsdale's delightful volume. There stands the man—"a three-bottle man", a hearty liver, a vigorous politician, a laborious statist, an enlightened practitioner, an unaffected philanthropist, an eccentric magistrate; the friend of Paley, Milner, and Law; a man to be liked and relished, and whose portrait, drawn amidst all his surroundings with a loving and skilful hand, in this handsome volume of Dr. Lonsdale, will long keep its place in our too scanty medical portrait-gallery.

BANBURY HOSPITAL.—At a meeting held in the Town Hall, the Mayor in the chair, for the purpose of appointing officers *pro tem.*, and making other arrangements for the opening of the hospital, it was stated that the donations amounted to £1,330, and the subscriptions to £530. Mr. Hitchens, of Leamington, offered £500, provided a further sum of £1,000 was raised, whereupon £325 was at once subscribed towards meeting it.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 29TH, 1870.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

I

SOME excuse may be reasonably enough demanded for adding to the already considerable mass of letters on medical education; but, in the first place, the matters to be here treated are of such great importance that they cannot, until fully remedied, be too often discussed, especially at times like the present, when great schemes of reform, long conceived, appear to be coming to the birth; and, secondly, the subjects referred to are among those of which the importance is apt to be overlooked from their being matters of detail. It may be well, also, to add, that in the following remarks no pains will be taken to write on "medical education" in general; but, on the other hand, the writer will strive carefully to avoid everything which may not be fairly comprehended under that term, and even of such much is left unsaid.

I. *On the Influence of Examination-Requirements in the amount and kind of Knowledge acquired by Candidates.*

The first matter to which attention may be drawn is the importance of the examination which a student is obliged to undergo, and its influence on his education—including in this term education, not so much what he is taught as that which he learns. To be sure, this subject has been much insisted on by many of those who have written on medical education, and by some with much stress. But at the same time there is reason to think that it is still not so universally recognised as it should be; its vital importance is not generally or fully realised. Probably, it would be allowed by everybody that, given a *perfect* method of *examination*, all medical education might be left to take care of itself, as to its method, duration, and kind; that, if the tests of knowledge were complete and unfailing, there would be no need of any compulsory curriculum of preliminary study, as the result only need be cared for. Inasmuch, however, as the result of all examinations must fall short of complete proof of possession on the part of the candidate of the necessary knowledge, there is an admitted need of a safeguard in the shape of certificates of his having studied for a defined period certain subjects, of having attended certain lectures, of having dissected, of having done this, that, and the other. This is, of course, how the matter stands: no examination, it is urged, can be a complete and unfailing test, and, therefore, the need of a supervised curriculum of study. But the fact remains, that the examination is the mainspring of the whole machinery, and represents, really, the motive power of every part. Those who have much to do with students are made acutely conscious of this in various ways. The eagerness with which examination-papers are scanned; the rapt attention given to accounts of the ordeal coming from those who have passed through it; the diligent attendance on lectures or class-examinations—supposed, rightly or wrongly, to deal with what is required for diploma-examination purposes; the apathy with which, but too frequently, other instruction is regarded, are sufficiently sure evidences how strongly this class of information appeals to students' minds.

No better illustration of the influence of examinations on the kind of knowledge sought after by students can be taken than one springing from a comparatively recent alteration in the method of testing students' knowledge adopted by the Examining Board of the Royal College of Surgeons. It is not many years ago that no department of a hospital was more systematically neglected by the average student (I am not referring only to

idle men) than the museum of pathology; and, unless a man happens to be indeed fond of pathology, or is conscious of the good of working, apart from examination purposes, there is not the least ground for supposing that he will voluntarily look at a number of bottles, the contents of which are to him as like one to another in nature and substance as they are in colour, and which can be read about far more comfortably in the accustomed handbook than in the discursive, not to say uninteresting, pages of a museum catalogue. Of late, however, a change has taken place. A student knows that part of the examination for a diploma which he *must* obtain has to do with actual specimens of disease; and knowing, also, as he does, that should he not have seen such specimens beforehand, they would be strange and quite incomprehensible to him, he takes care to look at them and become familiar with their appearance. It would be no exaggeration to say that the introduction of this "practical" element into the diploma-examination—occupying, as it does, but a few minutes or seconds—has increased the number of students of pathology tenfold. The amount of knowledge got is of course strictly proportional to what is demanded at the examination; but this need be only mentioned here—its consideration will come hereafter.

It may be well, however, to refer to the contrary effect, or rather the want of any effect, of a regulation on the part of an examining board which requires men presumably to learn a subject, but the knowledge of which is not tested by examination. It is not too much to say that such regulations are, in the majority of cases, absolutely futile. It may, indeed, happen now and then that an unusually timorous man is frightened into obtaining a little knowledge of the subject or a very studious man is attracted to it; but the effect ends here, and will, probably, under the circumstances, always do so. That a man would study comparative anatomy, for example (if it be not invidious to quote it), for an examination which will not test his knowledge of it, is about as likely as that he would study veterinary surgery.

The same thing—the influence of examinations on the kind of knowledge acquired by candidates—is frequently illustrated in an amusing manner. A so-called crotchety or an out-of-the-way question, occurring once in a series of examination papers, is carefully considered, and the correct answer "got up" time after time and year after year, long after all chance of its repetition has disappeared, and, it may be, after the author is forgotten. Those who have had tutorial care of students will be able to call to mind the questionings to which they have been subjected by men with an examination in prospect, on matters which are perhaps equally a puzzle to teacher and pupil, and which are generally traceable to an old examination. Some years since the following question was set at the Royal College of Surgeons: "What parts form the joint at the ball of the great toe? Describe the peculiarities of this joint." Now, this question is a good one, as a test of accurate knowledge of the hinder extremity, and might puzzle many advanced students of anatomy. It is not, however, a question likely to be often repeated. But, for a long time after its appearance, no joint was more inquired about in dissecting-rooms than that of the ball of the great toe; and no scraps of information were more gratefully received than those which had to do with this part of the body. This instance might be multiplied, of course, by many others.

It may seem, indeed, so evident that the kind of examination which a student must undergo makes all the difference to the knowledge he gets beforehand, as to make also any proof or illustration of the facts needless. But it is not impertinent to ask, if the truth in question be granted, how are we to account for the constant attempts to patch and improve medical education without reference to alterations in the scheme of diploma-examinations. The circumstances under which men enter the profession of medicine seem to be disregarded in such efforts. This observation does not, of course, refer to those who are fond of their coming study, or of certain parts of it, for its own sake; such men are numerous, let us be glad to acknowledge, and they form the backbone of the whole body; but these are not the men for whom legislation is required. The only regulations they need are such as will

give them certain opportunities of learning, and just so much restriction as will make them work judiciously; all else they can manage for themselves.

But how does the case stand with most of those who study medicine? What would be the record of one who impartially set down the aims of the majority of those now studying at various hospitals? It is no discredit to them to affirm that they for the most part learn "medicine" only to acquire a legal qualification to practise it, and so to get an honourable living. They desire knowledge to practise it well; but the first consideration must be the legal right to do so. They will be assumed, when titled, to be fit to practise their profession; and they are not likely for themselves, at least in their student life, and, so to speak, in advance, to dispute the assumption. On all accounts, the title to "practise" is the thing required; and this can be obtained, and obtained only, by passing certain compulsory examinations. Now, this granted, why should it be expected that men will learn that which will not help them towards the only thing they really want? Even men with high aims, to use a trite phrase, discard frequently all but that which, in their own opinion, is best for them: they choose their own line of study as far as possible, and do not easily tire of disputing the good of this or that which is laid down in the prescribed curriculum. And why, it may be repeated, should the average man be expected to do otherwise? A sense of duty may be relied on, for many, as a means of making them work. But suppose a student not to feel it to be his duty to learn that which he does not like, which, so far as he can see, will be of no service to him when learnt, and which will certainly not be required of him by his examiners, who is to blame him? Why is a student expected to do what his examiners, or say the rest of the world, would not think of doing? Who among his teachers learns that which he considers would be of no service to him when learnt, which he dislikes, which he is not obliged to learn, which he does not feel to be his duty to learn? Considerations such as these seem to point to the conclusion, than which there appears to be no other, that of all schemes of reform of medical education, the first and by far the most important is that which concerns a satisfactory constitution of the compulsory examinations for diplomas. Much besides this may remain to be done with benefit; but it is not too much to say that nothing will be of the least service without it.

SCARLET FEVER AND ITS PREVENTION.

THERE are few subjects which at the present time excite more interest and anxiety than the alarming spread of scarlet fever in London and other large towns, and, indeed, throughout the country. We have from time to time directed the attention of our readers to this most important practical question; and we propose now to pass in review the main points of a statement by Dr. W. Budd* (Bristol), in which, with characteristic clearness and force of diction, he sets forth his theory and his practice.

First, then, as to the theory: there is good reason to believe that not only the eruption on the skin of the scarlet-fever patient, but everything that is shed from the body of the infected, is heavily laden with the germs or seeds by which the disease is propagated. The discharges from the throat and nose are believed to be especially virulent. It is more than suspected that those from the bowel are scarcely less so. As the kidney is known to be affected in a very special and often in a very severe way by the poison, this organ probably furnishes another outlet for it. "All analogy, indeed, tends to indicate that in this case the renal epithelium which is cast off so plentifully performs the same eliminative function as that which is cast off in still greater profusion by the outer surface of the body." As the bulk of all these excreta soon finds its way to the cesspool or sewer, the large part which cesspools and sewers are known to play in the dissemination of the disease is thus explained.

Taking these considerations as our data, to prevent the spread of the fever our main object is to destroy the poisonous germs proceeding from these various sources on their very issue from the body. In accordance with this view, the chief points insisted upon by Dr. Budd are the following. The room, in which the patient is shut away from the rest of the household, is cleared of all needless woollen or other draperies which may harbour the poison. A basin, charged with chloride or carbolate of lime or some other disinfectant, is kept constantly on the bed, for the patient to spit into. A large vessel of water, with chlorinated or Condry's fluid, stands in the room, to receive the bed and body linen immediately on removal from the patient. Pocket-handkerchiefs are proscribed; in place of them, small pieces of rag are used for wiping the mouth and nose, and, when once used, are immediately burnt. Disinfecting fluids are used for cleansing the hands of the nurses and medical attendants. All glasses, cups, or other vessels used by or about the patient, are scrupulously cleaned before being used by others. The discharges from the bowel and kidney are received, *on their very issue from the body*, into vessels charged with disinfectants.

By these means, the germs which are thrown off by the internal surface of the body are robbed of their power to propagate the fever. Those which are thrown off from the skin require somewhat different management. There is reason to believe that the skin-eruption is the main outlet for the poison, and that the ejected particles of epidermis, partly in the form of visible scales, and partly in the form of impalpable powder, are most active sources of contagion. The primary object is to prevent these minute particles, which are the carriers of the poison, from taking wing before they can be disinfected *in situ*. This Dr. Budd effects by anointing the surface of the body, scalp included, twice a day with camphorated olive-oil. The inunction is soothing to the patient, and relieves the troublesome itching. Moreover, Dr. Budd has instituted a series of experiments which, he says, appear to show conclusively that camphor is a strong disinfectant. We should be interested to learn some particulars of these experiments. The inunction is commenced about the fourth day, as soon as a white efflorescence appears on the skin of the neck and arms. "The oiling is continued until the patient is well enough to take a warm bath, in which the whole person, scalp again included, is well scrubbed, disinfecting soap being abundantly used during the process. These baths are continued every other day until four have been taken, when, as far as the skin is concerned, the disinfection may be regarded as complete." Dr. Budd does not consider it necessary that desquamation shall have entirely ceased before the patient is allowed to mix with other members of the family, especially if half a pound of sulphate of iron be added to the last bath. Upon this point, however, we think it better to err on the side of over-caution. The breath, which derives its chief taint from passing over the diseased throat and nostrils, is best disinfected by the local application of a watery solution of the perchloride of iron, which has the double advantage of greatly helping the recovery of the patient and largely adding to the safety of the attendants. To complete the preventive code, immediately after the illness is over, the dresses worn by the nurses, which should be of cotton or some smooth material, are to be washed or destroyed; and the bed and furniture and room occupied by the sick are to be thoroughly disinfected.

Dr. Budd declares that so remarkable has been his success with this method, that for a period of twenty years he has "never known the disease spread in a single instance beyond the sick-room, and in very few instances within it." The two elements in the method are, separation of the sick on the one hand, and disinfection on the other; and we are confident that its general adoption would do much to stay the spread of the pestilence which is now bringing suffering and death into so many homes.

In conclusion, we venture to suggest that Dr. Budd's clear statement of the facts of scarlet fever, his conclusive reasoning upon those facts, and his rational and successful practice based thereon, afford a complete refutation of those pathologists who profess to doubt the elimination of

* *Scarlet Fever (sometimes called Scarlatina) and its Prevention.* By William Budd, M.D. Fourth edition. London: 1870. Pamphlet.

morbid poisons. The distinguished author of the Address in Medicine at the meeting of the British Medical Association at Oxford suggested that morbid poisons are assimilated, and not eliminated. In order to accept this novel doctrine, we must reject all the facts which prove the spread of diseases by contagion, as well as those which tend to establish the efficiency of disinfectants to prevent their spread. If no morbid poisons be eliminated, the doctrine of contagion through the agency of contaminated air or water is an error, and the practice of disinfection an uncalled for trouble and expense.

DR. CAYLEY has been appointed Assistant-Physician to the Middlesex Hospital.

ELIZABETH GARRETT, M.D., is a candidate for the London Education Board in the parish of Marylebone.

THE library of the late Professor von Gräfe has come into the possession of Mr. Hirschwald, the publisher, of Berlin, by whom a catalogue is about to be published.

PROFESSOR WILLIAM KING, M.D., of Galway, has received the honorary degree of Doctor of Science from the Senate of the Queen's University in Ireland, in consideration of his eminence as a geologist.

MR. W. B. LANGMORE, Surgeon to Whitecross Street Prison, is to receive a gratuity of £400, by way of compensation for the loss of his appointment occasioned by the abolition of the prison.

THE Quarterly Meeting of the Edinburgh University Club will take place at the Pall Mall Restaurant on Wednesday evening, November 9th, the Rev. Cosmo R. Gordon, D.D., in the Chair.

ON the 30th instant, an appeal will be made from three hundred local pulpits in favour of the Newcastle Infirmary. We hope it will be richly answered.

WE are requested by the Secretary of the General Lunatic Hospital at Northampton to make known that the statement in our article of last week, referring to a fatal accident to a lunatic in a bath, has no application to that hospital.

A LOAN exhibition of high-class paintings in water-colours will be opened on Monday next at the Institute of Painters in Water-Colours, Pall Mall, of which the proceeds will be devoted to the National Cottage Hospital for Diseases of the Chest, Isle of Wight.

THE *Richmond and Louisville Medical Journal*, an able and well-written American medical monthly, announces for next year a series of lithographic portraits, mostly of European medical men. The engravings selected are as follows: Sir James Simpson, Baron Liebig, Sir William Fergusson, R. Virchow, Cruveilhier, Rokitsansky, Trousseau, Chelius, Civiale, Thomas King Chambers, Ricord, and Claude Bernard.

THE authorities of the General Hospital, Birmingham, decided at their annual meeting on Wednesday, the 26th instant, to add to the staff one additional honorary physician and surgeon, with care of out-patients only at present, but to succeed to full ward-duties on the first vacancies. It was also decided to appoint a resident paid registrar, to record the vital statistics of the hospital, to perform the examinations after death, attend inquests, and perform other like duties.

THE CONJOINT EXAMINING BOARD.

WE are glad to learn that the question of establishing a Conjoint Board of Examiners is about to occupy the two Colleges again. The College of Physicians have held a meeting on the subject; and the College of Surgeons' Committee will shortly meet the College of Physicians' Committee in conference.

GRESHAM LECTURES.

DR. SYMES THOMSON, the Gresham Professor of Physics, will deliver a course of three lectures at the College in Basinghall Street, on Friday, November 4th; Monday, November 7th; and Tuesday, November 8th. The subjects of the lectures will be: 1. The Organs of Respiration in Health; 2. Hay-fever; 3. The Respiratory Organs in Disease.

RELAPSING FEVER IN LIVERPOOL.

THE following is the report of the Liverpool Fever Hospital for the week ending October 22nd, 1870. Remaining per last report, 1339; admissions during the week, 405; discharged, 354; deaths, 22; remaining October 22d, 1368. There were in hospital ten cases of typhus, six of varicella, one of variola, twenty-six of simple continued fever, and three of scarlatina.

HARVEIAN SOCIETY.

THE first meeting and *conversazione* was held on Thursday, the 20th. It was numerously attended by the members and their friends, and the President, Dr. Cleveland, delivered an address on the "Various Modes of Death." Mr. Pratt exhibited his large galvano-cautery, by which some large tumours with pedicles had lately been removed. The next meeting is fixed for November 3rd.

ACCIDENTAL SELF-POISONING.

THE *Pharmaceutical Journal* records the following case of accidental self-poisoning. It belongs to a melancholy class, only too numerous and painful, and in no way differs from a sadly familiar type.

"A widow lady named Elizabeth Simpkins, who resided with her brother-in-law at Crewe, has lately died under the following circumstances. It appeared that the deceased had been a sufferer from rheumatism, and that for the last seventeen years she had been in the habit of using an embrocation consisting of chloroform and aconite, prepared by Dr. Dawes of Longton. About half-past one on the morning in question, she awakened her brother-in-law, and told him she had taken the wrong medicine. Medical men were sent for; but, on their arrival, life was extinct."

We refer to this case as a proof of the incumbent duty of the Pharmaceutical Society to fulfil the function assigned to it by a recent Act of the legislature, of framing regulations for the purpose of preventing such accidents, as far as mechanical precaution, added to proper care, can prevent them. We have little doubt that, when they have fulfilled this caution, practitioners will adopt the precautions approved in sending out medicines from their private surgeries.

POOR-LAW RELIEF AT BETHNAL GREEN.

SOME very serious facts were elicited this week at an inquest on William J. Watson, a house-painter, who resided in the above parish. It appears that a short time ago his wife died, leaving two children: soon afterwards he fell into distressed circumstances, becoming very ill with painter's colic. His brother applied to the relieving officer for an order for the attendance of the parish surgeon. That officer was from home, and the applicant learnt that he would not return for several hours. The next day, the landlady again applied—this time with success—and the order was at once taken to the medical officer, Mr. Massingham, who forwarded it to his assistant, Mr. Rogerson. That gentleman not calling, three applications were made at his surgery, and once at his house, for his attendance. Between three and four in the afternoon of the day the brother saw him, when he stated that he would not be a minute, and told him to give the sick man some castor-oil. He did not call until half-past five, when the man was dead. Mr. Rogerson, in his evidence, stated that he received the order at half-past twelve; but though it was endorsed "Said to be urgent", he did not notice the endorsement; if he had, he would have made a push to have got there before half-past five. He got there as soon as he could. He had forty-six pauper patients to see that day, and to attend three women in labour, and had been on his feet all day from morning till night. Besides attending the pauper patients, he had charge of the practice of two other medical men—his own and Mr. Massingham's. It further appeared that, after the death of the father, the children were left with the corpse all night, and on the next day (Sunday) were found in his room in a starving condition, and had to be removed to the workhouse. This evidence suggests questions which call urgently for official reply. Why was the relieving officer absent from his home for hours, leaving no one to represent him? How did it happen that the medical officer, having an order handed him marked "urgent", should have sent it on to his

assistant without drawing his attention to the endorsement? Finally, how comes it that a gentleman holding such a multiplicity of offices should be the authorised assistant of the medical officer? We feel that an explanation other than that which appears in the report from which we have quoted is demanded, alike in the interests and for the honour of the Poor-law medical service and of common humanity. Mr. Rogerson was clearly over-worked; and the jury recorded in their verdict the opinion that he did the best under all the circumstances, but the best was—nothing. The circumstances, then, need revision and amendment.

REGISTRATION OF DISEASE.

THE following memorial, from the Northumberland and Durham Medical Society, was presented by Dr. Rumsey to the President of the Poor-law Board, at his interview with the conjoint deputation of the British Medical Association and Poor-law Medical Association.

“To the Right Honourable G. F. Goschen, President of the Poor-law Board.

“Sir,—We have the honour to inform you, as the representatives of the Northumberland and Durham Medical Society, that, under the auspices of the Society, a system of registration of disease has been in operation in Newcastle-upon-Tyne and Gateshead, since January 1864, which, during the past three years, has been conducted upon the same plan and with the list of diseases, as recommended by the British Medical Association. The returns have been contributed weekly by the public medical practitioners of the two towns, those in charge of the public institutions, charitable, parochial, and corrective. Monthly, or more extended reports, based upon these returns, with observations in meteorology, have also been issued. The expenses of the printing, issuing, and collecting the returns have been defrayed by the Society. In consequence, however, of the funds of the Society being limited and the expenses interfering with the publication of the Transactions, the Committee of the Society have promised to bear the expenses to the end of the present year, but not longer. If, therefore, other means are not forthcoming, whereby the expenses can be defrayed, it will be obligatory for the registration of disease in Newcastle and Gateshead to be abandoned, a course that will be taken with the utmost reluctance, the Society fully recognising the importance to the public and to science of the registration of disease.—We have the honour to be, sir, your obedient servants,

“MARTIN BURNUP, M.D., President, Northumberland and Durham Medical Society.

“CHRIST. S. JEAFFRESON, Honorary Secretary.

“Newcastle-upon-Tyne, 14th October, 1870.”

SMALL-POX AT DARLINGTON.

IF Charles Lamb were still alive, he certainly would desire to feel the bumps of the gentlemen who call themselves anti-vaccinists. This very strange sect have one of their stations at Darlington, and are at present amusing themselves with persecuting the Darlington guardians with requests to contravene the action of the law and suspend the life-saving practice of vaccination. By the happy irony of events, just before the deputation made their appearance in the board-room, the medical officer had reported that there were only two cases of small-pox in the place, and those in unvaccinated children. The deputation were therefore discomfited in advance. We hope to see the day, before very long, when, vaccination being as completely carried out in England as it is in Ireland, the same happy result will follow in the complete stamping out of small-pox. Meantime, the anti-vaccinationists are doing their little worst, which happily is not very much, to keep the disease alive.

VITAL STATISTICS.

IN the week ending October 22nd, the aggregate mortality in London and nineteen other large towns in the United Kingdom was in the ratio of 23 deaths annually to every 1,000 of the present estimated population. In the metropolis, 2,072 births and 1,334 deaths were registered, the former having been 104 and the latter 77 below the estimated average. Zymotic diseases caused 404 deaths, including 17 from small-pox, 20 from measles, 192 from scarlet fever, 8 from diphtheria, 18 from croup, 24 from whooping-cough, 12 from typhus, 26 from enteric (or typhoid) fever, 3 from simple continued fever, 14 from erysipelas, and 25 from diarrhoea. From choleraic diarrhoea one death was registered. Of the

17 deaths from small-pox, 10 occurred in the eastern districts of the metropolis. The weekly deaths from scarlet fever have averaged 194 during the last three weeks, the equivalent annual rate of mortality being 3.1 per thousand. Of 1,674 persons dying from scarlet fever during the 13 weeks ended 1st October, 64 per cent. died under five years of age, and 33 per cent. died between the ages of five and twenty, leaving only three per cent. of adult deaths from this cause. The proportion of young children dying in the last three weeks has increased to 66 per cent. Six fatal accidents caused by horses or vehicles in the streets were returned. The mean temperature of the air during the week was 49.7, or 0.3 above the average.

MANCHESTER MEDICAL AND SURGICAL REPORTS.

THE *Manchester Medical and Surgical Reports* appear this week for the first time. The preface describes pithily their *raison d'être*.

“Manchester is a great manufacturing city, surrounded by numerous towns and townlets, having altogether a population of over two millions. The medical charities of this important district number not less than fifty. Many industries are represented; and, as many of the densely populated parts of the town are pre-eminently unhealthy, all forms of *trade-disease* are met with here. Machinery in unexampled abundance is in action on every side, producing accidents of endless variety in rich profusion. Yet, with all these opportunities, Manchester, as a great centre for observation, has hitherto been silent, as though she were not, in the world of medical literature.”

If the absence of “hospital reports” in a separate form really implied silence and non-existence in the world of medical literature, the self-reproach would be more cogent. But, on looking through the names of the contributors, those of Morgan, Ransome, Southam, Williamson, Lund, Thorburn, Roberts, Simpson, Whitehead, among others, occur to us as the names of men who have not allowed Manchester to be altogether “silent, as though she were not, in the world of medical literature;” and, oddly enough, we find them here all discoursing on subjects in connexion with which their names are already more or less familiar to medical readers, and especially to our own readers; while the book, as a whole, far from being peculiarly Manchesterian, is altogether catholic in its subjects, and the particular subject of *trade-disease*, which is emphasised in the statement of its *raison d'être*, is not referred to in any paper in the volume. The opinion has before been expressed, that the somewhat parochial feeling which is tending to a multiplication of local volumes of hospital reports, each of which finds but a comparatively small number of readers, is in some sense rather a hindrance to medical progress, and an obstacle to studious readers. It is impossible, of course, to know the contents of any volume of reports without looking quite through it; and men engaged on any one subject have their work multiplied by the variety of miscellaneous volumes of the kind now issuing from various localities and individual hospitals. On the other hand, the stimulus of local emulation and the corporative spirit probably excite to work which would otherwise be left undone, even if it be admitted that they tend to confine to a few the researches which might otherwise be placed before the many. At any rate, there are evidently numerous groups of medical men to whom the publication of this class of volumes seems good; and this Manchester volume, although latest, is certainly not least of such reports in extent or excellence. It is a capital volume, including many very interesting papers, of which we shall endeavour to give a further critical notice at an early date.

ON THE RETENTION OF ORGANIC NITROGEN BY CHARCOAL.

AT the late meeting of the British Association in Liverpool, a paper was read by Mr. Edward C. C. Stanford, F.C.S., in continuation of one read by him at the Exeter meeting last year, entitled “A Chemical Method of treating the Excreta of Towns.” In this paper, the value of the dry as opposed to the water closet system was warmly advocated. It was shown that the only two real disadvantages alleged against the application of the dry system to large towns were: first, the large quantity of inert material to be carted in and out; and second, the difficulty of obtaining the necessary supply of earth. These two evils are at once removed by the process proposed by the author. Instead of earth,

X charcoal or charcoal derived from the carbonised excreta is used as the deodoriser. Of this, in proportion to earth, only one-fourth of the quantity is required; while the substance removed affords, by reburning, the necessary supply, and this constantly increases. So far, therefore, from being applicable only to small towns, it must pay best where the population is the densest. The whole of the available nitrogen, phosphoric acid, and potash, are retained, and the expense of removal in proportion to that by water-carriage is infinitesimal. Houses are visited only once a year, and the removal is less in amount, and even less disagreeable, than that of the house-ashes. All the malaria and other evils of connection with sewers are avoided, and health is insured. Twelve months' experience on a large scale has fully demonstrated all the advantages which the author had claimed for the process, and proved it a perfect solution of the sewage difficulty. As some chemists have assumed that the action of charcoal on animal nitrogenous matter is to oxidise it into nitrates, this was made the subject of a special investigation. The author showed in his former paper that, excreta being already an oxidised product, there was little foundation for this assumption as far as it was concerned; but now he also shows that even meat, after the mixture has become moderately dry, is unaffected by either seaweed or X charcoal. Separate mixtures of these charcoals with solid and fluid excreta and meat were tested monthly, and it was found that there was no loss of nitrogen, no oxidation, and no formation of nitrates after six months' keeping. As this result is contrary to the usual view, the author has promised to make further experiments with other kinds of charcoal, and the results may be looked forward to with interest in reference to the disposal of domestic refuse.

THE WORKING MEN'S HOSPITAL FUND.

AT the last meeting of the Committee of the Working Men's Fund for the Extension of the Queen's Hospital, Birmingham, eleven representatives were elected upon the Queen's Hospital Extension Committee. Mr. Sampson Gamgee, in addressing them, expressed the hope that the working classes would support the hospitals of Birmingham more efficiently than they now do. The working men of Glasgow contributed £6,033 : 7 : 7 in one year to the Royal Infirmary of that city; in Birmingham they contributed only £1,066 : 0 : 3 to the hospitals of the town. The representatives now elected might render great assistance in discriminating proper from improper objects of the charity. They would have the means of opening up a new field for the support and administration of our hospitals.

DISEASE-GERMS IN WATER.

MR. CHARLES HEISCH has published some experiments in the *Journal of the Chemical Society*, which aim at showing that the mere quantity of organic matter, nitrogenised or not, forms a very poor basis on which to found an opinion as to the wholesome character of any sample of water. We have very little doubt that this is the case, for chemical and pathological investigations pursued in different directions have already led to that conclusion. Mr. Heisch finds that, on adding a few grains of crystalline sugar to a certain infected water, in which no visible organisms could be seen, the solution became turbid in about twenty-four hours at a temperature of between 60 and 70 degrees, and presently a considerable development occurred of a torular character, subsequently producing filaments. The same thing occurs after boiling the water for half-an-hour. Mr. Heisch draws the conclusion that the water contained organic germs, irremovable by filtering (except through charcoal), and not destroyed by boiling, but capable of producing disease. The experiments are interesting, but we must observe that he fails to show that the germs were not destroyed by boiling in proving that he finds them afterwards; for he omits to eliminate the possibility that these germs may have been destroyed by boiling, in accordance with the prevalent belief; and that a new generation has occurred in his boiled solution, which still contained organic matter mixed with sugar—a not unfavourable condition for the evolution of life.

THE CONTAGIOUS DISEASES ACT AT CANTERBURY.

THE authorities charged with carrying out the provisions of the Contagious Diseases Acts in Canterbury report the following results from the 21st of January, when the Act was first applied in that city, to the 22nd instant, a period of ten months:—Number of women registered, 133; left the district, 35; married, 3; entered homes, 11; restored to friends, 24; died, 1; remaining on register, 56; examined and found free from disease, 304; admitted to hospital, 64; discharged from hospital, 35; ditto incurable, 1; prosecuted before magistrates, 39.

FEVER IN MANCHESTER.

FEVER, of the same type as that which prevails in Liverpool, is rapidly spreading amongst the poorer classes in Manchester. It was stated last week, by Mr. Leppoc, at the meeting of the Board of Guardians, that on the previous Sunday there were 180 cases, on Monday 183, on Tuesday 188, and on Thursday several more cases had been added to the list. Various suggestions have been made with the view to check the spread of the fever, which is expected to be specially aggravated by the recent floods in the Irwell. The Board decided, after a discussion, that the Sanitary Committee of the Corporation and the Sanitary Association of the City be invited to a conference, so that steps may be immediately taken to confine the spread of the disease.

THE INFLUENCE OF HOMŒOPATHY.

IN a very able address delivered by Mr. Robert Hamilton at the opening of the present session of the Liverpool Medical Society, he referred to the doctrine of infinitesimal doses, which, he observed, "remains unproven, as it issued from the brain of a crazed philosopher of Germany thirty or more years ago—not one step nearer verification than when first propounded by its author." He added: "It has often been said, what good homœopathy has done to legitimate medicine in lessening the amount of drugs given. But would it not be truer reasoning to point out how greatly the homœopaths have retarded the advance of true science, and, by the substitution of a sham, prevented the proper position of drugs as a part of therapeutics being found? The more humble place, which in future the materia medica will hold in relation to medicine, will not be due to homœopathy, but to that large host of searchers after truth, the *avant garde* of our profession, not one of whom is to be found in homœopathic uniform, who are toiling to unravel the mystery of life and death, health and disease."

NAVAL MEDICINE.

THE annual volume of medical reports on the health of the navy has been growing in interest of late years, and that which is just issued (for 1868) contains a considerable amount of valuable matter. Dr. Mackay, the head of the Statistical Department, in submitting the statistical report to the Director-General, is able to point out that it contrasts favourably with that of the preceding year, 1867. The total death-rate was 8.9 per 1,000, being the lowest rate of mortality which has occurred in the service afloat since the first annual return was published, in 1856. The death-rate from disease was only 6.5 per 1,000. It is a little late to be discussing the health of the navy in 1868. By the side of this blue-book there lies another on our table, which brings down to the end of 1869 the vital statistics of British Burmah; and another, which brings those of the Bengal army down to the end of 1869, and of some parts of India into the year 1870. Could not something be done to accelerate these reports? To some extent, their value is injured by their tardiness. Thus we learn that, since the Contagious Diseases Act came into operation, on the Home Station there has been a steady progressive decrease in the ratio of cases of those diseases against which it is directed, from 104.2 per 1,000 in 1863 to 53 per 1,000 in 1868. Of course, however, much later evidence is accessible and desirable; for, turning to the details on this subject, we find that, although the numbers showed this important decrease, there were many stations, as at Portsmouth, where the provisions of the Act were in 1868 very imperfectly carried out, and where the results were therefore disappointing. "Since that time,

there is reason to believe that much improvement has taken place in this respect;" and a corresponding further diminution in disease and economy of health and efficiency to the service may be expected. The details given in the report on this subject are summed up as follows.

"With respect to the prevalence of venereal diseases on the Home Station generally, it may be briefly observed that, since the introduction of the Contagious Diseases Act, they have steadily decreased; and that they would decrease still more, were the Act more extended, and its provisions in certain places more stringently carried out. The medical officers are unanimous in their approval of it, and only lament its limited sphere of operation."

OAKUM-PICKING IN OUR WORKHOUSES.

MR. GEORGE CHARLES COLES writes to us:

"Among the many improvements in our workhouses during the last two or three years, I have not yet observed that any have been made respecting the above. This description of work is generally allotted to the old men, most of whom suffer from some form of chronic bronchial disease. During the time I was at Shoreditch Workhouse, in 1866, I frequently had these men brought to me by the taskmaster for refusing to work. Now I consider it absolutely cruel to compel these old men to work in an atmosphere impregnated with particles of a substance which is irritating to an already diseased organ. On one occasion, when a pauper was brought to me for refusing to work, on account of its causing him severe paroxysms of coughing, he handed me the dimensions of the room, in which fifty paupers worked, and of which, in consequence of some of them being sensitive to cold, the windows were generally closed. The dimensions were— $31\frac{1}{2}$ ft. \times $15\frac{1}{4}$ ft. \times $10\frac{1}{2}$ ft. = 5044 cubic feet; or 100.88 cubic feet to each man. The floor was sunk 8 feet under ground. I think this matter should have the serious attention of the Poor-law Inspectors at all the workhouses."

LESSONS FROM AMERICA.

AMONG the first necessities for arresting the spread of scarlatina, and other similar contagious diseases, is an accurate and early report to a sanitary officer, who shall thereupon enforce proper precautions. Among the many "freedoms" which Englishmen permit themselves is that of enjoying contagion as they list, and keeping it secret when they please. The idea of compulsory dealing with such personal privileges is repudiated by the wisdom of vestries and the licence of legislation. No such freedom is, however, apparently claimed in the land of liberty across the seas; for we have before us a report concerning two persons in Brooklyn, named Rappold and Brown, fined respectively twenty-five dollars each for failing to report small-pox cases occurring in private practice. In one instance the patient was the wife of a journeyman tailor, who was sewing on unsuspecting customers' garments by the bedside. The apparently spontaneous outbreak of contagious diseases in many cases where the patients are morally certain that they have not been exposed to infection, is commonly due to such causes as this, and the still more frequent importation of the poison in the "week's wash"; and it is of the utmost importance to the public health that every case of contagious illness, whether among rich or poor, should be promptly reported.

THE GERM-THEORY OF DISEASE.

AT the meeting of the Medical Society of London on the 24th instant, Dr. B. W. Richardson brought forward for discussion a series of propositions relating to the Germ-Theory of Disease. His views will be understood from the following quotation.

"The vital or germ-theory fails (a) in the evidence (other than is analogical) which it adduces respecting germs of disease, their physical characters, properties, specificities; (b) in tracing a chain of connection between the origin of the germ and the origin of disease; (c) in defining whether the process set up in the particular diseases attributed to germs is fermentative or putrefactive; (d) in accounting for certain best known general facts and symptoms relating to the diseases attributed to germs in respect to origin. Further, the theory does not explain why diseases that are most readily communicable occur, as a rule, only once in the same person; why the same diseases are influenced by age, why the diseases are selective in respect to season; why the majority of persons who suffer from the epidemic diseases recover, and that recovery constantly occurs spontaneously; why, if germs capable of independent multiplication were the cause of the diseases, there should be recovery at all, when once the body has become infected; or why, if we accept

as the cause of the diseases independent agents, germs having their own vital existences and mode and force of multiplication in the bodies of animals, the diseases which are supposed to arise from germs do not increase instead of ceasing, as some have ceased.

"The physical theory of the origin of the communicable diseases, is that the diseases are due to poisons which are organic, but are neither independently reproductive nor indestructible, nor derived from organisms distinct from the animals in which the diseases are developed. It accepts that the organic poisons may be colloidal and may be transmitted as solid particles, on solid substances, or in water, or by air; but it holds that they are as destructible as other dead organic matter, and that their action is purely physical on the body. It leaves undecided the hypothesis of fermentation and putrefaction."

The discussion on the subject was adjourned, and will be resumed at the meeting of the Society next Monday evening.

THE CAPITULATION OF METZ.

METZ has at last been compelled, under the weight of famine and sickness, to surrender to the German army. It is stated that there are twenty thousand sick and wounded in the fortress—a number which will probably dwindle down to one-half as trustworthy and accurate accounts come to hand. It is to be hoped that our Society for the Relief of the Sick and Wounded has made every arrangement to lend a helping hand to this mass of sufferers.

MEMORIAL TO THE LATE DR. EASTLAKE.

It will be remembered that, at a meeting of some of the friends of the late Dr. Eastlake, it was decided to erect over his grave at Kensal Green Cemetery a plain marble cross to his memory, and to collect subscriptions for this purpose and for the liquidation of a portion of the law-expenses incurred by him in connexion with the affairs of the British Lying-in Hospital. The following gentlemen formed the Committee; John Scott, M.D., 8, Chandos Street, Cavendish Square; T. W. Nunn, Esq., 8, Stratford Place; Thomas Wells, Esq., 14, Manchester Square; Clifton I. West, Esq., 50, Doughty Street; Professor Turner, Edinburgh University; H. Wilson, M.D., 29, Baggot Street, Dublin; Alfred Leaf, Esq., Leaf Square, Manchester. The objects of the fund have been satisfactorily carried out. A monumental cross, designed by Mr. C. I. West, has been erected at Kensal Green Cemetery, over the remains of our lamented associate. The balance of the fund, amounting to £153, has been presented to Mrs. Eastlake, to meet a portion of the law-expenses incurred in connexion with the affairs of the British Lying-in Hospital; together with a list of the contributors to the fund and an expression of heartfelt sympathy with her in her great bereavement.

NECROPSIES AT HOSPITALS.

IN order to obviate the recurrence of cases such as those which have recently occupied the police-magistrates in connexion with hospital *post mortem* examinations, the authorities of Guy's Hospital have printed in large type the following notice to friends and relatives of deceased patients.

Extract from the Minutes of the Court of Committees of Governors of Guy's Hospital, held 7th September, 1870.—"The Governors reserve to themselves, in the interest of the Public and as one of the conditions of admission to the Hospital, the right of causing a *post mortem* examination to be made of the body of every patient who dies within the Hospital, by the pathologist or his representative, for the purpose of accurately determining the causes of death.

"In the event of the friends or nearest relatives being opposed to such an examination, they are to communicate their wishes to the Superintendent, who will submit their objections to the medical officer who had charge of the deceased patient, and if he is of opinion that there is no urgent need for a *post mortem* examination, the Superintendent is authorised to dispense with it."

Guy's Hospital, JNO. CHAS. STEELE, Superintendent.
12th October, 1870.

SCOTLAND.

DR. JOHN ANDERSON, Director of the Imperial Museum of Natural History, Calcutta, is announced as an additional candidate for the Regius Professorship of Natural History in Edinburgh.

AT a meeting of the Royal College of Surgeons of Edinburgh, on the 19th instant, Dr. Andrew Wood was unanimously elected representative of the College in the General Council of Medical Education and Registration of the United Kingdom for the period of three years from the 8th instant.

UNIVERSITY OF EDINBURGH.

THE opening address of the session will be delivered by Principal Sir Alexander Grant, Bart., on November 1st, at two o'clock, in the Queen Street Hall.

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, EDINBURGH.

THE introductory address in the Medical and Surgical School will be delivered in the Lecture Room, Surgeons' Hall, on Tuesday, November 1st, at 11 o'clock, by Dr. Joseph Bell.

LADY AMBERLEY'S SCHOLARSHIP.

FIVE competitors presented themselves for this Scholarship, and all satisfied the examiners. Miss Emily Bovell was the successful candidate. She passed good examinations in English, Latin, Arithmetic, Mechanics, German, and French.

SITE FOR A PERMANENT FEVER HOSPITAL IN GLASGOW.

WE observe that the lands of Springbank, containing twenty-five acres, have been offered to the magistrates for the purpose of erecting a fever hospital, at the sum of £15,000. As the site is reported to be in every way suitable, there seems every probability that the offer will be accepted.

CHILDREN'S HOSPITAL IN GLASGOW.

A PUBLIC meeting of the subscribers towards the erection of a children's hospital has been held this week, in which it was announced that the cause of the delay in making use of the funds collected in 1865 has been that the hospital might be erected in connection with the New University Hospital. It was also stated that the total amount collected at the time named was £6,018. The committee of gentlemen who have hitherto managed the matter contains such names as will ensure that the scheme will receive full justice.

THE EDINBURGH UNIVERSITY CHAIR OF MIDWIFERY.

WE understand that the resolution recommending reform in the Court of Curators which was passed at the meeting held in London, on July 11th, has been largely and very influentially signed by medical men and others connected with the University of Edinburgh, besides a considerable number of graduates and alumni of other universities who sympathise with the objects of the meeting. The resolution, with the signatures appended, has been forwarded by Dr. John Murray, the Honorary Secretary, for presentation to the meeting of the General Council, which takes place to-day (Friday), when the subject of the constitution of the Court of Curators will be specially considered. The following motion is on the list of business to be transacted at the meeting:—"That a representation be made to the University Court urging the desirableness of a change in the constitution of the Board of Curators, with a view to its being made more representative of the different bodies of which the University is composed, and better adapted for the function of selecting persons to fill high scientific and educational appointments." At the same meeting, Professor Crum Brown will bring forward the following resolution relating to female medical education in the University:—"That, whereas last year a resolution was passed in favour of the medical education of women in the University, and whereas it is found that under the present regulations of the University Court such education is practically impossible, the General Council represent to the University Court the desirableness of so far modifying the regulations as to afford to women the same advantages as to other medical students."

RELAPSING FEVER IN GLASGOW.

THE epidemic continues to make very marked progress in the city. The number of cases of fever reported during last fortnight is 398 against 315 in the previous fortnight, and 267 in the corresponding fortnight of last year, when a typhus-epidemic was prevalent. At the same time, we are glad to be able to state that the authorities are now much more alive to the state of matters, and much more energetic in providing means for the hospital treatment of fever. During the last month two new pavilions have been added to the Fever Hospital, and a third is in course of erection. We understand that there are at present over 250 patients in this hospital alone, and when the whole of the new additions are added, the accommodation will amount to 350 beds.

THE INSTITUTION OF MEDICAL BURSARIES IN THE UNIVERSITY OF ABERDEEN.

WE are glad to see that this subject, which we have strongly advocated on several occasions, has received the approval of both the University Court and University Council. The consideration of Dr. Struthers' proposal, made at the recent meeting of the General Council, that a Committee be appointed for carrying out the object in view, was deferred until next meeting.

IRELAND.

INTRODUCTORY ADDRESSES.

AT the Catholic University School, Professor Tyrrell gives the opening address on Thursday, Nov. 3rd; and at St. Vincent's Hospital Dr. Mapother delivers a lecture entitled "American Medicine," at eleven o'clock on Monday next.

ROYAL COLLEGE OF SURGEONS.

FOR the vacancy in the Council, which is to be filled on the 3rd Nov., the following Fellows are candidates:—Dr. Mapother; Professor in the College, and member of Council for the last four years; Professor R. W. Smith, of the University of Dublin; Dr. F. Kirkpatrick; and Dr. Darby, of Bray. The ballot will be open from one to three o'clock.

ARMY NURSES.

SIR Patrick Dun's Hospital Maternity fulfils an important function in the systematic training of Army Nurses and Midwives. The following is a report on an examination of the Army Nurses in training in Sir P. Dun's Hospital, for Diplomas, Prizes, and Medals, held on the 15th, 16th, and 17th September, 1870. Twenty-eight candidates presented themselves for examination, each of whom had attended in person from twenty to forty cases of labour in the Hospital Maternity. All of these were found qualified to receive the Midwifery Diploma of the Hospital, and had attended the six months' Course of Lectures and Practical Instruction required by the Rules of the Hospital; together with the Course of Lectures on the Laws of Health and Climate provided by the Hospital Board. The following candidates received Medals and Money Prizes:—

	Per Cent.
Mrs. Mary Anne Kelly (47th Regt.), <i>Silver Medal</i>	82
Mrs. Isabella Baulter (4th Brig. Roy. Art.), <i>Silver Medal</i> ...	81
Mrs. Elizabeth Burrige (1st King's Dr. Gds.), <i>Bronze Med.</i>	70
Mrs. Charlotte Austin (44th Regt.), <i>Bronze Medal</i>	67
Mrs. Mary Anne Rothwell (22nd Regt.), <i>Bronze Medal</i>	65
Mrs. Anne Mayled (1st. Bt. Scots Fus. Gds.), <i>Bronze Medal</i>	61
Mrs. Catherine Isabella Robertson (Scots Greys), <i>Bronze Med.</i>	60
Mrs. Frances Catherine Wick (6th Dr. Gds.), <i>Bronze Medal</i>	56
Mrs. Mary Anne Pickford (80th Regt.)	49
Mrs. Mary Letitia Dean (70th Regt.)	47
Mrs. Matilda Barker (44th Regt.)	40
Mrs. Mary Anne Beresford (1st Bt. 18th Foot)	36

WE have before us a list of eighty-one Army Nurses who have undergone training and received diplomas in midwifery from Sir Patrick Dun's Hospital.

ROYAL COLLEGE OF SURGEONS.

At a special meeting of the Council of the College of Surgeons, on Thursday evening, Mr. Hancock was elected, for a period of five years, a member of the Court of Examiners in the room of Mr. Quain; Mr. Le Gros Clark, for the same period, in the place of Sir William Ferguson; and Mr. Savory, in the room of Mr. Skey, whose period of office had expired, and who declined to be renominated. We observe that one of our contemporaries is of opinion that, in mentioning the names of the gentlemen nominated as Examiners at the previous Council, there was some breach of faith on the part of one of our correspondents, inasmuch as it is alleged that there was an understanding on the part of the members of the Council present that, for some reason, these names should not be divulged. This statement is, however, we are informed from several sources, entirely incorrect. A suggestion was, we are told, made to that effect by one gentleman, but it was immediately and generally rejected on the very obvious ground that the names would be posted in the College Hall in the course of four days in the official extracts from the minutes, and they were so posted.

Mr. Gay has given notice that he will propose, at the next ordinary meeting of Council, to be held on Thursday next, that, in the opinion of the Council, the Royal College of Surgeons is entitled to a greater number of representatives in the General Medical Council of Education and Registration than is assigned to it by the Medical Act of 1858; that, in any increase of the number, provision should be made that one at least of the representatives of the College be elected by the Fellows and Members; and that a copy of the foregoing resolutions be forwarded to the Lord President of the Privy Council.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

(Par Ballon Monté.)

TO-DAY begins a fifth week of our isolation from the rest of the world. We are sometimes able to send off little letters by balloons; but get no replies, no news, no food, from without. We dread greater sorrows and privations.

The health of Paris is, under the circumstances, remarkably good, with the one exception, that small-pox is exceedingly prevalent among the *gardes mobiles* from the provinces. Vigorous measures for vaccination and revaccination are being taken.

The increase in the wounded—the consequence of the sorties of last week—is considerable. Notwithstanding the number of small, well-appointed hospitals, the *Société de Secours* is injuriously concentrating serious cases (requiring warm and well-ventilated wards) in the vast windowless halls of the Palais de l'Industrie, in which the grand requisites of fresh air and warmth are sadly deficient. The wonderful success of operations, and the unlooked recoveries from dreadful wounds, under hygienical conditions the opposite of those now referred to, I am noting with care. The American ambulance is a model institution.

There seems as yet no want of food in Paris, though butcher-meat—beef and mutton at least—is distributed in rations. The quantity allowed to each adult *per diem* is one hundred grammes; so that, for my family of five, I receive half a kilogramme—a trifle more than one English pound. Horse-flesh, however, can be had as yet without stint at from 1fr. 50c. to 1fr. 80c., according to the piece. Beef, mutton, and bread, are at fair prices, fixed by the Government. Milk is at a famine price; vegetables are also very dear.

In an engagement at Châtillon on Wednesday last, one of the ambulance staff—Dr. Bouchereau, physician to the Hospice Sainte-Anne—was wounded in the left thigh by a musket-ball. I am glad to learn that our esteemed colleague is likely to make a complete and speedy recovery. On the same day, several of the ambulance staff were in great danger at Bagneux. One of them told me that the dust set in motion by a cannon-ball striking the ground within a few feet of the position which he and six or eight others occupied, having been told that it was safe, struck his eyes so violently as to blind him for the moment.

Paris, October 16th.

NOTES OF THE WAR.

At a meeting of the Austrian Patriotic Aid Society on the 21st inst., Professor Billroth was unanimously elected an honorary member of the Society, in recognition of his valuable and disinterested services as representative of the Society in the theatre of war.

THE academical senate of the University of Berlin has applied to the general war department for the names of all pupils of the school who have been killed in the present war, or who may die of their wounds. The names are to be registered on a tablet, which will be placed in the hall as an honourable memorial of them.

According to the St. Petersburg papers, the celebrated Russian surgeon, Pirogoff, at the special order of the Czar Alexander, set out for Bâle at the end of September, in order to place himself at the disposal of the National Association for the Aid of the Wounded, for service on the theatre of war in France.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Tuesday, the 1st day of November, 1870, at 3 o'clock P.M. *precisely*.

*** The following resolution was passed unanimously at a meeting of the Council of the Association, held at Newcastle-upon-Tyne, on August 10th, 1870.

"That, in the opinion of the Council, it is of the utmost importance that the Secretaries of the Branches should attend regularly the meetings of the Committee of Council; and they recommend that the travelling expenses of the Secretaries should be paid by their respective Branches."

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.
13, Newhall Street, Birmingham, October 17th, 1870.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting is appointed for Tuesday, November 8th, at Maidstone; MATTHEW ADAMS, Esq., Chairman.

Order of events.—At 2.30 P.M. To attend a Clinique at the Ophthalmic Hospital.—At 3.30 P.M. To attend a Clinique at the General Hospital.—At 4.30 P.M. Chair to be taken, and meeting to be commenced.

Papers promised.—1. A Medical Subject. By Dr. Monckton.—2. A Surgical Subject. By Mr. Wm. Hoar.

At 5.30 P.M. Dinner at the Star Hotel.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary*.
Rochester, October 25th, 1870.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting of the above Branch will be held at the Fountain Hotel, Canterbury, on Thursday, November 10th, 1870, at 3 P.M. The President of the Canterbury Book-Club in the Chair.

Gentlemen wishing to make communications to the meeting, are requested to inform me *at once*, in order that a notice thereof may be included in the circular convening the meeting.

CHARLES PARSONS, M.D., *Honorary Secretary*.
2, St. James's Street, Dover, October 24th, 1870.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT MEDICAL MEETINGS.

THE November meeting of the members of the above District will be held on Thursday, November 10th, at 2.30 P.M., at the Sussex County Hospital, Brighton: Dr. ORMEROD, Senior Physician to the Hospital, in the Chair.

Dinner will be provided punctually at 5.30, at the Old Ship Hotel. Charge, not including wine, 5s.

All members of the South Eastern Branch are entitled to attend, and to introduce friends.

Gentlemen who wish to make communications to the meeting, are requested to inform me *at once*, that I may give notice thereof in my circular.

FREDK. CHAS. MUDD, *Honorary Secretary*.
Albion Villa, Uckfield, October 1870.

WEST SOMERSET BRANCH: AUTUMNAL MEETING.

THE autumnal meeting of this Branch was held at the Royal Clarence Hotel, Bridgewater, on Thursday, October 13th, at 5 P.M. J. CORNWALL, Esq., of Ashcott, the President, occupied the Chair.

New Members.—Mr. Arthur Taylor, Corfe, Taunton; and Mr. Jas. Bendall, Creech St. Michael, Taunton, were admitted members of the Association and of the Branch. James J. Luce, M.D., Glastonbury, already a member of the Association, was admitted a member of the Branch.

Dinner.—Twelve members and two visitors were present at dinner.

Communications.—The following papers were read after dinner: 1. Dr. Cordwent (Taunton), On Entrance of Air into the Uterine Veins; 2. Dr. W. H. Axford (Bridgewater), On Syphilitic Paralysis; 3. Dr. Bent (Bridgewater) exhibited a preparation of the Lower Extremity of a Foetus in which Intrauterine Amputation had occurred; 4. Mr. Winterbotham (Bridgewater) read some curious extracts from an ancient work on the Practice of Medicine in Upper Ethiopia; 5. The President exhibited a Herbarium, over a century old, in excellent preservation.

Much lively discussion followed the reading of Dr. Cordwent's and Mr. Axford's papers. The meeting was a very pleasant and successful one.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

THE first meeting of the Session 1870-71 was held at the Midland Institute, Birmingham, on October 13th. Present: THOMAS UNDERHILL, Esq., President, in the Chair, and forty-six members.

New Members.—The following gentlemen were elected members of the Branch:—Mr. J. R. Jeaffreson, Leamington; Dr. E. C. Fox, Birmingham; Mr. Lawson Tait, Birmingham; Dr. Arthur Underhill, Children's Hospital, Birmingham; Dr. Hilliard, Queen's College, Birmingham; Mr. A. B. Simpson, The Workhouse, Birmingham.

Election of Officers.—Dr. JOHNSTON proposed, and it was carried:—"That, in the opinion of this meeting, it would be beneficial to the interests of the Branch at its annual election of officers to substitute for the present nomination list an open selection from the whole body of the members. That the carrying out of this resolution be left to the Council of the Branch."

Communications.—1. Mr. BENNETT MAY showed a Stump of an Amputation at the Ankle by Mr. Bartleet, after the plan of M. Jules Roux.

2. Mr. VINCENT JACKSON exhibited a young woman, aged 16, whose right Upper Maxilla had been removed in the Wolverhampton Hospital a few weeks since. The patient, at the time of admission, was the subject of a large, hard, ivory-like, osseous tumour on the upper jaw, of at least two years' growth; and, as its dimensions had produced much disfigurement, operative interference was requested. The girl was shown after an artificial roof and a set of teeth for the right side had been fitted to her mouth; whereby she obtained a complete return of the most perfect articulation, as well as being able to masticate her food with comfort and ease.

3. Mr. WEST brought before the Branch a man, aged 30, whose Shoulder-Joint he had Excised about twelve months previously, for Caries of the Head of the Humerus and Glenoid Cavity. A vertical incision, five inches long, was made along the anterior margin of the deltoid, and a second transverse incision at right angles to the first, commencing at its summit and extending for two inches over the acromion. Mr. West advocated these incisions as interfering in the least possible degree with the integrity of the deltoid; the man had preserved his arm and retained great power in it, being able to lift a fifty-six pounds' weight from the floor with ease, and also to abduct and adduct the arm to a considerable extent.

4. Mr. WEST read a paper on the Surgical Treatment of Aneurism, in which he reviewed the various modes of treatment, both internal and external, now in use, dwelling especially on the importance of the ligature as used by Hunter in cases where flexion, or digital and instrumental compression, could not be employed. Mr. West illustrated his remarks by the history of one patient whose femoral artery he had tied successfully for popliteal aneurism, and of another whose external iliac artery had been deligated for femoral aneurism. In both these cases, acetate of lead, iodide of potassium, and digitalis had been given for weeks without benefit. Flexion had produced increase of the tumour, and compression in various ways had given so much pain and inconvenience, producing in one case a large slough at the upper part of the thigh, that it could not be borne. Mr. West adverted to the recent discussion at

the Newcastle Meeting, and gave particulars of one case in which he had adopted Drs. Murray and Mapother's plan of completely arresting the circulation through the aneurism, the patient being kept for a considerable time under chloroform. No benefit had been produced in Mr. West's case, but he still thought the treatment worthy of trial, and recommended further inquiry and experience respecting it before throwing doubt on its efficiency.

SOUTH MIDLAND BRANCH: AUTUMNAL MEETING.

THE Fourteenth Autumnal Meeting of this Branch, numbering 103 members, was held at the Infant Schools Rooms, Stoney Stratford, on Tuesday the 18th instant, at 1 p.m., CHARLES HOOPER, Esq., President, in the Chair. There were also present Dr. Wm. Clark, President-Elect, and ten members and visitors. Dr. Bryan, the Secretary, for the first time in about eleven years, was unavoidably absent, owing to an accident.

The Secretaryship.—It was proposed by the PRESIDENT, and seconded by Dr. MACKAY: "That there be a second Secretary resident in Northampton, in case of illness, to act in absence of the other." The motion was carried by a majority of eight to three.

The Journal and Transactions.—Considerable discussion took place relative to the JOURNAL and regarding a volume of annual Transactions. No result was arrived at, excepting that the volume of Transactions was not necessary.

The Payment of Subscriptions.—It was determined to suggest to the Committee of Council that the JOURNAL should be withheld from members in arrears six months, and that the rule be strictly enforced.

New Member.—Mr. Joseph Goodall, of Stamford Infirmary (House-Surgeon), was duly elected a member.

Papers.—The following were read:—1. Spontaneous Cure of Fibrous Tumour of the Uterus. By A. D. Mackay, M.B.—2. Fibrous Tumour of the Uterus complicating Pregnancy. By R. W. Watkins, Esq. The woman was in labour forty-eight hours, and died eight hours afterwards. The *post mortem* examination discovered a large tumour twenty-six inches long by twenty-two wide, with a pedicle of the thickness of the wrist. There were four distinct tumours, three small and one large.—3. Case of Fracture of the Skull illustrating an injury, and course of treatment rarely met with. By J. Carruthers, Esq.—4. Case of a Bullet lodged in the Basilar Process of the Occipital Bone for a month, without giving rise to any serious symptom. By C. Hooper Esq.

The meeting dissolved about 5 p.m.

The next Annual Meeting will be held at Northampton in June 1870, under the Presidency of Dr. Wm. Clark.

SHROPSHIRE ETHICAL BRANCH: ANNUAL MEETING.

THE Annual General Meeting of the Shropshire Ethical Branch was held at the Lion Hotel, Shrewsbury, on Monday, October 3rd, at 2 p.m.; the President, ALFRED MATHIAS, Esq., in the Chair. It was attended by an unusually large number of country practitioners, several having travelled long distances to take part in the discussion on the proposed tariffs of medical fees, a copy of which had been forwarded to each member for consideration, early in July.

The following resolutions were passed unanimously.

Vote of Condolence to the Family of the late W. J. Clement, Esq., M.P.—"That the members of the Shropshire Ethical Branch of the British Medical Association are impressed with profound regret at the lamented death of their old esteemed friend and distinguished Associate, W. J. Clement, Esq., M.P., and, in offering to his family their sincere condolence and sympathy in their bereavement, desire to record their sense of the loss which not only they, but the profession and the public, have sustained by his decease."

Vote of Thanks to Officers.—"That the cordial thanks of the meeting be given to the late President, Vice-President, Council, and Honorary Secretaries, for their valuable services during the past year."

Election of Officers.—"That A. G. Brookes, Esq., be elected President, and J. W. Procter, Esq., Vice-President; and the following gentlemen members of the Branch Council for the ensuing year, in the place of those who retire by rotation, or otherwise:—Edwyn Andrew, Esq., M.D., Thomas Groom, Esq., G. D. R. MacCarthy, Esq., and Francis Whitwell, Esq."

Representatives of Branch in General Council.—"That, in accordance with the eighth general law of the British Medical Association, Alfred Mathias, Esq., A. G. Brookes, Esq., and J. R. Humphreys, Esq., be

the Representatives of the Branch in the General Council for the ensuing year."

Tariffs of Medical Fees.—"That the tariffs of medical fees which have been submitted to and discussed by the meeting (having also been previously circulated among the members for their consideration and emendations) be approved and recommended for general use by the Associates of the Branch."

Special Vote of Thanks to Dr. Styrap.—"That the cordial thanks of this meeting be tendered to Dr. Styrap for the valuable time and thoughtful care he has devoted to the preparation of the tariffs of medical fees, for which, and for other zealous labours to promote the interest and uphold the honour of the profession, the members desire to record their grateful appreciation and acknowledgment."

Thanks to the President.—"That the best thanks of the meeting be given to the President, A. Mathias, Esq., for the courteous ability with which he has conducted the important business of the meeting."

Several new members were proposed and elected.

Communications.—An interesting case of Aneurism of the Aorta was communicated by J. R. Humphreys, Esq.—Several other cases and papers announced for discussion were unavoidably postponed, in consequence of the important debate on the tariffs of medical fees having taken up so large a portion of the time set apart for the business of the meeting, as to encroach on the hour fixed for the dinner to suit the convenience of the country members, several of whom had to leave at an early period of the evening, in order to catch their last trains.

An adjournment consequently took place to the Assembly Rooms; and, at half-past four P.M., the members sat down to an excellent dinner, the President in the Chair, supported on the right by the Mayor of Shrewsbury, H. Fenton, Esq., a professional brother—the Vice-Chair being filled by A. G. Brookes, Esq., President-Elect. Immediately after the usual loyal toasts, one "To the Memory of our lamented Friend, W. J. Clement, Esq., M.P.," was feelingly proposed by his esteemed old pupil, James Bratton, Esq. (Ex-Mayor), and drunk in silence.

During the dinner, and after each toast, appropriate selections of music were played by an excellent band under the leadership of Mr. Brannon of Liverpool; and it was not until a late hour that the members separated, deeply impressed with the fact that such pleasant reunions exercise a powerful social and moral influence for the weal of the profession.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

MONDAY, OCTOBER 17TH, 1870.

JOHN GAY, Esq., President, in the Chair.

The PRESIDENT delivered an address on the Limitation of Surgical Art.

Local Inflammations in certain defined conditions as causes of Pulmonary Phthisis. By ANDREW CLARK, M.D.—The author said that hitherto his illustrations had been drawn from cases of pneumonia and pleurisy, and as yet he had found no exception to the laws which he had set forth as regulating their relations to phthisis. In the present paper he proposed to take his examples from chronic bronchitis, which, though a less common, was an equally efficient agent in bringing about phthisical destruction of the lung. A widow, aged 48, was admitted into the London Hospital for chronic bronchitis, in June 1866. She had had winter cough for twelve years. The percussion-sounds were good over both lungs. With the stethoscope, sibilant and sonorous *râles* were heard everywhere, and at the bases there was coarse moist crepitation. The pulse was 80. There was no fever nor night-sweat. She was treated with alkalies, and afterwards with acids, iron, and creasote inhalations, and was doing well until she was placed on a more liberal diet, with beer and wine. It being obvious that the change did harm, the diet was reduced. This displeased her, and she left the hospital. In three months she was again admitted under another physician. She became feverish; and in February 1867, dulness on percussion in the supraspinous fossa was noted. In March, lung-tissue was found in the expectoration. She got diarrhoea, and died in the following May. The *post mortem* examination revealed extensive disease in the left lung. The bronchi were thickened and dilated, and the intervening lung-tissue was converted into a dense fibrous mass. A few small cavities were seen, and also some grey tubercles in both apices.—The second case was that of J. L., aged 65, a widow. She had had winter cough for ten years. On admission, she had much cough and muco-purulent expectoration. There was no

dulness on percussion. Sibilant *râles* were heard over both lungs. The pulse was 64; the temperature 98. This patient gradually declined, owing to a nervous shock. She had hæmoptysis and diarrhoea, and signs of consolidation about the right lung. She died, but no *post mortem* examination was obtained.—In a third case, J. W., aged 53, a dock-labourer, had bronchitis over twenty years. Four years ago his strength failed. He had profuse purulent expectoration. He became feverish; bronchial breathings and crepitations were heard over his chest, and the right lung became consolidated about two years later. The sputa became lumpy, and contained areolar and elastic tissue. In December 1869, the urine was found to be albuminous, and in the following April he died. The *post mortem* examination showed dilated tubes, grey tubercles, and small cavities in the lungs.—The fourth case was that of Mrs. B., aged 61. She had lived in Kent for many years, and was subject to bronchitis. In 1864, her general health failed. She became feverish, and bands of elastic tissue were found in the sputa. Crepitation was heard in the middle third of the right lung. The progress of the disease here was slow. The patient was still under observation.—In concluding, Dr. Clark said that the chief causes of phthisical complication in cases of chronic bronchitis appeared to be repeated colds, over-feeding, and the abuse of stimulants. Loss of strength, feverishness afterwards subsiding, and coarse moist crepitation, were signs of the phthisical condition. When the bronchi ulcerated, fibres of lung-tissue were found in the sputa; fibroid or tubercular pneumonic changes in the lung followed; but the progress of the disease was usually slow. By meeting feverish complications with rest, milk-diet and salines, and by the use of inhalation of iodine, creasote, or carbolic acid, and appropriate treatment by tonics and diet, the progress of the disease might be greatly retarded and life indefinitely prolonged.—Dr. SYMES THOMPSON agreed with Dr. Clark that tubercle was not often the primary mischief. These cases showed the value of early treatment to avert the phthisical complications.—Dr. THOROWGOOD said that, in going over the patient records of the Victoria Park Hospital, he had noticed a large number of the cases of phthisis to have had their origin in a catarrh or bronchitis at some more or less distant date. This bronchitis was probably inefficiently treated, while doubtless alcoholic drinks were freely taken by the patient, till the lung breaking down, he was obliged to become an in-patient of the hospital.—Dr. HARE said that we must not rush too hastily to the conclusion that the disease was of catarrhal origin. Hospital-patients usually referred all their ailments to cold. He could not agree with Dr. Clark that a pneumonic deposit, unabsorbed at the end of three months, would never go. He had observed a case of pneumonia where the consolidation persisted for two years and then was quite removed. He insisted much on the value of counter-irritation as a curative measure.—Dr. SEMPLE believed such cases as those related by Dr. Clark to be very rare; and commonly, the sequence of events was the very reverse of that stated. Early tubercle caused the bronchitis, not the bronchitis the tubercle.—Mr. STREETER made some remarks on the importance of perfect ventilation as a preservative against phthisis.—Mr. PETER MARSHALL asked if Dr. Clark includes the cases of acute phthisis in young persons as sequelæ of bronchitis.—Dr. WILTSHIRE inquired as to whether there might have been any heart-disease leading to mechanical impediment of the circulation, and hæmoptysis, which might have caused destruction of lung-tissue.—Dr. CLARK, in reply, said that he must admit Dr. Hare's case of pneumonia to be an exception to the rule which he had propounded. He quite agreed with Dr. Hare as to the value of counterirritation. He did not include cases of acute phthisis in young children as sequelæ of bronchitis. He had no reason to think that there was any mechanical obstruction of circulation, likely to cause such hæmorrhagic destruction of lung as he had himself described in his lectures before the College of Physicians in 1866.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

OCTOBER 15TH, 1870.

R. DRUITT, M.R.C.P., President, in the Chair.

THE opening meeting of the session was held at the Scottish Corporation Hall, Fleet Street.

Dr. VINEN, Medical Officer of Health for St. Olave's, Southwark, mentioned a case in his district in which, after a person had died of Typhus Fever, the friends, who were Irish, were about to delay the burial, and hold a wake in the infected chamber. He signed a certificate that delay in burying the body was attended with imminent danger; and the magistrate gave an order for immediate interment, which was duly carried out. From further conversation, it appeared that, where no dead-house existed, difficulties arose; but where there was a dead-house, the law was clear and effective.—Dr. STEPHENSON said

that in his parish (St. Pancras) he had the permission of the Guardians to use their dead-house, the parish having no public mortuary.

Mr. JONES exhibited a plan of a new Cooking Apparatus. The principle of it was that the cooking was performed *in vacuo*; economy of heat was thereby effected, and the meat was less impaired in nutritive power. Meat thus cooked kept a very long time. He had sent some of it to South America, and was awaiting the result.—After some remarks on the advantage to the poor of any system that would provide them with cheap and handy food, the meeting voted their thanks to Mr. Jones.

Dr. JOSEPH ROGERS, President of the Poor Law Medical Officers' Association, attended, and invited the members to take part in the deputation to Mr. Göschén on the Monday following, on the subject of National Registration of Disease.

The PRESIDENT then read his opening address. He said he would not limit his attention to any one subject, but cast a view over the field of sanitary operations, noticing the points that seemed most to require attention. First, he would say a few words about the lamentable prevalence of scarlet fever. According to Dr. Ballard, this was the season in which it might be expected to show an increase after a partial diminution during the summer; and the Registrar-General's late returns showed that such was the case. But, let the medical officer do what he might, it was clear that, for an efficient wielding of sanitary measures, a registration of disease was required, compiled with some provision for making the disease known immediately to the sanitary authority. The present system of studious concealment was most objectionable and unsafe. It was clear that infection arose from other sources than the immediate effluvia of the sick. For these it was difficult to account; but in his own experience he almost invariably found that contamination arose from sewer-air or sewer-water. Disinfection, too, was often performed imperfectly. A thorough drenching with the disinfectant was essential. There was need, he said, of a popular disinfectant for rooms and bedding—one that should be cheap, speedy, and effective. He himself preferred the fumes of sulphur. Periodical fumigations of the most crowded houses, and the drenching of drains, closets, etc., with carbolic acid, were highly beneficial. After mentioning various other remedies and precautions, Dr. Druitt spoke of the ventilation of the sick room. There was need, he said, of great care in this. In no case should the air of such a room be driven into the interior of the house, but always outwards. In respect of the registration of disease, the first point, he said, was to make those in authority sensible of the immense benefit to the community which would accrue from a national system. He would like no new office to be created, but advantage to be taken, as far as possible, of materials already existing. Baby-farming he attributed to the immoral state of the country. Under the very best conditions it was found that the mortality among illegitimate children was astounding—so much so, that it was highly dangerous for any one to undertake the care of them without calling in a medical man from time to time to certify that the children were being properly treated. Dr. Druitt mentioned the case of a workhouse in which, notwithstanding very special attention, fifty-six out of seventy-two children died within twelve months after their reception. Into the question of the Contagious Diseases Act he would not enter deeply. The present moment, when the discussion had reached such a pitch of violence, was highly unsuited for calm discussion. Could not, he asked, some common ground of agreement be found among men who had the same object in view, and whose motives were equally good? He himself would prefer a public repression of prostitution, and the incarceration of open and notorious women. From the earliest times the law had interfered with such women. As to the principles of sanitary law, the President maintained that, although a landlord had a right to his own land, he had no right to make use of it in such a manner that the rents which he received were derived from taxes drawn out of the pockets of the industrious. Side by side with this abuse, stood gross anomalies in the Poor-laws. The President mentioned the case of a drunken fellow who spent his life in annoying his own neighbourhood, and who went in and out of the workhouse just as it suited the purposes of his vagabond life and dissolute manners, claiming such admission as his legal right. Both in this matter and that of the Contagious Diseases Act, if a cure were aimed at, care must be taken that crime was not encouraged. Legislative inspection was equally necessary, he considered, in the erection of dwellings. It was not just that a person should be allowed to build habitations that would foster poverty and sickness, and thus prey upon the pockets of the industrious classes. He went so far as to advocate the erection of buildings for the working-classes by the State. He was glad to see the question of the equal apportionment of rates occupying the attention of such men as Mr. Göschén. He anticipated good results from this, because the greatest obstacle to raising money was the feeling that the burden fell unequally. Rates ought to fall on owner as well as occupier, and both ought to have a share in their administra-

tion. In conclusion, the President said he hoped they would shortly hear of a consolidation and amendment of sanitary laws resulting from the labours of the Sanitary Commission; that the law would be made uniform for the whole kingdom; that it would be made simple, speedy, and effective, in harmony with the laws for the relief of the poor, and with the collection of national statistics.

After a short discussion, in which Dr. Joseph Rogers, Mr. Liddle, Dr. Gibbon, Dr. Aldis, Dr. Tilley, Dr. Stevenson, Dr. Iliff, and others took part, the President made a brief reply, and the meeting closed.

PATHOLOGICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 18TH, 1870.

RICHARD QUAIN, M.D., President, in the Chair.

MR. SPENCER WATSON presented a Case of Glioma of the Retina, with Secondary Deposits in the Facial and Cranial Bones, in a child.

Mr. CHRISTOPHER HEATH exhibited parts from an extremely interesting Case of Aneurism of the Aorta, which he had attempted to cure by ligature. The patient (an old soldier) was forty-five years of age, with the aneurism pulsating in the upper part of the thorax, flattening out the sternum, and producing congestion of the right side of the neck, and great dyspnoea and distress. It appeared to occupy the position of the innominate. Mr. Heath exhibited sphygmographic tracings of both radials, showing evident signs of arterial disease on the affected side. Mr. Heath dissected as far as the subclavian, but was unable to find the artery, and at last came to the pulsating sac. The patient went on well for several days, when a violent gush of hæmorrhage took place from the point reached by the operation, and he died. A sacculated aneurism of the aorta was found overlapping the innominate. The hæmorrhage was the result of weakening of the walls of the sac by the operation.—Mr. FRANCIS MASON, who was present at the operation, bore testimony to the great difficulty encountered in finding the artery.—Mr. HEATH, in answer to several remarks of Dr. Wilks, Dr. Moxon, and Dr. Crisp, as to whether the innominate was involved or not in this case, or generally in aneurism of the aorta, replied that he considered this point of no importance, so far as the operation was concerned.

Dr. CRISP brought forward an interesting case of General Alopecia in a gentleman in whom also the nails of the fingers became affected. It had commenced in July, and he was unable to trace the cause of the affection. There were rash-like filaments of a white colour on the roots of the hairs, somewhat like a fungus.—Dr. RISDON BENNETT had seen a case in which the hair almost entirely returned in eighteen months.—Mr. NUNN thought the case syphilitic. He had seen several cases from hereditary and acquired syphilis.—Dr. BALLARD related two cases (father and daughter) in which syphilis was out of the question. The father's hair returned, sparsely, but white.—Dr. CRISP remarked that the family history of his patient was very good. There was no affection of the root, but of the anterior part of the nail.

Mr. MORRIS exhibited an interesting specimen of large Renal Cyst of the size of a foetal head, associated with Cancer of the Liver, taken from a man sixty-nine years of age. The cyst was connected with the lower portion of the left kidney, and contained dark-coloured fluid and broken-down blood-clots.—Mr. CHRISTOPHER HEATH inquired if fluctuation was sensible at the later stages, because the diagnosis is important in these cases.—Mr. MORRIS replied that latterly the cyst had simulated ovarian dropsy.

Dr. JOHN MURRAY presented a number of specimens of Intestines affected by Acute Dysentery, which he had brought from one of the hospitals near Sedan. The large intestines were greatly affected; the small intestines to a limited extent. The mucous membrane was swollen, tumid, deeply injected, and covered with minute aphthous patches. In the large intestine—especially in the colon and rectum—the mucous membrane was extensively and irregularly ulcerated, and patches, some not less than the area of an adult hand, had completely sloughed away, leaving the muscular coat of the intestine bare. There was extravasation of blood into the submucous tissue. Peyer's patches were in some cases ulcerated, but superficially, and without deposit as in enteric fever, and the mesenteric glands and spleen were in these enlarged. The intestines contained blood, mucus, and extremely foetid fluid feculent matter and *débris* of the mucous membrane. Abscesses in the liver were very rare. The symptoms during life were those of tropical dysentery, but insidious and of a scorbutic character.—Dr. SCHULHOF asked if ipecacuanha was used in the treatment of these cases.—Dr. MURRAY replied that it had not been employed: there was none to be had. The cases had chiefly been treated by tincture of the perchloride of iron, given in small doses, frequently repeated. Bismuth was also a popular remedy amongst the German

medical officers; opium was also employed.—Mr. HULKE referred to the great benefit which had resulted from the use of ipecacuanha in the Crimea.—Dr. WILKS reminded the Society that two centuries ago ipecacuanha had been introduced into France as a nostrum, under the name of the *Radix antidysenterica*.—Dr. CAYLEY remarked that the specimens shown to the Society differed from tropical dysentery in so far as the cases presented ulceration of the small intestine, looking like enteric fever.—Mr. REEVES had seen ipecacuanha used at Saarbruck and elsewhere, and one case of dysentery in which symptoms pointing to abscess of the liver were present.

Dr. PEACOCK exhibited two specimens of Malformation of the Heart. 1. A case of entire obliteration of the orifice and trunk of the pulmonary artery, from a cyanotic child two years and three months old, who died of cancrum oris, as an out-patient of Mr. Croft at St. Thomas's Hospital. In this case, there was a large aperture in the septum ventriculorum; but the foramen ovale was closed. The ductus arteriosus was pervious, and communicated with the pulmonary artery, and so furnished the supply of blood to the lungs. 2. The second case was one of very great contraction of the orifice of the pulmonary artery, with malformation of the valves and supplementary branches from the aorta. There was an aperture in the septum of the ventricles; but the foramen ovale was closed, and no trace of the ductus arteriosus could be found. In its place, however, there were two compensating branches derived from the aorta, near the origin of the left subclavian artery, one of which opened into one of the pulmonary branches, while the other was apparently distributed to the lung, though it also probably had some communication with the pulmonary artery. The openings of these vessels from the aorta were impervious. The preparation was removed from a boy aged 17, a patient of Dr. Peacock's at St. Thomas's Hospital, who had all his life suffered from palpitation and shortness of breath, and who was somewhat cyanotic. The condition of the heart was diagnosed during life. Dr. Peacock remarked that the cases of congenital smallness of the pulmonary artery, with compensating branches from the aorta, were of very rare occurrence. They probably generally resulted from obliteration of the portion of the bronchial arch which should form the ductus arteriosus, at a very early period of foetal life.

Dr. FAGGE brought forward a specimen, taken from a female aged 26, showing Embolism of the Cerebral Artery, consequent on mitral valve-disease, and which had existed for six months. There were yellow softening of the brain, and embolism also in the kidneys and spleen. He did not think that the appearances differed much in different organs.

Dr. MOXON showed a specimen of Phlegmonous Gastritis which occurred in a young man as a part of phlebitis and pyæmia of the portal system of veins. There were three or four abscesses in the submucous coat of the stomach, near its œsophageal part; none of them had burst. The cause of the disease was suppuration in and about the walls of the rectum; this reached and extended in the hæmorrhoidal veins, and had led to a large abscess forming along the portal vein, and entering both the liver and the pancreas, destroying the vein wall for several inches length. Dr. Moxon suggested the question how far this grave occurrence corresponds to common fistula *in ano*, reaching by chance the veins of the rectum, and expressed his belief that such a view would be very insufficient. It is more true to the nature of such a case to regard the man as already in a state nearly or quite reaching pyæmia before the suppuration is set up, so that the suppuration about the rectum meets another constitutional factor, which extends it in the way discovered. The known occurrence of some cases of pyæmia without any wounds in an idiopathic way reveals the importance of the constitutional factor, as also does the occurrence of pyæmic and puerperal fever from contagion. Indeed, in this case it was open to serious doubt whether all the suppurations were not set up as an idiopathic portal pyæmia, for none of them seemed to be older than the others.

Dr. MOXON also exhibited a case of Gastritis occurring in a man who was severely affected with gout, and had died with utter wasting of the cortex of the kidney, due to the gout. The question raised by the case was how far it responded to what is called "gout in the stomach." The stomach was acutely inflamed, deeply reddened, and coated with a pellicle of lymph difficult to remove; a similar inflammation existed in the colon, and here were also two small abscesses in the submucous tissue, with many ulcers and scars, resulting apparently from the bursting of such abscesses. If gout in the stomach truly occurred, it would be expected to put on such an appearance. The man did not, during life, give any signs of gastric disease that drew attention.—Dr. RISDON BENNETT said that old gouty patients often died in this way, the brain retaining its vigour to the last.—Dr. MOXON, in answer to Dr. Dickinson, said that there was no amyloid disease.

Dr. MOXON next brought forward a specimen of Suppurative Inflam-

mation of the Spleen in spots distributed through the organ, some of these spots forming small abscesses of the size of peas, and others minute flecks, ramifying in parts and suggesting capillary phlebitis. The organ came from a man who had died of pneumonia supervening on a three weeks' illness, which was regarded as relapsing fever. The pneumonia was of a few days' duration, and was not of sufficient extent to kill. The spleen, besides this acute disease, showed old adhesion to its bed. Was it possible that the old disease of the spleen caused the affection of it in the fever to assume this inflammatory form?

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, OCTOBER 20TH.

THE first meeting of the fifteenth session of the Society was held at the Royal Kent Dispensary, Greenwich Road.

The following gentlemen were unanimously elected officers for the ensuing session:—*President*: E. Clapton, M.D. *Vice-Presidents*: J. M. Burton, Esq.; J. C. Thorowgood, M.D. *Council*: J. Anderson, M.D.; W. Carr, M.D.; S. Giles, M.D.; R. Gooding, M.D.; W. Lockhart, Esq.; C. Nind, Esq.; A. Roper, Esq. *Treasurer*: P. Purvis, M.D. *Secretary*: J. P. Purvis, Esq. *Librarian*: G. G. Bothwell, Esq.

Votes of thanks were unanimously accorded to Dr. Purvis and Mr. Roper, the retiring President and Secretary; the latter having held office for the last three years.

Dr. CLAPTON took the chair as President, and delivered the inaugural address. He first of all alluded with deep regret to the death of the late Dr. Rooke, of the Seamen's Hospital, for some years a member of the Society, and a frequent attendant at and contributor to its meetings. He then proceeded to comment upon the protracted and destructive outbreak of scarlatina, and the apparent powerlessness of hygienic precautions to check its progress; and, in connexion therewith, on the researches of Dr. Burdon Sanderson into the nature of zymotic poisons, and also the views of Professor Tyndall and others as to the nature of disease-germs. The recent outbreak of relapsing fever, the antiseptic treatment of disease, and the administration of the out-patient department of general hospitals, were also severally alluded to and ably commented upon.—An interesting discussion followed, in which Dr. Purvis, Mr. Mitchell, Dr. Carr, Dr. Gooding, Mr. Lockhart, etc., took part; and Dr. Clapton replied.

A vote of thanks was unanimously given to the President for his highly interesting and instructive address, and the Society adjourned.

The next meeting will be held on Friday, November 11th, at which Dr. Carr of Lee will read a paper.

THE POOR-LAW MEDICAL SERVICE OF GREAT BRITAIN AND IRELAND.

POOR-LAW MEDICAL REFORM.

THE Council of the Poor-law Medical Officers' Association, in issuing their very interesting annual report to a large body of the profession, take the opportunity again to inform the members of the Association, and Poor-law medical officers generally, that Dr. Brady, M.P., will, in the next session of Parliament, introduce a Bill having for its object a very considerable reform in the administration of medical relief to the poor, and largely affecting the status of Poor-law medical officers. In this he will be aided by a leading member of the House of Lords. It is most desirable that Dr. Brady's hands should be strengthened in every way; and as he has, through the medical press, pointed out the mode in which this may be most effectually done—viz., by furnishing him with information which will enable him to prove how largely our huge expenditure on the poor is traceable to the niggardly economy generally followed by boards of guardians in their arrangements for medical relief—the Council trust medical officers will forward to Dr. Rogers, 33, Dean Street, Soho, London, the President of the Association, any instances where unchecked sickness and preventable deaths have sent families to the workhouse, or caused them to become permanently chargeable to the rates, etc. The Council undertake that the names and addresses of informants shall in no instance be revealed, unless distinct permission be given.

In the last Report of the Poor-law Board, page 49, the following statement will be found.

"In England, the instances are but comparatively few in which persons receive medical relief only, nearly all those who are attended by the Poor-law medical officer requiring further relief as well."

"In England, the services of the Poor-law medical officer are strictly limited to the pauper class."

Dr. Rogers would feel obliged if medical officers would write and inform him whether this assertion of the Poor-law Board is, or is not, borne out by their experience of the districts to which they are appointed.

Members are requested to take notice that the next general meeting of the Association will take place at the Freemasons' Tavern, Great Queen Street, W.C., on Tuesday, November 29th, at half-past seven o'clock, when highly interesting subjects will be brought forward.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

NATURAL SCIENCE SCHOLARSHIPS.—Merton College, Oxford, announces an open Natural Science Scholarship of the value of £80 for five years, and one or more exhibitions of the value of £25 for three years, to be awarded in December next. The examination will be in chemistry, physics, and physiology, and an opportunity will be given for showing a knowledge of practical work in chemistry and physiology. They will be awarded either for special excellence in one subject, or for excellence in two out of three subjects, but no candidate will be examined in more than two subjects. There is no limit to age, but members of the University must not be over six terms standing.—The Natural Science Scholarship at Lincoln College, Oxford, has been awarded to Mr. Schofield, of Owens College, Manchester.—The National Science Demyship of £80 a year, at Magdalen College, Oxford, has not been filled up, there being no candidate up to the required standard.

COURSES OF LECTURES.—Dr. Rolleston, the Linacre Professor of Anatomy and Physiology, commenced his course of lectures on Tuesday, the 18th instant.—Mr. Lawson, the Professor of Botany, commenced his course of lectures at the Herbarium, on the Minute Anatomy of Plants, on Friday, the 21st.—Dr. Acland, the Regius Professor of Medicine, will lecture at the Radcliffe Infirmary on Medicine on Tuesdays and Saturdays, commencing on the 29th instant.—Examinations for the Degree of Bachelor of Medicine will be held early in December.—The election to a Radcliffe Travelling Fellowship will take place early in next term.—Dr. Lee's Reader in Anatomy (Mr. J. B. Thompson) commenced his course of lectures on Osteology in the Lee's Reader's Room on Wednesday week; he will also deliver a course of lectures on Comparative Anatomy in the same place.

UNIVERSITY OF CAMBRIDGE.

LECTURES ON NATURAL SCIENCE.—The following lectures in Natural Sciences will be delivered in Trinity and St. John's Colleges, Cambridge, during the Michaelmas term, 1870. On Electricity: Mr. Trotter, Trinity. On Chemistry: Mr. Main, St. John's. Instruction in Practical Chemistry will also be given. On Geology—(1) Palæontology; (2) Lyell's Principles of Geology; (3) Elementary Lectures: Mr. Bonney, St. John's. (Students of other Colleges can be admitted to these Lectures by arrangement with their college tutor.) On Elementary Botany: Mr. Trotter, Trinity. On Physiology: The Trinity Prælector of Physiology (Dr. M. Foster) at the New Museums.

EXAMINERS FOR 1870.—At the last Congregation graces passed the Senate (without opposition) as under:—That on the nomination of the Board of Medical Studies, C. Trotter, M.A., of Trinity College, and T. W. Danby, M.A., of Downing College, be appointed Examiners for the first M.B. Examination during the ensuing year.—That W. H. Drosier, M.D., and Mr. John Wood, F.R.C.S., be appointed Examiners for the second M.B. Examination during the ensuing year.—That G. E. Paget, M.D. and E. Liveing, M.D., be appointed Examiners for the third M.B. Examination during the ensuing year.—That W. S. Savory, F.R.S. and F.R.C.S., and C. Lesturgeon, M.A., F.R.C.S., of Trinity College, be appointed Examiners for the degree of Master in Surgery during the ensuing year.—That A. W. B. W. Barclay, M.D., be appointed Assessor to the Regius Professor of Physic during the ensuing year.

PHYSICAL SCIENCE: MUNIFICENCE OF THE CHANCELLOR.—The Vice-Chancellor has announced that he has the great gratification of making known to the Senate the following munificent offer of his Grace the Duke of Devonshire, the Chancellor of the University:—"Holker Hall Grange, Lancashire. My dear Mr. Vice-Chancellor,—I have the honour to address you for the purpose of making an offer to the University, which, if you see no objection, I shall be much obliged to you to submit in such manner as you may think fit for the considera-

tion of the Council and the University. I find in the report, dated February 28, 1869, of the Physical Science Syndicate, recommending the establishment of a Professor and Demonstrator of Experimental Physics, that the buildings and apparatus required for this department of science are estimated to cost £6,300. I am desirous to assist the University in carrying this recommendation into effect, and shall accordingly be prepared to provide the funds required for the building and apparatus, so soon as the University shall have in other respects completed its arrangements for teaching Experimental Physics, and shall have approved the plan of the building.—I remain, my dear Mr. Vice-Chancellor, yours very faithfully, DEVONSHIRE.—The Rev. the Vice-Chancellor."

NEW ENTRIES.—The new entries this session in the University of Cambridge number 583, and are dispersed as follows:—Trinity College, 152; St. John's, 125; Jesus, 48; Gonville and Caius, 44; Corpus Christi, 31; Trinity Hall, 29; Clare, 27; Emmanuel, 27; Christ's, 20; Pembroke, 15; St. Catherine's, 14; Magdalene, 13; Queen's, 13; St. Peter's, 11; King's, 9, and Downing, 5.

UNIVERSITY OF DUBLIN.

REGULATIONS RESPECTING CERTIFICATES FOR MEDICAL AND SURGICAL DEGREES.—The following regulations have recently been issued.—1. In future, all Certificates of Lectures, or Hospital Lectures, must state the attendance of the Student; and no Certificate of Lectures or Hospitals will be accepted for Degrees in Medicine or Surgery which does not guarantee the following *minimum* attendances:—*a.* Winter Course, 42 attendances; *b.* Summer Course, 30 attendances; *c.* Hospital Lectures, 48 attendances.

2. Candidates for the Degree of Bachelor in Medicine are required to produce, in addition to the General Hospital Certificates, a Certificate of personal attendance on Fever Cases; such Certificate to be signed by the Clinical Physician under whose superintendence the Student took charge of the cases—and to contain the names, addresses, dates, and nature of fever of the several cases.

N.B.—Blank forms of Fever Certificate will be furnished to the Hospital Physicians, on application to the Medical Registrar of Trinity College, Dublin.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At an extraordinary meeting of the College, on Monday, October 17th, the following gentlemen, having conformed to the bye-laws and regulations, and passed the required examinations, were granted Licences to practise physic, including therein the practice of medicine, surgery, and midwifery.

Cooper, Arthur, M.R.C.S., Stamford Street
Drew, Alfred Stanbanks, M.R.C.S., Stow-on-the-Wold
Halket, Laurence John, The Infirmary, Newcastle-upon-Tyne
Harris, Arthur George Rawson, Thames Side, Staines
Mathias, David, M.R.C.S., Cardigan
Paulson, William, Falmouth Road, S.E.
Symons, Henry Edward, M.R.C.S., St. Bartholomew's Hospital
Vachell, Charles Tanfield, M.R.C.S., King's College Hospital

The following candidates, having passed in Medicine and Midwifery, will receive the College License on their obtaining qualifications in Surgery recognised by the College.

Parsons, Francis John Crane, Heathcote Street, Mecklenburgh Square
Vasey, Charles Lyon, Cavendish Place

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, October 20th, 1870.

Barker, Richard Henry, Hungerford
Collins, Philip Tenison, Wednesbury
Crombie, Alexander, Horley
Hayes, Thomas Crawford, Mitre Court, Fleet Street
Murphy, Shirley Forster, Amptill Square
Parsons, Francis John Crane, Heathcote Street
Vachell, Charles Tanfield, King's College Hospital

The following gentlemen also on the same day passed their first professional examination.

Bowes, John Ireland, Guy's Hospital
Burgess, Edward Arthur, Guy's Hospital
Marshall, John, Guy's Hospital
Rastrick, Edward Elliott, Guy's Hospital

As an Assistant in compounding and dispensing medicines.
Barnard, Henry, Caledonian Road, N.

MEDICAL VACANCIES.

The following vacancies are announced:—
ADDENBROOKE'S HOSPITAL, Cambridge—Surgeon: 31st.

BRADFORD (Yorkshire) INFIRMARY AND DISPENSARY—Resident Medical Officer: applications, 31st; election, Nov. 11th.
 BRIGHTON AND HOVE DISPENSARY—Resident House-Surgeon: applications, 31st; election, Dec. 6th; duties, Jan. 3rd.
 BRISTOL ROYAL INFIRMARY—Assistant House-Surgeon: applications, Nov. 12th.
 CARNARVON UNION—Medical Officer and Public Vaccinator for the Llanidan District: applications, Nov. 4th; election, 5th.
 CASTLEREA UNION, co. Roscommon—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Frenchpark Dispensary District: 31st.
 DARFIELD MAIN COAL COMPANY, Yorkshire—Surgeon.
 DENTAL HOSPITAL OF LONDON—House-Surgeon: applications, Nov. 12th. Secretary: applications, Nov. 12th.
 DERBYSHIRE GENERAL INFIRMARY, Derby—House-Surgeon: applications, Nov. 5th.
 DINGLE UNION, co. Kerry—Apothecary for the Workhouse and the Dingle Dispensary District: Nov. 10th.
 EASTERN DISPENSARY, Leman Street, Whitechapel—Resident Medical Officer: applications, Nov. 7th; election, 8th.
 ENNISTYMON UNION, co. Clare—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Miltown-Malbay Dispensary District: Nov. 9th.
 LIVERPOOL ROYAL INFIRMARY—Lectureship on Comparative Anatomy and Zoology: applications, Nov. 5th.
 LIVERPOOL SOUTHERN HOSPITAL—Senior House-Surgeon: applications, Nov. 10th.
 MADELEY UNION, Shropshire—Medical Officer for the Dawley District.
 MIDDLESEX HOSPITAL—Assistant-Physician: applications, Nov. 15th; election, 24th.
 MILTOWN-MALBAY, co. Clare—Surgeon to the Constabulary.
 MORPETH DISPENSARY—House-Surgeon: applications, Nov. 25th; election, Dec. 9th.
 QUEEN ADELAIDE DISPENSARY, Bethnal Green Road—House-Surgeon: applications, Nov. 1st; election, 4th.
 REETH UNION, Yorkshire—Medical Officer and Public Vaccinator for the Muker District: applications, Nov. 3rd; election, 4th.
 SOUTH DUBLIN UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Clondalkin Dispensary District: applications, 29th; election, 31st.
 SOUTHERN, Argyleshire—Parochial Medical Officer.
 UCKFIELD UNION, Sussex—Medical Officer for the Mayfield District.
 WESTHAMPTON UNION, Sussex—Medical Officer and Public Vaccinator for the Rumboldswyke District: applications, Nov. 11th; election, 14th.
 WEST SUSSEX AND CHICHESTER INFIRMARY AND DISPENSARY—Surgeon: Nov. 17th.
 WIGAN DISPENSARY—Surgeon.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*ARNISON, W. C., M.D., appointed Medical Officer to the Post Office at Newcastle-upon-Tyne.
 DAVIDSON, A., M.B., appointed Lecturer on Pathology at the Liverpool School of Medicine.
 *LOTT, Jas. Jno., Esq., elected Resident Surgeon to the Whitechapel Workhouse.
 KERNOT, A. B., Esq., appointed Surgeon to the Reeth Union Workhouse and District, *vice* W. Smith, Esq.
 MACKENZIE, Stephen, Esq., appointed Resident Medical Officer to the London Hospital, *vice* R. T. Grubb, Esq., retired.
 *NORTON, G. Everitt, Esq., appointed Chloroformist to the Middlesex Hospital, *vice* *Osman Vincent, Esq., resigned.
 OWEN, A. Lloyd, B.A., M.B., elected Surgeon to the Royal Portsmouth, Portsea, and Gosport Hospital, *vice* F. W. Way, Esq., resigned.
 *YELD, Henry J., M.D., appointed, by the Postmaster-General, to be Provincial Medical Officer to the Post Office in Sunderland.

BIRTHS.

BEST.—On October 8th, at Aberdeen, the wife of A. Vans Best, M.D., late Surgeon Indian Army, of a son.
 BOYLE.—On October 21st, at Hutton Rudby, Cleveland, Yorkshire, the wife of Andrew A. Boyle, Esq., of a daughter.
 FEGAN.—On October 22nd, at Old Charlton, S.E., the wife of *Richard Fegan, M.D., of a son.
 GAINES.—On October 11th, at Bath, the wife of *Charles Gaine, Esq., Surgeon, of a son.
 GREENE.—On October 9th, at Old Kent Road, the wife of *W. T. Greene, M.B., of a son.
 LEIGHTON.—On October 12th, at Gloucester Place, Hyde Park, the wife of E. T. Leighton, M.B., of a daughter.
 SATCHELL.—On October 13th, at Tunbridge Wells, the wife of *W. C. Satchell, Esq., Surgeon, of a daughter.

MARRIAGES.

BALL, John Augustus, M.B., Surgeon to the Stockport Infirmary, to Catherine Anne, eldest daughter of John Lingard VAUGHAN, Esq., of Heaton Norris, Lancashire, on October 12th.
 ELLIS, William H., Esq., Surgeon, of Shipley, to Jane, second daughter of Henry MARTIN, Esq., of Sussex House, Highbury New Park, on October 13th.
 SMITH, Clement M., M.D., of Babbicombe, Torquay, to Edith C., only daughter of George F. REMFRY, Esq., of Truro, at Kenwyn, on October 11th.
 *SMITH, Heywood, M.B., of Portugal Street, Grosvenor Square, son of *Protheroe Smith, M.D., to Emily Gertrude, third daughter of the late Lieut.-Colonel the Hon. James HOPE and Lady Mary Hope, at All Saints, Knightsbridge, on October 17th.
 TOONE, W. H., Esq., to Ann Henton, only daughter of *Charles W. Wood, Esq., Surgeon, Woodhouse Eaves, Loughborough, on October 18th.
 WARRINER, the Rev. George, of Bloxham Grove, Oxfordshire, to Mrs. E. F. ELLISON, eldest daughter of *Robert Otter BLYTHMAN, Esq., of Swinton, Rotherham, at North Curry, near Taunton, on September 21st.

DEATHS.

*DAGLISH, George, Esq., Surgeon, at Wigan, aged 65, on October 20th.
 DAWSON, William O., Esq., Surgeon, at Portobello, on October 11th.
 EASBY.—On October 19th, at Darlington, aged 26, Eliza, wife of *William Easby, Esq., Surgeon.
 MCANDREW, Robert J., Esq., Surgeon, at Limehouse, aged 47, on October 22nd.
 PALEY, James, M.D., at Kensington, aged 51, on October 19th.
 SHIPTON, William, Esq., Surgeon, at Barnstaple, aged 67, on October 20th.
 WHITMORE.—On October 14th, at Wimpole Street, aged 13, Kate, youngest child of *John Whitmore, M.D.

THE AMALGAMATION OF SOCIETIES.

At a meeting of the Royal Medical and Chirurgical Societies on Tuesday evening, the President stated that the Pathological, the Clinical, and the Epidemiological Societies, had accepted the proposal to amalgamate with the Royal Medical and Chirurgical Society to form a Royal Society of Medicine, but that two other societies which had been invited to join had declined to do so; and that this meeting had been summoned to consider what further steps should be taken in the matter.

Dr. Greenhow moved, and Dr. Barclay seconded, a resolution that the four above named societies be requested to nominate delegates to confer together, draw up bye-laws, and found a Royal Society of Medicine, with Sections for the different branches of science represented by the societies, and to take the necessary proceedings to obtain a new charter.

After a little discussion, Mr. Durham moved, as an amendment, that the consideration of the scheme be adjourned for twelve months. This was seconded by Mr. Croft. Other speakers having addressed the meeting, Mr. Paget said that no plan of amalgamation could be complete from which at least one of the principal societies, representing one of the most important branches of medicine, held aloof; and moved that the Council of this Society be requested to consider how far there could be a co-operation of the Pathological, Clinical, Epidemiological, and other Societies, with the Royal Medical and Chirurgical. After a good deal of discussion, Mr. Durham withdrew his amendment, when Dr. Quain seconded Mr. Paget's, which was put to the meeting and carried by a large majority.

We are compelled to defer a fuller report of the meeting.

STOCKPORT INFIRMARY.—The subscriptions towards the erection of a new wing for infectious cases now amount to £4,790.

THE ground for the intended Cottage Infirmary at Amlwch is now being cleared out, and it is expected that the foundation-stone will be laid within a few days.

Mr. JOHN S. KEDDELL has obtained a superannuation allowance of £40 per annum (the highest that could be given) on resigning as Medical Officer for the Minster District of the Sheppey Union.

WARWICK DISPENSARY.—It has been proposed to convert the Warwick Dispensary from a charitable to a provident institution. New rules have been prepared for the purpose, and are shortly to be submitted for the consideration of the subscribers; but the scheme appears, from the correspondence in the local newspapers, to have excited some opposition.

It is affirmed that the following have consented to act as Commissioners to inquire into the operation of the Contagious Diseases Acts: The Bishop of Manchester; Mr. Mundella, M.P.; Mr. Dalrymple, M.P.; Dr. John Chapman, editor of the *Westminster Review*; Dr. Bridges; and Mr. Applegarth. Mr. W. Fowler, M.P., was invited to sit on the Commission, but declined.

MORE BABY-FARMING.—The detective police (according to the *South London Press*) have received information of the existence of three baby-farming establishments in Peckham, and very shortly the owners of those establishments will be arrested and brought before the magistrates. As baby-farming has, by the recent verdict, been raised to the dignity of a capital offence, the position of these persons is extremely perilous.

BEQUESTS, DONATIONS, ETC.—The Cumberland Infirmary, Carlisle, and the Cumberland and Westmoreland Convalescent Institution, Silloth, have each received £105 under the will of John Underwood Coy, Esq.—Sir Thomas Proctor Beauchamp has given £400: 11: 8 to the Norfolk and Norwich Hospital.—W. Cunliffe Brooks, Esq., M.P., has given £105 towards the building of the new wing of the Stockport Infirmary.—£100 has been presented to the Seamen's Hospital Society, "To the Memory of a Brother of E. S."

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—At a meeting of the Royal College of Surgeons on 19th instant, the following office-bearers were elected for the ensuing year:—*President*: J. D. Gillespie, M.D. —*Secretary*: James Simson, M.D. —*Treasurer*: John Gairdner, M.D. —*Librarian*: Archibald Inglis, M.D. —*President's Council*: James S. Combe, M.D.; Andrew Wood, M.D.; James Dunsmure, M.D.; James Spence; H. D. Littlejohn, M.D.; William Walker. —*Ex-Officio*: John Gairdner, M.D. —*Examiners*: W. Dumbreck, M.D.; A. Inglis, M.D.; R. Omand, M.D.; J. Dunsmure, M.D.; P. D. Handyside; J. D. Gillespie, M.D.; H. D. Littlejohn, M.D.; P. H. Watson, M.D.; D. Wilson, M.D.; J. Smith, M.D.; D. M. C. L. Argyll Robertson, M.D.; Joseph Bell, M.D. —*Assessors to Examiners*: J. S. Combe, M.D.; W. Brown; J. Spence; J. Simson, M.D. —*Conservator of Museum*: J. B. Pettigrew, M.D. —*Officer*: J. Dickie. —*Doorkeeper of Museum*: J. Grandison.

CRUELTY TO A LUNATIC.—Jane Armstrong, of Hendon, a middle-aged woman, has been committed by the Sunderland magistrates for trial at the assizes, upon the prosecution of the Commissioners in Lunacy, for keeping a lunatic for profit without being licensed, and for cruelty to the lunatic, one Mrs. Hobson. She had lived with the defendant for some years, and was in receipt of £1 a week under a will. Upon information being given to the police, they visited the house, and after some opposition by the defendant, they got access to the room, where there was nothing but an iron-bedstead, a mattress scantily covered, and a box on which the lunatic sat and took her meals. There was no chair, table, or other furniture; and the atmosphere of the room was loathsome. A strap was found, with which the defendant said she was in the habit of fastening the lunatic to the bedstead when she was unruly, which was not often.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At a meeting of this Corporation, held on Monday, October 3rd, the following office-bearers were elected for the ensuing year, viz.:—*President*, J. G. Fleming, M.D.; *Visitor*, W. Weir, M.D.; *Treasurer*, John Coats, M.D.; *Honorary Librarian*, J. D. Maclaren, M.D.; *Vaccinator*, James Dunlop, M.D. —*Councillors*: The President, *ex officio*; The Visitor, *ex officio*; G. Buchanan, M.D.; Eben Watson, M.D.; James Stewart, M.D.; Robert S. Orr, M.D.; H. R. Howatt, M.D. —*Board of Examiners*: R. D. Tannahill, M.D., Midwifery and Medical Jurisprudence; J. B. Cowan, M.D., Medicine and Materia Medica; Andrew Fergus, M.D., Chemistry; G. Buchanan, M.D., Anatomy and Physiology; Robert S. Orr, M.D., Medicine and Materia Medica; W. Leishman, M.D., Midwifery and Medical Jurisprudence; William Lyon, M.D., Surgery and Surgical Anatomy; Eben Watson, M.D., Anatomy and Physiology; James Morton, M.D., Surgery and Surgical Anatomy; Robert Perry, M.D., Chemistry. —*Clinical Examiners in Medicine*: The Physicians of the Royal Infirmary. —*Clinical Examiners in Surgery*: The Surgeons of the Royal Infirmary. —*Examiners in Arts*: John Coats, M.D.; James Steven, M.D.; *Inspectors of Drugs*: William Eadie, M.D.; James Morton, M.D.

BOOKS, ETC., RECEIVED.

- Weekly Return of Births and Deaths in London and in nineteen other Large Towns of the United Kingdom, week ending Oct. 15th.
Auscultation and Percussion. By Samuel Gee, M.D. London: 1870.
A Preliminary Notice of the Akazga Ordeal of West Africa. By Thomas R. Fraser, M.D. Edinburgh: 1870.
Transactions of the Clinical Society of London. Vol. iii. London: 1870.
Public Health and Vital Statistics for 1869: British Burma Home Department (Sanitary). Rangoon: 1870.
The Alleged Malpractice Suit of Walsh v. Sayre. New York: 1870.
The Annual Discourse before the Massachusetts Medical Society, May 25th, 1870. By W. W. Wellington, M.D. Boston: 1870.
Nederlandsch Archief voor Genees- en Natuurkunde. Utrecht: 1870.
Report on the Sanitary Condition and Public Health of Mile End Old Town for the year ending March 1870. By M. Corner, M.D. London: 1870.
Method and Medicine: an Essay. By B. W. Foster, M.D. Birmingham: 1870.
Report on the Sanitary Condition of St. Mary, Islington, for September 1870. By E. Ballard, M.D.
Manchester Medical and Surgical Reports. Vol. i, for October 1870.
Handbook of Medical Microscopy. By Joseph G. Richardson, M.D. Philadelphia: 1870.
The Twelfth Annual Report of the Herefordshire Medical Association.
The Fifth Annual Report on the Sanitary Condition of Merthyr Tydfil, being for the year 1869.
Monthly Report on the Health of the Parish of St. Marylebone during August and September.
Medical and Sanitary Report of the Native Army of Bengal for the year 1869. Calcutta: 1870.
Transactions of the Odontological Society of Great Britain.
A Sketch of the Medical History of the Native Army of Bengal for the year 1868. Calcutta: 1869.
General Report on the Lunatic Asylums, etc., in the Bengal Presidency, 1868. Calcutta: 1870.
Life of John Heysham, M.D. By H. Lonsdale, M.D. London: 1870.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Adjourned discussion on Dr. Richardson's paper on "The Medical Aspects of the Germ-Theory."
TUESDAY.—Pathological Society of London, 8 P.M. Mr. W. Adams, "Exostosis from angle of Scapula"; Mr. Nunn, "Atrophy of Uterine Walls, with Intra-uterine Fibroid Growth"; Mr. Francis Mason, "Congenital Papillary Tumour"; Mr. Henry Arnott, "Blood-Tumour of Scrotum, Cancer of and imperfectly descended Testis"; Dr. Dickinson (for Mr. Duncan), "Parts of a Watch removed from a Wound inflicted at the Battle of Sedan"; Dr. Whipple, "Rupture of the Transverse Ligament of the Atlas."—Anthropological Society.—Beaumont Medical Society, 8.45 P.M. Mr. Rivington, "On Diseases of the Ear." Discussion of Miscellaneous Cases.
WEDNESDAY—Obstetrical Society of London, 8 P.M. Dr. W. Martyn, "On the Management of Childbed, with a view to promote successful Suckling"; Mr. Coward (Christchurch, New Zealand), "A Case of Inversion of the Uterus"; Dr. Tracy, "A short History and Description of the Lying-in Hospital at Melbourne, Australia"; and other papers by Mr. Mitchell and Dr. Mendenhall.
THURSDAY—Harveian Society of London, 8 P.M.—Linnæan Society.—Chemical Society.
FRIDAY—Western Medical and Surgical Society of London, 8 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

R. M.—The report shall receive early notice.

INQUESTS AND NECROPSIES.—The coroner of Newcastle has fallen into a very serious and dangerous error in supposing that he has the right or the power to forbid *post mortem* examinations. His function is strictly limited to ordering them where the medical authorities do not perform them without his order, and paying for them. Inquests without *post mortem* examinations are commonly mere burlesques of justice. It is one of the follies of a system which tolerates persons ignorant of all medical knowledge in a post such as that of coroner—which assumes its possession—that inquests are too often mere matters of form. We have repeatedly had to point out that inquests without *post mortem* examinations are failures of justice. Mr. Coroner Hayle would perpetuate this condition. Fortunately, he is unable to exercise that influence. But it is singularly unfortunate that, being that anomalous functionary a legal coroner, he is not even acquainted with the law.

THE AKAZGA ORDEAL POISON OF WEST AFRICA.

IN the BRITISH MEDICAL JOURNAL for August 27th, attention was drawn to some experiments by MM. Rabuteau and Peyre on the m'boundou ordeal poison, in such a manner as to lead to the supposition that their investigations were the first into the action of this poison. We find, however, that, several years ago, Dr. T. R. Fraser of Edinburgh made many experiments, which were much more complete than those of the French observers, and which showed much more than their recent experiments. As occasionally happens, however, with French scientific men, Rabuteau and Peyre seem to be quite ignorant of the English work. Dr. Fraser has not only examined the physiology much more fully, but has also isolated and described the active principle, regarding whose existence they merely throw out some vague surmises, and he has also pointed out the nature of the structure of the wood. His researches on the subject are now before us, and we shall take an opportunity of noticing them more fully.

AN ADDRESS ON AMERICAN MEDICINE.

DELIVERED AT

ST. VINCENT'S HOSPITAL, DUBLIN,
*In opening the Session, 1870-71.*BY E. D. MAPOTHER, M.D.,
Professor of Physiology in the Royal College of Surgeons, etc.

GENTLEMEN,—I appear to-day in a capacity which I have never before sought to fill, having had nothing new to tell my colleagues or professional friends who might honour me with their presence, and feeling that I at least was unable to teach students anything of professional matters or professional morals in an introductory lecture. Having, however, just returned from a marvellous country, I thought a brief account of the state of our profession there might not be uninteresting, although it be hastily gathered and fragmentary.

In America, the licensing bodies are, without a single exception, teaching bodies as well. This is as it should be, provided the teachers are not the sole examiners, and that they do not examine the candidates separately and privately, as is usually the case. No examinations were held while I was in the country; but I heard that they were not as stringent as most of ours, and that the proportion of the rejected was much smaller. There are about forty universities and colleges in the United States which license practitioners. The sole title conferred is that of M.D., and this tends to prevent the unwise separation of medicine and surgery, which should be studied and practised, at least at the outset, together. In Canada, as in other of our colonies, associations of medical men are permitted by Government to examine and register those about to settle, or to reject those who do not possess a diploma or who fail to pass a practical examination. In Ontario province an Act has just passed which amalgamates all the eight licensing bodies. This affords a precedent for the State examination or single portal, which last session it was attempted to establish with us. I regret to say that, in some such examining boards in America, half the examiners are homœopaths; and in one there are in equal numbers regular practitioners, homœopaths, and eclectics, persons who profess to select what is best from each system—their guiding principles, however, not being apparent. That it is somewhat risky to inquire, appears from the following instance. The leading physician of a large city agreed to meet an eclectic if he would produce his diplomas. Pulling from his pocket a "double qualification," in the shape of a brace of revolvers, the eclectic swore he should either consult with him or fight him. With so many separately governed States, it would be difficult to establish a general body to control the profession—such a body as our Medical Council ought to be. One thing is certain, that in such a body the election of its members would be placed in the hands of the profession. The persistent refusal of our Government to concede this right made the Medical Bill of last session deservedly unpopular. The omission of the eighteenth clause made the measure so useless, the modes of admission remaining as numerous as ever, and such unfair advantages were conferred on the universities over the licensing colleges—especially that with which all my interests are identified—that I heard with the liveliest satisfaction of the withdrawal of the Bill on July 26th.

Every well-wisher of his profession must feel it his duty to oppose any measure of medical reform which does not alter the constitution of the Medical Council, enact the "one portal", and protect the Colleges of Surgeons who have had originally the conduct of surgical education, who have never imposed illiberal restrictions, and in whose hands exclusively it might well remain. The following numbers from the *Boston Directory* for the present year will give a fair estimate of the status of the profession. In this most intellectual of American cities there are two hundred and forty-one regular physicians—that is, members of the Massachusetts Medical Society—forty homœopaths, eleven eclectics, and fifty-five female physicians.

I have now to mention a few of the medical institutions of the country; and, firstly, the Museum at Washington, which excels anything of the kind in Europe. This will appear to you from these splendid photographs, some hundreds of which have been presented to our College of Surgeons by the United States Surgeon-General; and I am happy to say that he informed me of his intention of sending many others accordingly as they are published. Some of these pictures show great

artistic ingenuity; for instance, that in which both aspects of the body were taken by the aid of a mirror. All the injured parts from those killed in the War, and the parts removed from the wounded, are preserved; and in the latter case, most accurate records of their histories are kept. About one hundred clerks in the building keep the pension-lists, and the progress of any case can thus be most easily traced. Many of the surgeons of the American hospitals send preparations, so that the collection is rapidly increasing. There are the preparations and photographs of the eight successful amputations through the hip which were performed in the war. I examined one of the porters of the museum from whose arm seven inches and a half of the humerus had been excised with wonderful success, for a most useful and very slightly shortened limb remains. The collection of crania is immense, and all are computed by the relative position of the foramen magnum—the test of development which Dr. Otis, the learned curator, regards as most accurate. The greater splintering of the inner table he has shown to depend on the lesser force of the ball; for, if this be shot from within outwards, the outer table splinters more. Besides ordinary photographs, there are a vast number of sun-pictures of objects and tissues magnified by the solar microscope, and taken under the superintendence of Lieut.-Colonel Woodward, M.D., the medical curator, so well known for his work on the diseases of the American campaign. The building was formerly Ford's Theatre, in which that most lamentable crime, the assassination of Abraham Lincoln, was committed. The medical museum at Boston is also most excellent, and it illustrates the greatest case of the retention of human life under terrific injury ever recorded. An Irish labourer was ramming powder with a crowbar into a hole in a rock about to be blasted. The powder exploded, and the crowbar (four feet long and two and a half inches in circumference) passed below and behind the orbit, through the skull, and out through the interparietal suture, and twenty feet into the air above. The brain projected considerably; yet, notwithstanding this fearful injury, the man survived in good health for twelve years and a half. A photograph of the skull and the crowbar forms the frontispiece of the catalogue, of which this copy was lent to me by Professor R. W. Smith, whose splendid writings are as well known in America as they are in the University which he adorns, or in the Pathological Society which owes its existence to him. This preparation surpasses in wonder that in the museum of the London College of Surgeons, of the chest of a man transfixed from one armpit to the other by the shaft of a gig—an injury survived for ten years. The museum just named, as well as that of our College, vastly surpasses any anatomical collection in America, and probably I may add, or elsewhere.

The Harvard University near Boston is the oldest and most flourishing of the American seats of learning; the number of professors being about sixty, and the students one thousand. Among its medical teachers are such illustrious men as Agassiz, O. W. Holmes, Bigelow, Asa Gray, and Wyman; and, there being no other school, the fees are large, and repay them for all their time. The zoological museum directed by the great naturalist is most splendid; and in the department of fishes, exceeds any in the world. Professor Holmes is as good an anatomist as he is poet and essayist, and I can award no higher praise. Many of his poems relate to his profession: for instance, the inimitable *Rip Van Winkle, M.D.*, read at the last opening meeting of the Massachusetts Medical Society.

The schools in the States are far too numerous: thus, in Louisville, a city not one-third of the size of Dublin, there are three—one rather oddly placed; namely, in the meat-market building. Their multiplicity has led to a downward competition; the fees are but £7 a year, and the whole sum for medical education and graduation does not reach £20. The fees in the Cincinnati College are lower still: it had last year forty-five graduates, whose fees amounted to about £400, giving each of the eleven professors £36 yearly for his remuneration. From even the most strict schools great numbers of graduates proceed. Thus in Bellevue, New York, and Jefferson College, Philadelphia, over two hundred are annually capped. In the latter, the surgical teachers are such far-famed men as Gross and Pancoast.

The cheapness and too great facility of the smaller schools allow untrained persons to graduate; and if they find the trade dull, they turn to others. The clown of the circus, while I was at Washington, was a medical doctor. I wish I could believe that professional outcasts always follow callings as innocent. We suffer from the same multiplicity of schools; and as long as there are six in Dublin to eleven in London, a city ten times larger, it is evident the classes cannot repay a scientific lecturer. As soon, therefore, as he begins to acquire practice, his services are lost to science. Edinburgh, with a class of 500, has but two medical schools. It is most desirable that the proprietary schools should unite with that of the College of Surgeons; and, indeed, they are already under similar control and somewhat identified in interests. It is regarded as certain

that Parliament will determine the question of University education in Ireland this session; and lest any exclusive privileges should be designed for University medical schools, it behoves the others to demand equal recognition of their lectures—a claim which could not be resisted if they were previously strengthened by union. The amalgamation of our licensing bodies is still more desirable—especially that of our College of Physicians and College of Surgeons. It may be said that, on the eve of legislation, it may be useless to do this; but surely it will be well that any Parliamentary inquiry should find them amicably united. The division of income cannot be any obstruction, for the receipts of each for the past seven years should form a reasonable basis for apportionment of fees.

In America, pupilage for three years with a practitioner is necessary for graduation; and, as free patients are seen in the private surgery, pupils may learn a good deal. Our dispensaries at hospitals render this system unnecessary. The States are a high-pressure place, as every one knows; and the most striking medical instance of it is, that there is a summer session for similar work to that of winter, and in Bellevue Hospital, New York, even a third or autumnal session. Small specialities are encouraged by the establishment in the Universities of such Chairs as those of "Professor of Diseases of the Chest," "Professor of Genito-urinary System," "Lecturer on Diseases of the Kidneys," and the like.

The clinical mode of examination is universal in America; and, I rejoice to say, it will be in practice at the licence-examination of our College of Surgeons in January. I may mention that this was the first body to ordain clinical examination, which was required for Fellowship in 1845. In most American hospitals, a pupil will not get his certificate unless he has acted as dresser under the house-surgeon, who is responsible for his instruction.

The hospitals in the great cities are usually vast, and two in number. The City Hospital, Boston, exceeds in architectural beauty even St. Thomas's and the Leeds Infirmary, and is furnished with every modern hygienic improvement. Dr. M. F. Gavin, a licentiate of our College, and once a pupil here, is surgeon to this hospital. To his kindness I am most deeply indebted.

The Bellevue Hospital, New York, is remarkable for a splendid system of telegraphy and ambulance throughout the city, by which the injured are quickly discovered and conveyed to the wards; also for the holding of coroner's inquests within it, by which grand opportunities for studying forensic medicine are afforded. Its staff includes such men as Frank Hamilton, Flint, Doremus, and Hammond. The class last year numbered four hundred and thirty-six.

The Infirmary on Ward's Island, in connection with the Castle Garden Emigration Commission, is also a noble structure, and in it poor Irish and German emigrants meet with truly paternal care.

After all, in Dublin, with ten smaller hospitals, the sick poor are better convenience, and the buildings are certainly more wholesome. As several of our hospitals lie close together, an amalgamation of them, as regards clinical instruction, might be readily effected, if the number of cases in one be judged too small for the purpose.

The senior offices in the American hospitals are conferred by the city authorities; but the recommendation of the Medical Board, who select three candidates, is always respected. The junior offices are all won by competition, and those who have held them are usually promoted to the senior and permanent offices.

The Mercy Hospital at Chicago will accommodate one thousand patients after this year, most of whom will pay about twenty-five shillings weekly for support and treatment. This system, very common in America, is most unfair to the profession. In the same wonderful city, as in most of those on the borders of the Lakes, there are government hospitals for the care of sailors, who suffer much from typho-malarial fever, or, as it might be more correctly called, entero-malarial; for intestinal lesions are combined with intermittent symptoms. In the West, most diseases are influenced by the ague-poison; hence quinine is an universal remedy. The main difference, as it seemed to me, between typho-malarial and our enteric fever, was the extreme tediousness of convalescence in the former. It was the most formidable of the war-diseases, seventy thousand cases having been recorded, with one-eleventh of them fatal. In the Bellevue Hospital, New York, I saw several cases of relapsing fever—the epidemic which has been so rife in London, Liverpool, and Glasgow. The physicians did not seem to regard it as catching, for the rules of the hospital exclude contagious cases. The patients were nearly all from the filthy, and, as I acknowledge with regret, the distinctively Irish, part of the city, where overcrowding in vile tenement-houses, personal squalor, and poor food, had fomented the contagion. With the exception of these houses and a few lanes in Boston, I saw no places in the States which did not bear evidence of strict sanitary surveillance. Nearly every town and every city has a

grand water-supply, sewerage, and an excellent system of inspection, including speedy prosecution of those who spread catching diseases, directed by a medical officer. The great fault in his office, like most other positions in the country, is, that he is elected by popular vote, and for a very short tenure.

The Sanitary Reports of New York are most splendid: for instance, this one, containing thirty beautiful coloured plates, illustrating the Texas cattle-disease.

It may not be out of place to mention that, with a view of guarding against the spread of relapsing fever, if it should be imported from Liverpool, our Public Health Committee are about to offer to the poor free baths and washhouses. The distribution of food, the other great preventive, is not within their province; but I feel certain that the charitable will thus aid our poor room-keepers when the present pressing need for it is made known.

It having been rumoured that, in Kentucky and some other Western States, suddenly fatal symptoms had seized infants, owing to the use of the milk of diseased cows, or cows which had fed on some poisonous plant, I made extensive inquiries, but obtained no reliable facts. Cholera infantum, a most fatal form of diarrhoea, was very prevalent; and the adulterated milk given to bottle-fed children was a highly probable cause.

As regards surgical practice, I saw nothing strikingly different from that of Dublin or London. Americans are close readers of works and periodicals in French and German, as well as in English, which, with doubtful honesty, they republish. They adopt, therefore, every well-attested improvement. In treating hip-disease in the advanced stage, Sayre's splint—a brass rod, with perineal and knee bands for extension—is invariably employed; and, as exercise is then possible, the patient's health more rarely fails than with us. This great surgeon's name reminds me of an extraordinary action for malpraxis to which he was subjected. He was accused of opening the hip-joint while puncturing an abscess in a child. The medical witness who made this assertion had to admit that his sole professional training had been the employment of posting bills in a druggist's book for two years, and that he could not name one ligament of the hip, a question which, he said, related to "minute anatomy". The Judge of the Supreme Court, after advising with a surgical jury, condemned the plaintiff to pay Dr. Sayre's costs and 5 per cent. on the £5,000 damages claimed; and this decision gives us a good hint as to the way in which the promoters of speculative actions should be treated.

For the reduction of hip-luxations, manipulation, of which flexion is the essential part, is most successful with American surgeons. The ilio-femoral, or Y ligament, as Professor Bigelow calls it, from its bifurcated form, is the main part to be relaxed; and flexion does so in each of the four common forms. I found that fractures of the lower limb were usually kept extended with weights and pulleys, or sometimes with straps of plaster only.

The Woman's Hospital and Medical College at Philadelphia, now in its twenty-first session, is the largest of such institutions in the States. In the wards I found about twenty cases, including six of labour, a vesico-vaginal fistula, a Colles's fracture, consumption, and dyspepsia; and, as far as I could judge, they were being skilfully treated. A numerous attended dispensary for female and infantile cases is attached. The lecture-room and dissecting-room were well arranged, and in the latter I was shown some capital anatomical preparations made by the demonstrator, a most intelligent lady, who brought me round. She admitted that their institution was unpopular in the neighbourhood, and that mischievous boys often stoned their windows. About six bodies, male and female, suffice for the students, who average yearly forty-five. There are eight professors, four male and four female; while in the New York Female College, of nine professors, only two are ladies, and they teach obstetrics only. The whole cost of education is £50, a sum exceeding that of any of the male medical colleges. Woman performs no nobler office than that of nursing and comforting the sick, as all will eagerly aver who have witnessed the work within these walls of the holy Sisters of Charity; and while such duties might advantageously be extended to the care of natural childbirth, I feel sure that against dissection and the general practice of surgery, the refinement and modesty of Irish ladies will always revolt.

Lunatic asylums are well managed, and show high averages of recovery, that at Halifax having had last year 42 per cent. of cures on the admissions. I was surprised to learn that no Indian has ever been an inmate, while Negroes show a proportion like that of the whites. In one asylum, I was told of the following interesting case. A young girl, a teacher in a school, was asked by a zealous pupil to teach her algebra. Ashamed to admit her ignorance, she laboured during every spare moment to learn this branch of mathematics; but, after a few weeks, became insane. Her case throughout the five years she re-

mained was one of most determined suicidal tendency. Despite every care, she contrived to hang herself with bedclothes from her window one night. When discovered, she was insensible, and remained so for six days, during which she was nearly perishing from congestion of the lungs. When the insensibility disappeared, it was found that she was sane. She soon returned to her duties, and is now one of the most respected ladies in her town.

I was astonished to find that, in a country generally so well educated, quackery was rampant and successful. However, the only physiological knowledge which was diffused was that relating to the sexual passions, by filthy advertisers and one pseudo-medical journal, the organ, forsooth, of an university. I have elsewhere contended that the spread of the knowledge of the functions of the human body was the efficient remedy against quackery. Still, the weak-minded and ignorant should be shielded from the rapacity of the quack. I am well aware that there is great difficulty in suppressing quackery without incurring the risk of greater evils. Governments are not scientific authorities; and it is conceivable that some such discovery as vaccination might be branded as quackery, as it was in its earlier days. Still it cannot be impossible to put down, by public prosecution or exposure, such flagrant impostures as those I witnessed in America. Two quacks infest Louisville, stay at the best hotel, and drive about in a splendid equipage. When they gather a crowd, one puffs the virtues of his nostrum, and the other sells it to the dupes. While I was there, a respectable citizen drank some of it, and died ten minutes afterwards. No jury sat on his body, for life out west is not so highly rated as with us, and the only verdict among the reflecting classes was, "What a fool he was to take it." In St. John, New Brunswick, I encountered a more complete Jack Pudding. From the top of his magnificent carriage, he shouted for all who were ill to come and let themselves be cured. Some fellows in his pay asserted that they suffered from toothache, earache, deafness, and sick stomach; and when they had been well lathered by him with his embrocation, they cried out that they were as well as ever. Scores of bottles of the stuff went off at a dollar each. At night, the populace were still more attracted by the vehicle being lighted up and furnished with a grand band of negro melodists. The most extraordinary reward for quackery I have lately heard of was a pension of £50 yearly awarded last year to a bone-setter by the local legislature of Nova Scotia. The credulity in nostrums must be regarded as a proof that civilisation is not as advanced as among the better classes in the old countries, and it is now about the level of what it was in the seventeenth century in England. Then such absurdities as Sir Kenelm Digby's sympathetic powder were in vogue. There is this difference, however, that such English quacks were fools—all the Yankee ones are knaves. In 1739, the English Parliament passed an Act granting Mrs. Stephens £5,000 for the secret of her lithontriptic, a mess then found to be made of egg-shells, snail-shells, and some herbs burned together. To her certificate are appended the names of several cabinet ministers, and of Cheselden, Hawkins, and Sharpe, the greatest surgeons of the century.

Quacks are largely supported by those wretched persons whose diseases have been condemned as incurable. The quacks who are most detestable are those who profess to prevent and cure sexual diseases. Their indecent advertisements have caused the minds of the young to dwell on lascivious subjects, encouraged masturbation, and made hypochondriasis common. They have had much to do with the origin and spread of such scarcely conceivable mixtures of lust and lunacy as Mormonism and Free Love. Many advertisements offer aid for foeticide, but I should be sorry to believe they come from any who have even taken the first step in the healing art.

I blush to say that the newspapers of this city are polluted by such announcements from a person whose name is still retained on the Medical Register. But quacks always fail here, owing to the good sense and morality of our people. In America, panacea puffs meet you everywhere; the hotel books and directories are interleaved with them; they present you with fans covered with them, and they desecrate the grandest scenes. At Harper's Ferry—one of the most magnificent spots in the world—the towering rocks, the vast trees, the fortresses ruined in the war, are all bedaubed with advertisements in letters a yard long.

Empirics strive to make regular medical study unpopular, and for this purpose the *New York Star* was induced to publish, on Aug. 28, absurd pictures of the bodies of beautiful young girls tied up by the hair for dissection—the anatomists around being depicted much after the manner of ravenous wolves.

The prevalence of quackery and the generally low state of the profession depend greatly on the general combination of drug-selling with the curative art; and their total separation, while greatly elevating medicine, would stimulate the scientific study of pharmacy—a remark equally applicable to these countries. In the drug-stores,

soda-water and various spirits are largely sold, especially in the State of Maine.

While the profession is lowered in public estimation by the evils on which I have dwelt, its really learned members, such as the great Professor Gross, to select one out of the hundreds there are, hold the very highest social rank.

I was so pleased with my tour, that I would urge my professional brethren to select America instead of the Continent for a six weeks' vacation. The glorious and stupendous scenery, the liberality of most of her institutions, and the hospitality of her educated classes, make the United States a truly enjoyable place of travel for the English-speaking tourist. Still more warmly I would advise the newly fledged surgeon to make the Transatlantic trip. It is healthful, notwithstanding the seasickness. I may mention my belief that the horizontal posture is the only cure for this condition, as the symptoms depend on the shaking of the medulla oblongata. A ship-surgeon has much occasion for the exercise of his benevolence and administrative ability among the emigrants, and occasionally among the cabin-passengers, and all branches of his professional knowledge may be called into requisition. To a lover of Nature, the towering billows, the spouting and plunging whales, the porpoises running races with the ship, the nautilus, suggester of the sail, and the phosphorescence of the waves by night, are objects of intense interest. During the week's stay in port, he can see something of America's finest scenery and enlightened institutions.

There is one other topic on which I must touch; namely, the past and present prospects of medical students. It is this day twenty years since I began the study of medicine; and the changes have been so great that I cannot refrain from some allusion to them. Up to that period, success was much more slow of attainment, and for a young man to have gained a high position most unusual; indeed, the instance of Carmichael was the only one to adduce. That illustrious man was chosen President of the Royal College of Surgeons at the age of thirty-four. Then, it was necessary to court the favour of the great to obtain public employment; now, the grand system of competitive examination has placed a competency within the reach of every student who is manly and self-reliant. The navy, the home and Indian armies, have thus become much more ably officered; and, as clerkships in the Poor-law Service are now to be won by competition, I feel sure the medical offices in that department will be soon made public prizes. The medical charity system of Ireland would then surpass that of England still more distinctly than it does at present. And lastly, the junior offices in our great hospitals must open to those who strive to win them by their own exertions. To the vast encouragement of study which such competition has given, I attribute the great improvement in the habits and character of our students. Twenty years ago, it being impossible for any one without much interest to get employment, students degenerated into "chronics", and became idle and dissipated. At the present day, I maintain that the student of medicine is characterised by professional earnestness, and by that benevolence which even the first steps in a noble calling cannot fail to inspire. Like other youths, he shows a fondness for the various amusements which this dear old city of ours provides; and, if they be not hurtful to his body, mind or morals, I for one hope they never shall be curtailed.

MANSLAUGHTER BY A MIDWIFE.—The Leeds Borough Coroner has held an inquest on the body of a young woman named Jane Vickers, who was attended by a midwife in her confinement. Hæmorrhage set in, and the neighbours advised the latter to send for a medical man; she did not do this, and death ensued. Mr. Goldie, surgeon, stated in evidence that he was called to see the deceased, but that she was dead when he arrived. He made a *post mortem* examination, which satisfied him that the midwife had displayed gross negligence and ignorance in the management of the case. The jury returned a verdict of manslaughter against the midwife.

DONATIONS, BEQUESTS, ETC.—"T. N. R." has presented £1,000 to the National Hospital for Consumption and Diseases of the Chest, Ventnor, Isle of Wight.—The Hon. Augusta Irby bequeathed £500 to the Northampton General Infirmary.—Baroness Wenman has bequeathed £500 to the Oxford Infirmary.—Mr. James Reid, of Calderbank, has bequeathed £500 to the Glasgow Royal Infirmary, and £200 to the Convalescent Home.—"P." has made his (or her) thirty-first contribution to the funds of the Cancer Hospital, Brompton, making a total of £335.—Miss Elizabeth Baker, of Alfred Street, Bedford Square, has bequeathed £300 to the Royal Free Hospital, and £300 to the London Fever Hospital.—The Sheffield Public Hospital and Dispensary has received £200 under the will of J. Wilson Hawksworth, Esq.—The Rev. Carr J. Glynn has given £50 to the Dorset County Hospital.

ON THE SHOULDER-TIP PAIN, AND OTHER SYMPATHETIC PAINS, IN DISEASES OF THE LIVER.*

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II.

THE occurrence of this pain in the top of the shoulder, scapula, clavicle, arm, or side of the neck—in one or more of these parts, and in connection with inflammation, abscess near both the convex and the concave surfaces, cancer, and hydatids of the liver, and with the passage of gall-stones, has been well ascertained, both in ancient and modern times; and, although not always present, it is sufficiently often so, and then frequently so severe, as to arrest the attention of patient and of physician.

It is, therefore, of sufficient importance to demand a serious investigation, and a proper explanation, if such can be found; the more so, as there appears to be a prevalent feeling that its occurrence has not as yet received a satisfactory elucidation. The explanations of this pain that I have seen are these.

1. Aretæus, in treating of acute and of chronic affections about the liver, says that in abscess a sharp pain is felt in the tops of the shoulders and clavicle, "for the diaphragm, from which the liver is suspended, is dragged down by the weight, and the diaphragm drags the membrane lining the ribs, to which it is attached, and this membrane (the pleura) is stretched up to the clavicle and top of the shoulders, which are also dragged down." (*Extant Works of Aretæus*, by Adams, 1856. Chron. Dis., book i, chap. xiii.)

2. Avicenna, Rhazes, and Haly Abbas, repeat the same account. (*The Seven Books of P. Aegineta*, by Adams, vol. i, pp. 567-8. Syd. Soc.)

3. John Hunter states that some sympathies are beneficial and of great value in the economy; that others, again, are injurious, and goes on to say—"Some sympathies are opposite in their action; pain in the liver is depressing, that in the shoulder rousing. Nature is incapable of sustaining the former, and sets up the rousing pain in the shoulder to continue life." (*Hunter's Life*, by Palmer, vol. i, p. 331.)

4. Mr. Hilton, in his Hunterian Oration, 1867, p. 28, after showing that Hunter knew the fact of the existence of the pain, but failed to explain it, proceeds thus—"He had not arrived at the anatomical and physiological elucidation which we have deduced from the fact that the right phrenic nerve, arising from the third and fourth cervical, gives off a branch which takes its course under the inferior cava, through the fissura venosa, into the porta of the liver, and, finally, also one or two filaments to the round ligament."

5. Sir Thomas Watson writes as follows: "Thus, filaments of the phrenic nerve penetrate the diaphragm, and communicate with the ganglia that lie around the coeliac artery; other filaments are distributed to the muscles about the shoulder, and in this way has been explained the well-known fact that disease or irritation of the liver is very apt to be accompanied with pain in the shoulder." (*Lectures on the Practice of Physic*, 4th Edition, 1857; vol. i, Lect. xxxix, p. 720.)

6. Professor Rolleston, in his Address on Physiology at the Oxford Meeting of the British Medical Association, 1868, alluded indirectly to the subclavius nerve and its connection with the phrenic, and so with the shoulder-tip pain in liver-disease.

These connections of the nerve of the subclavius muscle—a twig from the fifth, or fifth and sixth, cervical—with the phrenic, and of the phrenic nerve with the liver through the great sympathetic ganglia, are, I believe, undoubted facts. I do not find the direct passage of phrenic twigs to the porta of the liver and round ligament given in any book (see Ellis and Swan);† but, if present, they are maintained by very small twigs, which are not accessible to examination, and it would be extremely difficult, if not impossible, to prove that the shoulder-pains in liver-disease are located in the phrenic nerve and its branches. This nerve does not appear to give off any other branches in the neck, except those to the sympathetic and to the subclavian muscle.‡ It is true that there are at times pains in or close to the clavicle in some cases of hepatic

disease, and possibly they may be accounted for by the connections pointed out or alluded to by Sir Thomas Watson, Mr. Hilton, and Professor Rolleston; but the ordinary seat of the shoulder-tip pain is not in the clavicle, but in the edge of the trapezius muscle behind it, as will presently be pointed out, and the above-mentioned explanation does not, therefore, answer for that pain.

Now, there exists an important, though a somewhat distant line of nervous connection between the liver and the top of the shoulder—one that has not hitherto been noticed in print—but by means of which a more intelligible and satisfactory explanation is capable of being given of the occurrence of the shoulder-tip pain in liver-diseases; and, by submitting the following observations, noted before special reference was made to what had been previously written on the subject, I shall best be able to show the line of connection just referred to.

These observations were made on cases of hepatic congestion with enlargement, of cancer of the liver, and of passing gall-stones, cases which had, from time to time, come under my notice in public and in private practice; and with regard to the frequency of the pain at the shoulder-tip, I had come to a conclusion the reverse of that stated by Andral, Budd, and others. It appears to me to occur more frequently than is generally believed. That it is seldom severe, I agree; but that it is often present in some degree, though little complained of by patients, and will be discovered on investigation to exist, I feel sure.

The pain, when present and well marked, occurs at the top of the shoulder, being referred especially to the angular space between the acromial end of the spine of the scapula, and the adjacent end of the clavicle, where the upper and outer part of the trapezius muscle, as it goes to be inserted into the bones just named, is lodged. At this part, the external branch of the spinal accessory nerve, after having supplied the sterno-cleido-mastoid, and anastomosed with the second and third cervical nerves, enters the trapezius, forming a small plexus with twigs of the third and fourth cervical nerves, and is continued on along the vertebral border of the scapula, supplying the trapezius in its course, and communicating with twigs of the intercostal nerves.

The pain occurs often when there is much pain in the liver. It varies in intensity from a feeling of weight, or dull aching, to a sharp, lancinating, darting, or boring pain; and then the part at which it is felt becomes more or less tender on pressure (but no swelling or redness, as Dr. Budd has stated, is observable).

It appears to be severe in proportion to the degree of pathological (hyperæmic or inflammatory) disturbance raging in the liver, and is at times accompanied with pains passing from the liver up into the interior of the chest, and the liver itself is very tender on pressure. When not severe, it appears confined to the shoulder-tip; when severe, it shoots downwards to the lower angle of the scapula, and occasionally obliquely upwards along the side of the neck, as far as the base of the skull, in front of the vertebral column, or, in other words, along the track of the external division of the spinal accessory nerve, the only nerve lying in that direction.

In a case favourable for observation, a little examination will show that this nerve is really tender to pressure from the seat of pain at the shoulder-tip up to that part of the sterno-cleido-mastoid muscle through which the nerve is known to pass, and also thence as far towards the base of the skull as it is accessible to pressure. This muscle is tender where the nerve passes through, if its deeper layers are moderately pinched up; but above and a little way below the line of transit of the nerve the muscle is not at all tender to pressure.

The trunk of the pneumogastric nerve also, of the same side, will be found in such a case abnormally sensitive to pressure, and it will be so in proportion to the amount of pain in the shoulder, and to the tenderness of the spinal accessory; and the sensitiveness will be found greater as we trace the nerve down to the clavicle, at a little below the level of which the nerve ceases to be amenable to examination; upwards in the neck, this sensitiveness appears to be continuous with that of the spinal accessory.*

* As it has been matter of dispute whether or not the par vagum is sensitive to irritation or violence, the opposite views on this question are here appended. Dr. Carpenter, in his *Human Physiology*, 4th Edit., p. 519, has the following passage:—"Now if this nerve excites the motions of respiration, by its powerful action in producing sensation, we should expect to find its trunk endowed with considerable sensibility, which is not the case; for all experimenters agree in stating that, when its trunk is pinched or pricked, the animal does not exhibit signs of pain nearly so acute as when the trunks of the ordinary spinal nerves, or of the fifth pair, are subjected to similar treatment."

On the other side, Dr. John Reid, in his *Physiological, Pathological, and Anatomical Researches*, p. 163, states that "Haller, Brunn, Dumas, Dupuy, Mollinelli, Mayo, Magendie, Brachet, and himself, all concur in stating that the pinching, cutting, and even stretching of the nervus vagus in the neck, are, in the majority of instances, attended by indications of severe suffering."

Again, in the 7th Edition of Dr. Carpenter's *Principles of Human Physiology*, edited by Mr. H. Power (1869), the following remark is made at page 568. "That the nerve is capable of conveying those impressions which become sensations when

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

† "One or two filaments of the right nerve join in a small ganglion, with branches to the diaphragm, which are derived from the solar plexus of the sympathetic; and from the ganglion twigs are given to the suprarenal capsule, the hepatic plexus, and lower vena cava." (Quain's *Anatomy*, 7th Edition, vol. ii, p. 641.)

‡ A subclavian twig is not mentioned in Quain's *Anatomy*, 7th Edition, 1866.

Pressure applied upon one or both of these nerves will now and then give rise to an increase of pain in the shoulder, or to pain in the head, and upon the vagus will excite or increase pain in the liver.

The above observations have been often repeated in the presence of clinical students and others at the Newcastle Infirmary, and are full of interest, as they seem to afford the real or chief clue to the difficulty of accounting for the shoulder-tip pain in question. Before, however, concluding that this clue has really been found, it is necessary to trace the courses and connections of the spinal accessory and of the par vagum, their connections with each other, and their relations to the shoulder and the liver.

On referring, therefore, to the best and most recent anatomical works, in English, French, and German, that I have been able to consult, I find that all pretty well agree as to the connections of the par vagum and spinal accessory—that these are more intimately connected with each other than either of them is with the glosso-pharyngeal, and that they have in the foramen lacerum posterius a common vascular network, from which the glosso-pharyngeal is excluded.*

The course, distribution, and office of the external division of the spinal accessory appear not to be in doubt. That the internal division joins the trunk of the par vagum at the ganglion of the trunk, and contributes to the formation of the pharyngeal and laryngeal nerves with the vagus, is not doubtful; but we are ignorant as to how far the remaining part of the spinal accessory, which is incorporated with the vagus, goes along with it, and we do not accurately know to which organs it is finally distributed. These two points are of necessity, from the nature of the parts, of most difficult, if not of impossible, determination by the scalpel.

By some anatomists, the spinal accessory portion of the vagus is believed to be given to the lungs, heart, and stomach, which it is said to animate, more or less, with motor power. (Hirschfeld and Leveillé, *Neurologie et Esthésiologie*, 2me Edition, Paris, 1866, p. 218 et seq.) If this be true, there seems no reason why the liver, kidneys, and other parts—such as the suprarenal bodies, the pancreas, and the small intestine—should not receive branches from the spinal accessory as well as from the vagus itself. In such case, we should have the seat of the sympathetic pain supplied by the external division, and the seat of disease in the liver supplied, in part at least, by the internal division of the same nerve—the spinal accessory—the two branches being in intimate connection beneath the skull. But, although it is probable that the internal branch of the spinal accessory is distributed to the same organs as the vagus itself, there are not as yet sufficient anatomical grounds for such a conclusion.

It nevertheless appears that the par vagum, accompanied or not by the spinal accessory, does reach the liver, either directly from the gastric branches themselves, or indirectly from them through the great sympathetic ganglia, but the accounts of anatomists as to the mode and the amount of nervous supply to the liver, vary greatly from each other.†

The following extracts will show this discrepancy. No doubt many varieties of distribution exist which will, to some extent, account for the varying descriptions that we find in anatomical books; and the dissection of the part is beset with difficulties, particularly as many of the twigs of the pneumogastric pass through ganglia, and join with nerves of the sympathetic system, and are not easily distinguished from sympathetic twigs; but repeated and faithful researches will give us a more uniform, more correct, and more reliable account, both of the course and ultimate distribution of these important nerves.

These extracts are from Quain and Sharpey, Dr. John Reid, Cruveilhier, Swan, Hirschfeld and Leveillé, Dr. J. Kollmann, and others.

1. Quain and Sharpey (*Anatomy*, 7th Edition, vol. ii, p. 623) say, that from the left nerve "some filaments are continued between the layers of the small omentum to the hepatic plexus"; a part of the right nerve "is continued from the stomach to the left side of the coeliac plexus, etc.," but no mention is here made of hepatic branches. But, again, at page 867, we find that "the nerves of the liver are derived partly from the coeliac plexus, and partly from the pneumogastric nerves, especially the left."

communicated to the sensorium, is experimentally proved by the fact that, when its trunk is pinched, the animal gives signs of acute pain; but it is also evident from the painful consciousness we occasionally have of an abnormal condition of the organs which it supplies."

In the ordinary and healthy state of the body, the vagus in the neck, as any one may satisfy himself, is usually not at all tender. Under ordinary degrees of pressure by the finger or thumb, no pain is produced. In animals, when the nerve is pricked, cut, or ligatured, great pain, as I know from experiment, is the immediate consequence.

* See Quain's *Anatomy*, 7th Edition, vol. ii, p. 618, and plate, p. 619; also, Flower's *Plates of the Nerves*.

† "Some small twigs from the accessory join the pulmonary and cardiac plexuses; the remainder accompany the vagus to the stomach, when they are lost." (*Cyclop. Anat. and Physiol.*, vol. iii, p. 690.—John Reid on *Par Vagum*.)

2. Dr. John Reid (*Cyclopædia of Anatomy and Physiology*, 1847, vol. iii, p. 889) tells us that from the concavity of the curve formed by the *left vagus* as it passes from the cardia towards the right side, several small branches run upwards and to the right between the layers of the small omentum to join the left hepatic plexus; and then "The few branches of the *left vagus* which reach the pyloric orifice are partly distributed upon the walls of that portion of the organ, and partly throw themselves into the coeliac plexus. Some of the filaments of the latter portion may be traced into the numerous plexuses surrounding the gastroduodenalis branch of the hepatic artery, into the right hepatic plexus, and may sometimes be followed as far as the artery of the gall-bladder." The *right vagus*, after giving its branches to the cardia and posterior surface of the stomach, sends "a considerable portion, so large as generally to present the appearance of being the continuation of the trunk of the nerve, from the posterior surface of the cardiac region of the stomach, backwards and downwards to the left side of the coeliac axis, sending branches to the splenic, the coronary, and to the superior mesenteric plexuses, to the plexuses surrounding the pancreatic branches of the splenic artery, and it ultimately terminates in the left semilunar ganglion."

3. Cruveilhier (*Anatomy*, Library of Practical Medicine, vol. viii, pp. 1137 and 1162) lays it down that one set of branches of the *left vagus* "enters the gastro-hepatic omentum, and is conducted by it to the transverse fissure of the liver, and enters that gland." The *right* "gives a smaller number of branches to the stomach than the left, and joins the solar plexus, of which it may be regarded as one of the principal origins"; and, again, under heading—Sympathetic Nerve, Coeliac Plexus, "the anterior hepatic plexus accompanies the hepatic artery, and is formed by some twigs from the right pneumogastric, and by several large branches from both semilunar ganglia."

4. In Swan's *Demonstration of the Nerves of the Human Body*, p. 51, London, 1834, we read of the par vagum:—"Right side. After it has passed the diaphragm, it gives filaments to the cardiac extremity of the oesophagus, some of which communicate with similar ones from the left side. It sends a branch to terminate on the posterior surface of the stomach, after giving a branch to the splenic plexus. It sends a branch to terminate on the lesser curvature of the stomach. It gives a branch to communicate with branches of the left trunk on the superior gastric artery, and others from the part of the right hepatic plexus on the pyloric artery to terminate on the stomach. It sends a branch to communicate with those from the coeliac plexus, accompanying the superior gastric artery. The continuation or principal part of the trunk then passes downwards, and ends in the coeliac plexus. The left, having passed the diaphragm, sends several filaments to the cardiac end of the oesophagus, and to communicate with those from the left side. It sends several branches to join the left hepatic plexus, and a considerable branch to the broad end of the stomach. It sends several branches on to the lesser curvature, some of which terminate at once on the stomach, and others pass along the superior gastric artery to meet the branch accompanying the pyloric artery from the right hepatic plexus, as well as filaments from the branch of the right or posterior trunk."

5. From Hirschfeld and Leveillé (*Neurologie, ou Description et Iconographie du Système Nerveux*, Paris, 1853) I gather the following passages:—"Le cordon gauche donne des branches dont les unes vont à la grosse tubérosité de l'estomac, dont les autres longent la petite courbature entre les deux feuillets de l'épiploon, et se perdent à la face antérieure de l'estomac; les dernières remontent entre les mêmes feuillets, dans le sillon transverse du foie, accompagnent les vaisseaux hépatiques, s'anastomosent avec le plexus hépatique du grand sympathique, et se distribuent au foie." "Le droit se divise derrière le cardia en deux faisceaux; l'un plus petit, se perd à la face postérieure de l'estomac où il s'anastomose avec le gauche par l'intermédiaire des ganglions plats; l'autre se dirige vers l'extrémité interne du ganglion semilunaire droit, et s'anastomose avec le plexus solaire. J'ai pu poursuivre quelques filets jusqu'au plexus nerveux mésentérique supérieur."

Valentin, and other German and French Anatomists, describe very minutely the supply of the par vagum to the liver, but do not agree with each other.

7. Dr. Sharpey has kindly given me a copy of a Prize Essay, entitled *Ueber den Verlauf des Lungenmagenervens in der Bauchhöhle*, by Dr. J. Kollmann, Assistent an der Königl. Academie in München, Leipzig, 1860, with two lithographic plates of the distribution of the par vagum. In the summary at the end of the Essay we find the following:—"Der vordere Lungenmagenerv endigt an dem Magen und der Leber," and "Der hintere Lungenmagenerv biegt sich nur mit dem kleinern Theile seiner Fasern zum Magen, mit dem bei weitem grössern verzweigt sich an der Leber, der Milz, der Niere und Nebenniere, der Bauchspeicheldrüse und dem ganzen Dünndarme." In this Essay there

is also given an excellent *résumé* of the researches of previous German and French Anatomists into the distribution of the par vagum in the abdomen.

The account of the liver-nerves by Kollmann appears to be more in accordance with what might be expected from analogy, and from pathological observation and inference, than the descriptions of the other authors. But the vagueness and unsatisfactory state of our knowledge on the above subject must now be evident.

Besides, although some anatomists mention anterior and posterior hepatic plexuses, yet only few, as John Reid, Swan, and Valentin, appear to have distinguished plexuses or nerves of the right from plexuses or nerves of the left lobe, and we know little as to the ultimate destination of the nerves in the interior of the liver.

As to this ultimate distribution, the substance of the knowledge we appear to possess is as follows. The combined sympathetic and pneumogastric branches "enter the liver supported by the hepatic artery and its branches, along which they may be traced a considerable way in the portal canals, but their ultimate distribution is not known." "The gall-bladder receives nerves along the hepatic artery from the coeliac plexus." (Quain's *Anatomy*, 7th Edition, 1867, vol. ii, pp. 867 and 868.)

Ellis (*Demonstrations of Anatomy*, 3rd Edition, 1852) says, "the hepatic plexus is continued on the vena portæ, hepatic artery, and bile-duct, to the transverse fissure, where it enters the liver and ramifies on the vessels."

Cruveilhier says that the hepatic plexus of the sympathetic (which comprises the pneumogastric hepatic nerves) "gains the transverse fissure of the liver, divides like the vena portæ and hepatic artery, and may be traced for some distance in the capsule of Glisson." (*Anatomy*, vol. ii, p. 1162; Tweedie's Library of Medicine, 1842.)

THE WAR AND WINTER-STATIONS FOR INVALIDS.

By C. THEODORE WILLIAMS, M.D.,

Senior Assistant-Physician to the Hospital for Consumption and Diseases of the Chest at Brompton.

THE selection of wintering-places for invalids, always a subject of some difficulty, is this year complicated by the war now raging in France, and by the uncertainty as to the extent of French territory which may become the seat of hostilities. At present, the Mediterranean health-resorts of France—Hyères, Cannes, Nice, and Mentone, are cut off from direct communication *viâ* Paris and Lyons, and can be only reached by circuitous routes through France, likely to be soon obstructed, or by still more circuitous routes through Germany, Switzerland, and Italy. On account of uncertain communication, Pau, Arcachon, and Amelie les Bains will also probably be closed to visitors. Let us, therefore, briefly consider what winter-stations are still accessible to invalids.

In the first place, there are those of our own south coast, which offer the attractions of home comforts, first-rate medical advice, and easy accessibility, and will no doubt be largely resorted to. Their mild climate may be generally ascribed to their shelter from northern and easterly winds, and to the benign influence of the Gulf Stream and of the currents, aerial and aqueous, generated by it. A mild atmosphere, of tolerably equable temperature, devoid of extremes either of cold and certainly of heat, is thus obtained; but we must not forget that it has the drawbacks of more or less humidity, much cloudy weather, and a considerable number of rainy or foggy days.

Of these stations, Torquay stands pre-eminent, on account of its admirable shelter from cold winds, and the large choice of residences which it offers; for so extensive is the sheltered area, and so various the elevations included in it, that a situation may be chosen either near the sea, at some distance from it, or even at heights of several hundred feet above it. On account of its rocky soil, Torquay is perhaps less damp than many parts of Devonshire; but its large number of trees, both deciduous and evergreen, do not add to its dryness, and cause an amount of shade more acceptable in summer than in winter.

The Cove of Cork, Penzance, Falmouth, Dawlish, Teignmouth, and Tenby, enjoy much the same mild, moist ocean-climate as Torquay; only they are less sheltered from winds which, from their coldness or tempestuous violence, are trying to invalids.

Nearer London are Ventnor and Bonchurch, capitally protected from the north by high cliffs several miles in length, but very circumscribed in area; while for those for whom a more open and only moderately sheltered situation is advisable, Bournemouth, with its dry sandy soil

and fragrant pine-woods, may be indicated, as strongly contrasting with those damp localities in which, according to modern research, phthisis is endemic:

Hastings and Worthing, the mildest places of the south-east coast, if inferior in temperature to the best stations on the south-west coast, have attractions in point of proximity and accommodation; but they are open to east winds, the common prevalence of which in the later winter and early spring months greatly impairs the suitability of these resorts at that season. The same objection applies still more strongly to Brighton, the most bracing place on the south coast, which up to Christmas is generally warmer and more sunny than most inland places, but in the spring it becomes too bleak to be endurable by pulmonary invalids.

It is, however, obvious that there are invalids who require a warmer and drier climate than can be found in these islands, and to many of them it is a necessity of life: for these we must look abroad.

The Italian Riviera, extending from Ventimiglia to Spezzia, promises for this winter a safer asylum than the places in the South of France; while its health-resorts enjoy a similar and in no way inferior climate. I have long urged the desirability of establishing more health-stations on this part of the coast, where highly favoured sites, such as Diano, Alasio, and others, are not wanting; and in this way the overcrowding of the favourite French resorts might be much relieved. I hope to see the day when this may be accomplished; but, for the present, San Remo, Bordighera, and Nervi are alone fit for the reception of invalids; and, of these, San Remo can be warmly recommended, on account of its extensive hotel-accommodation and the size of its sheltered area. The protecting range, sloping gently back from the shore, is intersected, but not penetrated, by numerous valleys, remarkable for the luxuriance of their vegetation; and the chain, running out on each side to the sea, encloses an amphitheatre four or five miles in width, which it shelters from all cold winds. Here can be found a considerable choice of villa residences; while the olive-clad hills and valleys, abounding in lemon-trees and wild flowers, afford full scope for varied excursions. The climate is one of the finest on the coast, the number of rainy days being very small, and the mean daily range less than in the other health-resorts.

Bordighera, well known to English novel-readers as the scene of *Dr. Antonio*, is a few miles nearer to the French territory, and much resembles San Remo in position and climate, though it is inferior in shelter and in accommodation. The palm-groves, from which each year Rome is supplied during the Holy Week, testify to the warmth of the place; and in the comfortable hotel invalids have wintered safely.

On account of its proximity to Genoa, and its fine view of the beautiful bay, Nervi is sometimes preferred as a wintering-place. It contains a good hotel and boarding-house, and is fairly sheltered; but the rapid rise of the hills behind it limits the extent of the rides and drives. English medical men reside at San Remo and Bordighera; but at Nervi recourse must be had to Genoa for such aid.

How is the Riviera to be reached this winter? The transit by Paris, Lyons, and Marseilles,* so easy and safe for invalids, being obstructed, there is still open to us the road through Germany, *viâ* Ostend, Cologne, Stuttgart, Munich, and thence by the Brenner Pass to Verona and Genoa. The unbroken rail-communication enables the invalid to make this journey easily in about a week; and he can proceed from Genoa by train in two hours to Savona, and thence by carriage in one day to San Remo. This would also be the safest route to pursue for those who preferred trying Mentone, Nice, or Cannes. Those to whom so long a land-journey is likely to prove injurious can go by the steamer which starts every week from Liverpool to Genoa, performing the passage in about ten days.

As regards the Italian cities, Pisa is the only one which can be safely recommended as a winter-station. The climate bears a certain resemblance to that of Pau; but the locality is damper and not so well sheltered, and the drives in the vicinity are exposed to cold blasts from the Apennines. Among the Italians, Pisa is held in high repute.

According to my experience, few places are so unfit for a pulmonary invalid as Rome. If he wanders on the sunny and sheltered slopes of the Pincian, he is tolerably safe; but a drive into the Campagna exposes him to cold winds, and possibly to malaria; a walk in the well-like streets, so narrow and walled-in by lofty palaces that the sun hardly reaches the pavement, is not beneficial; and visits to the icy museums and galleries, to which his inclinations and his friends direct him, are fraught with danger.

In Naples, there is the additional disadvantage of bad drainage; and, although in its neighbourhood there are sheltered retreats, such as

* The British Chaplain at Nice has lately reached that city *viâ* Bâle, Geneva, and Lyons; but, with the prospect of Lyons being soon attacked by Prince Frederick Charles's army, this route can hardly be recommended.

Capri and Salerno, their climatic attractions can hardly counterbalance the fatigue of the long journey necessary to reach them.

The unsettled state of Sicily renders Palermo an unfit resort; and the climate of Malta is far too changeable to be recommended.

The climate of Cairo and Upper Egypt possesses the qualities of dryness and warmth in a high degree. Cairo is accessible in seven days by the Brenner and Brindisi route, or by the steamer from Liverpool or Southampton. A sanatorium lately established by an English lady promises the accommodation hitherto wanting; but this place is not exempt from the disadvantages of imperfect drainage. Far superior is the climate of Upper Egypt; and voyages up the Nile in a boat have been found highly beneficial; but the recent depopulation of its banks by the Pasha, for the purpose of cultivating his cotton-grounds, renders the difficulty of catering during the voyage so great, that we hear of travellers suffering last year great privation, and returning in great disgust.

The direct route to Algiers *via* Marseilles is for the present impracticable; and, disturbances among the Arabs being apprehended, that fine climate, with its bracing hill-stations, can hardly be considered a safe resort for invalids this winter, and can only be arrived at by way of Gibraltar, Carthage, and Oran.

From Gibraltar, Tangiers also can be reached, where a softer atmosphere, tempered by Atlantic breezes and excellent, although limited, accommodation, gives it strong claims to be recommended as a winter-station for invalids; but the almost barbarous state of the neighbourhood places many restrictions on out-door life there.

Again, a mean winter temperature considerably higher, and a rainfall considerably less than that of any winter-station of southern France, is to be found at Malaga, but counterbalanced by a want of proper house-accommodation, by bad drainage, and by (for this winter) the circuitous approach by sea.

Many patients have this winter gone to Madeira, long the favourite resort of the phthisical, but which has for some time been superseded by the more invigorating and bracing Mediterranean stations; its soft and equable climate being stated to have deteriorated of late years, through the cultivation of the sugar-cane and the consequent irrigation of the country. I understand, however, that this is, to a certain extent, discontinued; and the cultivation of the vine, once so famous, again resumed, the vintage of last year having been unusually abundant; and doubtless this change will exercise some good effect on the climate, which will probably suit, as hitherto, the inflammatory forms of consumption. Those patients, however, are most likely to profit by a residence in Madeira who can take riding exercise on the hills, and not remain confined in Funchal. Steamers leave Southampton about three times a month for Madeira, making the voyage in a week.

In conclusion, I would remark that the closure to invalids of so many Mediterranean stations rather invites a trial of the high altitude resorts of Switzerland; but the advanced state of the season is unfavourable to a fair trial of this plan, for it seems to be the common experience of those who have benefited by a residence at Davos and St. Moritz, that it is necessary to go there in late summer, and undergo a certain amount of acclimatisation to reap whatever benefits may accrue from a winter in these elevated regions.

RECOLLECTIONS OF WORK IN AN AMBULANCE.

By WILLIAM MAC CORMAC, F.R.C.S., Surgeon to the General Hospital, Belfast.

EVERYTHING in war time is *à l'improviste*, and one can never tell beforehand what is about to befall. So it was even with us from our first start from Paris on the 28th of last August. Through a number of accidental circumstances, foreseen by none of us, we joined together, a band of English and American surgeons, anxious to give our aid to the sick and wounded accruing from this bloody war. We were sixteen in all—eight Americans and eight English—with Dr. Sims and myself at the head. Dr. Philip Frank, Dr. Woodham Webb, Mr. Blewitt, Mr. Wyman, Mr. Hewitt, Mr. Ryan, Mr. Scott, formed the rest of the English party; whilst Dr. Pratt, Dr. May, Dr. Tilgman, Dr. Nicholl, Messrs. Hayden, Wallis, and Harry Sims constituted the American section of our corps.

We received our supplies at the Palais de l'Industrie, in the Champs Elysées, then a vast receptacle for medical supplies of all kinds; and, with two waggon-loads of medical stores, some saddle-horses, and a troop of *infirmiers*, or male nurses, we formed a procession along the Boulevards, on Sunday, August 28th. In due time, we reached the railway station, and started for the purpose of reaching MacMahon's

head quarters, and the field of battle, wherever it then might be. I may here say a word as to the organisation of the French voluntary ambulance corps. The generality of them were monstrously cumbrous. There were too many surgeons, too much material to transport, too many *infirmiers*, too often taken from a class of men who enlisted in this service to escape being called upon to fight in the army. In some of the ambulances, there were as many as forty medical men, and a dozen heavy waggons, with horses in corresponding numbers. Many of these ambulances spent their time in marching and countermarching, without ever reaching, in time to be of use, the actual scene of operation. Their waggons would often stick fast in some country bye-road, or in a field, and then they would have to be abandoned. There were ten such ambulances; and as a system or organisation, the French Society for Aid to the Wounded has to a large extent failed in its mission. No doubt it has done much good, but not proportionate to its resources, which have now been completely used up. In my opinion, a field ambulance should be constituted of not more than four or five surgeons, and as many assistant-surgeons, who would act as competent dressers, and who had been trained to dress severe wounds. Skill as a dresser is at least as much required on the battle-field, as skill as an operative surgeon, and there is ample scope for the employment of carefully educated young surgeons in this capacity. I look upon this point as of the first importance. All the cases, whether they be operated upon or not, require careful dressing, and too often this has been entrusted to inexperienced hands. For a moving ambulance, the smaller the quantity of stores taken the better, and these without exception should be carried on horses or mules. The waggons are a serious impediment, and very often, as I said before, have to be abandoned, with their valuable contents, altogether. What is most needed are a few cases of surgical instruments and appliances, some chloroform and carbolic acid, one moderate-sized tent, half a dozen stretchers of the simplest construction, to carry the wounded and to serve as beds. These, and some tins of preserved food, are all that need be carried about. For whatever else may be required, one must trust to the supplies of the place in which one may happen to be. If the French ambulances had been constructed upon this system, and multiplied in number, they would have been much less costly, and, I venture to add, would have done much more good. Of course these remarks apply only to field ambulances which follow closely, or are supposed to do so, the movements of the troops. For more extensive organisations which go to a certain spot, and then establish a complete hospital, the case is different. But the great difficulty for these is to secure patients. In moving troops, and taking up a positions from which to offer battle to the enemy, I fear that as yet generals are not much actuated in coming to a decision as to where happen to be placed the largest and best hospitals, or any hospitals at all. No doubt if the scene of battle could be foretold, it would be quite right to send thither beforehand the amplest medical provision possible; but as that can never be, the less complete organisation of an *ambulance volante* must be relied upon to furnish that immediate succour so much needed on, or close to, the battle field.

In accordance with our instructions on leaving Paris, we tried, after arriving at Sedan, to reach MacMahon's head quarters and the front. The Vicomte de Chezelles, Courier des Ambulances, acted as our guide. Through a combination of circumstances, we were delayed that evening, the 30th August, at the railway station near Sedan, and we saw the Emperor, MacMahon, and the whole Etat Major, arriving during the night. In place, therefore, of our going to the front, the front came to us. Then were the negotiations completed with Dr. Duplessy, Médecin en Chef des Hôpitaux de Sedan, which placed us in possession of a large hospital of 384 beds on the battle-field of Sedan. This piece of exceptional good fortune, the getting into a first rate position, and into working order, just on the eve of a great battle, has enabled the Anglo-American ambulance to render services such as no other ambulance in either army has been as yet in a position to perform during this war.

Of course, during the first ten days or a fortnight, we were short-handed, and overworked. Such a result is inevitable after all great battles. I find in the diary which I kept, that we have been sometimes working for twenty hours at a time, performing operations, noting cases, and making dressings. I have heard of surgeons working for much longer spells after battles. But it is questionable if work done under like circumstances is of advantage to the wounded. Not only does one suffer from physical fatigue, but one must lose, more or less, that clear intelligence so urgently demanded by the urgency and severity of the cases. The building of which we got possession was an infantry barrack, situated on the ramparts of Sedan, at the place to which the Prussians gave the appropriate name of Kronwerk Asfeld.

REMARKS ON THE BENEFICIAL EFFECTS OF COMBINING TONICS WITH APERIENTS IN CHRONIC CONSTIPATION.*

By the Rev. DAVID BELL, M.D., C.M., Goole, Yorkshire.

THERE is, perhaps, no more prevalent affection than chronic constipation of the bowels—nothing from which a large proportion of both sexes suffer more inconvenience and incur greater risk than irregular and slow action of the intestinal canal. Many years ago (when I had the honour to be in practice as a physician), numerous cases came under my care, both in males and females, where the parties found it to be a great discomfort and trial to them. It was a great discomfort because, after a certain period, varying from three to seven and ten days, it was necessary to take an aperient or purgative, which, if taken in sufficient quantity to act upon the bowels, generally overacted, and caused sinking of the system and depression of spirits; and not only this, but the bowels seemed to be so weakened that they could not again act of themselves. The trial was again to undergo the same ordeal, so that it was put off till serious disturbance was threatened. The subject had, perhaps, more interest for me, because I had to deal with it in my own person; and on one occasion I had been—when a medical student, and while working very hard in hospital and dissecting-room, etc.—three weeks without an evacuation from the bowels. I need not say that on that occasion I suffered fearfully, and had a narrow escape from serious disease. Very many cases of persons with constipation for a week came before me, in the course of a lengthened practice, and the subjects were for the most part of the character denoting a want of tone in the entire system. I had an idea, therefore, that it was want of tone in the intestines in particular that caused the constipation, and that a combination of tonic and aperient—the latter subdued in its action by a mild sedative—would be the remedies to meet such cases; and in carrying my principle into practice, I have rarely if ever been disappointed.

In fixing upon an aperient, my attention was turned to the class that was known to possess also tonic qualities, and Socotrine aloes was experimented with. After a great many trials, and in a variety of cases, I resolved upon the following formula.

R. Aloes Socotrin., extracti hyoscyami, \bar{a} i gr. xii; quinin. disulph. gr. vi; ferri sulph. gr. iv. M. bene et fiat massa in pilulas xii æquales dividenda.

At first I directed that two of these pills should be taken at bed-time, and I found that a free feculent, and in a measure formed evacuation was the result on the following morning, or in about twelve hours after they had been taken. In some cases, however, there was a second motion of a liquid character. Now this latter was what I wished to avoid; for the depressing effect at the time, and the weakening influence afterwards, upon the bowels, were the effects to be got rid of in any endeavour to devise a safe aperient. I ordered, therefore, only one pill to be taken, and the time, instead of being bed-time, to be the afternoon, four to six o'clock; and I was rejoiced to find that on the following day, from ten to twelve o'clock, the bowels were relieved of a formed natural motion, and without pain. I have reduced the proportion of aloes in some cases to ten grains, and in other cases to eight grains, with the same result, until I found that I could in all cases so control the action as to assimilate it to that of nature: in fact, having had now the experience of a large number of cases, and spread over many years, I am enabled to say that the beneficial result is unfailing. The drawback usually attributed to the action of aloes, of inducing hæmorrhoids, or increasing them where they already exist, does not ensue.

The unspeakable comfort of having the power to regulate the action of the bowels need not be dwelt upon in the presence of medical men; and I only ask you to put to the test my prescription. In very many cases, after steadily using the pills for a time, the bowels have been restored to or brought into healthy action, and all the evil consequences of chronic constipation have disappeared—the quinine and iron, no doubt, as well as the tonic effect of the aloes, having a bracing effect upon the system generally, and upon the bowels especially. Neuralgia or "tic" being frequently an accompaniment of constipation, it has in many cases been quite removed, and in most cases greatly lessened, while the pills have been used. Those only who have suffered from it can conceive the trying effects upon body and mind produced by constipation, and those only who have felt that there is a remedy can appreciate the value of that remedy which can relieve them from those effects, and make life, that had been rendered irksome, a pleasure.

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

REPORTS OF MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

MIDDLESEX HOSPITAL.

CASES OF CIRRHOSIS OF THE KIDNEY IN YOUNG PEOPLE.

(Under the care of Dr. HENRY THOMPSON.)

WE are indebted to Mr. J. W. Langmore, M.B., late Resident Clinical Assistant, for the following notes.

The following are examples of a class of cases which, though not rare, are scarcely noticed in most works on renal diseases. All the examples of primary contracted kidney given by Dr. George Johnson and Dr. W. Roberts are in patients of forty and upwards; and the latter says (p. 321) "the subjects of it are more advanced in years than those of the large, smooth kidney". The cases given below resemble the ordinary cases of "gouty" kidney in their insidious origin and *post mortem* condition; but they run a more acute course, and the proportion of albumen is rather greater: whether the pathological history is the same may well be doubted. Both of these patients had probably suffered from scarlatina; but this certainly cannot always be made out, and in these the fever was not followed by dropsy, nor had they any symptoms of renal disease for years afterwards. Lastly, they were both very steady and temperate.

CASE I.—R. H. C., aged 24, was a pawnbroker's assistant. His father died at fifty-one, of heart-disease and chronic bronchitis. His mother is alive and well, and has a family of nine children. All the rest are healthy. The patient had scarlatina when an infant, but had no dropsy then or since till the present attack. He had always been subject to dyspepsia and flatulence, but had otherwise enjoyed good health till six months ago. He then began to feel ailing, and noticed that his feet swelled towards evening. He never had any puffiness or swelling of the face. His urine was always clear and very abundant. Latterly, the patient had been obliged to rise twice during the night to micturate. Three months before admission, his sight began to fail rapidly, and he could now barely distinguish the outline of large objects. During the last month he had suffered from severe and almost constant frontal headache, from much nausea and flatulence, and occasional vomiting. He worked in a shop, and had not been exposed to cold.

On admission, he was well made, spare, but not emaciated. His face was pale; some rhonchus was heard throughout the chest; there was slight enlargement of precordial dulness. He had moderate œdema of the lower limbs; none elsewhere. The urine contained nearly one-third albumen; specific gravity, 1010; it contained abundant granular and hyaline casts, some fatty; not much epithelium.

In spite of all treatment, the patient became steadily worse. The headache became more severe; the vomiting very troublesome; the dropsy rapidly increased. He got œdema of the lungs, then slight epileptiform attacks, and finally profuse epistaxis. He died, worn out by sickness and loss of breath, just a month after his admission.

Post Mortem Examination.—There were ecchymoses under the pleura and pericardium, and patches of lobular pneumonia in the lungs; and the bronchi were choked with frothy fluid. There was some hypertrophy of the heart. The kidneys were pale, opaque, and mottled, coarsely granular to the touch; the capsule was strongly adherent; the cortical substance was very pale, and diminished in thickness. The organs were small, especially the left; they weighed four ounces and a half each.

CASE II.—E. T., aged 24, married, never strong, had a fever when two or three years old, and had been deaf ever since. There was no history of dropsy. She had been married four years, and had had two miscarriages, but no living children. Two years before admission, she had rheumatic fever badly. She was in her usual health till the 3rd of November last, when she noticed swelling of the ankles towards evening; but for six or eight weeks before that she had to rise once or twice every night to pass urine, and noticed that she passed a much larger quantity than before. The swelling of the legs slowly increased. Six weeks before admission, the thighs and lower part of the back were involved. Ten days ago, she first had puffiness of the face, and at the same time the amount of urine suddenly diminished, so that during the last few days she had passed very little. During the last week, she had had slight cough and dyspnoea, with frontal headache, loss of appetite and nausea. The catamenia had been absent since January.

On admission, April 2nd, her face was very pale and puffy; there was considerable œdema of the lower limbs. Rhonchus and sibilus

were heard over the whole of the chest; pulse 104; respiration 32. The tongue was moist, coated; the appetite was variable; the bowels confined. The patient was heavy and stupid. The urine was pale, of specific gravity 1014, and contained one-fifth of albumen; it contained abundant epithelial and finely granular casts, with a quantity of loose granular renal epithelium and nuclei. The patient was evidently suffering from an attack of acute nephritis, supervening on the chronic disease. She was passing, however, from twenty-five to thirty ounces of urine *per diem*. In a few days, she had severe headache and vomiting. The albumen increased to one-third. She then had severe convulsions, and died on the eighth day after her admission.

Post Mortem Examination.—There was extreme œdema of lungs, and signs of pericarditis about the base of the heart. The liver and spleen were fairly healthy. Both kidneys were extremely small, and in a state of advanced granular disease; they weighed one-third of an ounce each. There were nodules on the surface, pale and mottled. The capsule was thickened and very adherent. The cortex was thin, and the pyramids very "plumose" at the base. The substance generally was tough, and studded with concretions of urate of soda.

INFIRMARY FOR EPILEPSY AND PARALYSIS.

PARALYSIS AND ANÆSTHESIA OF THE RIGHT ARM; COMPARATIVE EFFECTS OF FARADISATION AND GALVANISATION; PROGRESSIVE RECOVERY.

(Under the care of Dr. ALTHAUS.)

THERE is now a girl, aged 16, in the Infirmary, who presents in a marked degree the curious symptom of insensibility to Faradisation, both muscular and cutaneous, and perfect excitability to galvanisation, in a paralysed limb. It will be recollected that Baierlacher was the first to show that, in certain forms of peripheral paralysis, galvano-muscular contractility may still exist after Farado-muscular excitability has disappeared. Meyer, Neumann, Erb, Eulenburg, Ziemssen, and others, have since then studied these conditions—to some extent experimentally, on animals—and have shown that, as far as these alterations of excitability are concerned, *nerves and muscles obey totally different laws*; that, soon after an injury to the motor nerves has taken place, the excitability of the *nerves* appears to be completely gone—not only to the induced, but also to the continuous, current—while the *muscles* only lose their excitability to the induced, but not to the continuous, current. The important practical conclusion to be deduced from these facts is, that it is of no use whatever to treat cases of this kind with the handy little machines furnishing an interrupted (induced) current, as this has no influence on nerves and muscles thus affected; but that they should be treated exclusively by the aid of the continuous current, which is the only means at our disposal capable of curing cases of this kind.

Decima D., aged 16, was admitted July 12th, 1870, as an in-patient. She had been in good health until four months previously, when, one evening after she had been out for the day, she fainted for about five minutes. The next day, she complained of "rheumatics" in her arm; viz., a sensation as of pins and needles. The day afterwards, she felt that she had less power in the right arm than before, and experienced severe pain from the elbow down to the fingers' ends. The fingers appeared quite white, and the skin peeled off. The loss of power gradually became more marked, especially in the fourth, third, and first fingers: the thumb at this time retained its power, and only lost it afterwards. In about ten days from the commencement of the affection, she had completely lost the power over the whole arm, from the shoulder downwards. The arm at this time felt cold, and was blue; it was then put into a sheet of wool, which kept it warm. She now attended as an out-patient at one of the hospitals, and was treated there for three months and three weeks, chiefly with the induced current; but, as she did not get any better, she was sent to the infirmary, where she was received under the care of Dr. Althaus.

On examining the patient, it appeared that there was complete paralysis and anæsthesia of the whole arm, no voluntary movement being possible, and no pricking, pinching, or other mechanical irritation being in the least perceived. Faradisation of the skin and the nerves and muscles of the arm likewise proved ineffectual; but, on applying a continuous current of sixty cells of a Daniell's battery, the patient felt sensations of pricking, tingling, and heat, in the arm; and the muscles, more especially the flexor muscles of the fingers, responded sluggishly to the current, by tardy yet decided contractions. In the absence of medicines which have any influence on such conditions, nothing but galvano-therapeutical treatment was resorted to. Within four days, common sensation had completely returned; and after ten days, the first feeble motion appeared in the fingers. The patient was kept for a month under treatment, and then discharged. At that time, she could not only move all her fingers, but also extend the wrist. She was readmitted early in

October, when it was found that she had made no further progress in the interval. The continuous current is now again being applied daily, and the elbow is gradually recovering its power. Dr. Althaus expects that she will in time completely recover. The steady progress of the improvement from the periphery to the centre is one curious feature in this interesting case.

CHESTER GENERAL INFIRMARY.

CASE OF FATAL INJURY TO THE KIDNEY IN A SUBJECT POSSESSING ONLY ONE KIDNEY.

(Under the care of Mr. JAMES TAYLOR, Surgeon to the Infirmary.)

SEVERAL points in the following case, which came under Mr. Taylor's care at the Infirmary, make the case one deserving of record. They are: 1. The rarity of persons having only one kidney; 2. The great amount of injury of the kidney without any corresponding bruise; 3. Death resulting from a secondary effect of the injury (uræmic poisoning) rather than from the direct injury to the organ.

The following are the notes of the case during life taken by Dr. Haining, the house-surgeon.

John E., aged 22, was admitted under the care of Mr. Taylor, about 4 P.M., October 17th, 1870. The patient, who had previously always been healthy, but was rather given to drink, fell from the city walls near the Northgate on to the roof of a building, and thence rolled to the ground, alighting, according to a witness, on his head, his knee being doubled up against his stomach. He seemed evidently under the influence of drink, although he could stand without assistance. He complained of great pain over the left false ribs, especially when attempting to raise the body into the erect position. No fracture of the ribs or pelvis was detectable. There was a slight graze on the left cheek. He was put to bed, and a hot flannel was wrapped round the abdomen. He slept for an hour or two. At 9 P.M., as no urine had been passed, a No. 12 catheter was passed, drawing off about ten ounces of dark portwine-coloured fluid. He had pain in the left side of the abdomen, and occasional darting pain in the left thigh. A draught containing twenty grains of chloral hydrate, and half a grain of hydrochlorate of morphia, was given.

October 18th, 2 A.M. The draught was vomited. He was restless; but had pain only on moving. Half a grain of morphia was given.—10.30 A.M. He had slept part of the night. Pulse 88; temperature 99 deg.; respiration easy. A catheter was passed, but about two drachms of dark fluid only came away, almost pure blood. Catheterism gave great pain; and afterwards he fancied he could pass urine, but was unable to do so. There was no dulness above the pubes. A hot bath was administered.—6 P.M. He had no inclination to pass urine. The hot bath was repeated, followed by half a grain of hydrochlorate of morphia.—9 P.M. He slept after the bath. The catheter was passed, but nothing came away. Pulse 94. He felt easier.

October 19th, 11 A.M. He had rested very well, and had only slight pain in the left side on turning. The catheter was passed easily, and about two drachms of bloody fluid were withdrawn. There was no dulness above the pubes. He vomited his breakfast of milk and tea. There was slight delirium. Pulse 102; temperature 99.6.—4 P.M. His breathing was slow and stertorous occasionally for a minute or two, and his face rather livid; but he was easily roused. There was slight incoherence at times. There was no abdominal tenderness. Percussion was tympanitic.—6 P.M. He was suddenly seized with a fit, lasting about three minutes. His face was livid; the mouth firmly closed; his eyes fixed; his breathing slow and gasping; the pulse under 70.—6.30 P.M. He was quiet, and apparently asleep.—At 6.45 P.M., he suddenly expired.

The *post mortem* examination was made forty-five hours after death. There was a large quantity of blood in the cavity of the peritoneum, both coagulated and fluid; and the intestines, which were tympanitic, were matted together by coagulum and slight adhesions; the peritoneum was but slightly congested; there were a few patches of ecchymosis in the mesentery. On searching for the right kidney, no trace of it could be found. The left kidney was imbedded in a mass of coagulum. When this was broken up, the kidney was seen to be completely torn across, the upper third from the lower two thirds; the two fragments were fully an inch from each other, the interspace between the two torn surfaces being filled up by coagulated blood. The kidney was but little larger than usual; its structure was highly congested, but otherwise normal. The bladder was contracted and empty. There was but one ureter, that coming from the left kidney: no trace whatever of a ureter on the right side; neither could any opening or depression be detected in the wall of the bladder corresponding to the right ureter. The muscles of the loin on the left side were full of extravasated blood. All the other organs of the body were perfectly healthy.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 5TH, 1870.

THE INTIMATE PATHOLOGY OF CONTAGION.

I.

"THE question of the mode of existence of contagious matter lies at the foundation of all scientific inquiry as to the means of obviating or counteracting contagion." This sentence, with which Dr. Burdon Sanderson commences his "Introductory Report",* sufficiently indicates why such investigations as those alluded to therein should interest a wide circle of readers and workers. The subject is one of deepest importance to the science of medicine. Until we have attained some definite knowledge as to the nature and mode of origin of contagia, we are, as it were, battling blindly with enemies which elude our blows. We therefore welcome Dr. Sanderson's paper as the first instalment of an earnest and able endeavour to drag our mysterious enemies out into the light, by dispelling some of the clouds which have hitherto obscured our mental vision.

The present Report is divided into two parts, the first of which refers to the "Physical Properties of Contagion", and the second to the "Organic Forms which occur in Infecting Liquids".

The first question which arises in such an inquiry is naturally as to the physical condition or nature of the infecting agent. Have we to do with a fluid, or with a vapour? or does the infecting medium consist of minute particles? Much valuable experimental evidence, brought forward by M. Chauveau and by himself, is referred to by Dr. Sanderson in support of the view that "the contagious principle is neither soluble in water nor capable of assuming the form of vapour;" but that "every kind of contagium consists of particles" of a very minute character, rarely more than $\frac{1}{200000}$ in diameter, similar to those which were seen by Dr. Lionel Beale in 1864, in vaccine lymph. On this subject, Dr. Sanderson says, in his concluding summary: "On grounds which have been stated, we regard it as probable that contagium-particles are spheroidal, transparent, of gelatinous consistence, of density nearly equal to that of the animal liquids in which they float; and that they are mainly, though perhaps not exclusively, composed of albuminous matter. With reference to their mode of action, we have examined into those considerations which seem to render it probable that they are organised beings, and that their powers of producing disease are due to their organic development; and we have accepted this doctrine as the only one which affords a satisfactory explanation of the facts of infection." This is the conclusion which Dr. Sanderson is now inclined to adopt, though he speaks with all proper caution upon the subject, and tells his readers that his present statements are only to be regarded as "forecasts" of what hereafter he hopes to be able to establish.

Now, whilst it may be quite true that the evidence brought forward by Dr. Sanderson concerning certain infectious diseases can be considered as in part favourable to the doctrine which he at present adopts, it would also appear from other evidence that infection may certainly take place without the aid of living particles. We must be doubly careful, therefore, not too readily to admit the universality of the above rule. In illustration of the possibility of exceptions occurring thereto, we will quote a passage from a recent address† by Professor Rolleston referring to some remarkable effects recorded by Dr. Charlton Bastian, in the face of

which Professor Rolleston says: "There are, I make no doubt, animal poisons produced in and by animals, and acting upon animal bodies, which are neither organised nor living. . . . Dr. Bastian tells us (*Phil. Trans.* for 1866, vol. 196, pt. ii, pp. 583-584) that, whensoever he employed himself in the dissection of a particular nematoid worm, the *Ascaris megalocephala*, he found occasion to observe, and that in himself, and very closely, the genesiology of a spasmodic and catarrhal affection not unlike hay-fever, as it seems to me, but under circumstances which appear to preclude the possibility of any living organisms being the cause of it, as they have been supposed, and by no less an authority than Helmholtz, to be of the malady just mentioned. For, in Dr. Bastian's case, this affection was produced not only when the *Ascaris megalocephala* was dissected when fresh, but 'after it had been preserved in methylated spirit for two years, and even then macerated in a solution of chloride of lime for several hours before it was submitted to examination.' Could any microzyme or megalozyme have survived such an antizymotic treatment—such a pickling as this?"

But—even on the supposition that we have to do with living particles—whilst it may be a fact that the contagium of many diseases exists in the form of such particles as those to which Dr. Sanderson alludes, and whilst it may be also true that fermentable fluids swarm with particles which are more or less similar in appearance, it may nevertheless not be true that the particles in the two sets of cases are similar in nature. For this reason alone, therefore, if no other existed, we should not at present consider it advisable to call all such particles "microzymes"; because, as a matter of fact, the particles of contagia have not been proved to be similar in nature to the earliest particles which appear in organic infusions, and which soon develop into *Bacteria*, *Bacterida*, *Vibrios*, etc. The use of this term "microzyme" as a common appellation for these two kinds of particles must practically carry with it the assumption, that such mere elementary particles as those of vaccine lymph and of infectious diseases generally are in reality living embryo-ferments, belonging to the group which comprises *Bacteria* and allied forms: whereas these particles, even if living, may be, as Dr. Beale supposes, mere altered off-castings from such units as white blood-corpuscles or the nuclei of epithelial cells. Seeing that minute living particles derived from these or other sources would, in this primitive condition, be microscopically indistinguishable from those met with in putrefying organic infusions, and that some pathologists regard contagion-particles as most allied to the one class, whilst others class them differently, it would seem desirable that we should possess a name for these minute living particles that would leave their nature an open question. If we call them "microzymes", this object is certainly not well attained. Dr. Beale, naturally enough disliking Dr. Sanderson's term, and following Dr. Farr, proposes to call such particles "biads". We think, however, that a better name still—one which would simply indicate their nature as particles of living matter or plasma—might be adopted, were we to call them "plastides". This word is already in use by Professor Haeckel and others to signify a portion of what appears to be structureless, living matter. The name is applicable to masses of any size; whilst such mere specks as those of which we have hitherto been speaking might be called, by way of distinction, *plastide-particles*.

But, having found what we consider to be this more appropriate designation for mere living particles, a further difficulty presents itself. Are we at present justified in speaking even of the best known contagia as plastide-particles? Have the infecting agents of vaccinia and sheep-pox really been shown to be living particles? This part of the question next needs our consideration.

The progress of an infectious disease has been compared to the progress of a fermentation, and hence the use of the word *zymotic* in connexion with this class of diseases. The use of this term, and the analogy which it suggests, have done not a little to nurse an inchoate belief in the minds of many that in infectious diseases we have to do with phenomena akin to fermentation—and hence, also, in accordance with the modern doctrines of Pasteur, with phenomena induced by the pre-

* Introductory Report, by Dr. Burdon Sanderson, "On the Intimate Pathology of Contagion". (Twelfth Report of the Medical Officer of the Privy Council.)

† Delivered in the Biological Section of the British Association. (See *Nature*, No. 47, p. 427.)

sence of living organisms or ferments. Germ-theories of disease have, therefore, taken strong hold upon the minds of many. But there are processes generally understood to belong to the class of fermentations in which, in spite of M. Pasteur's dictum—now on its trial—no living organisms have been shown to be present. Foremost amongst these may be mentioned amylolytic fermentation, in which, by the occurrence of a mere isomeric transformation, starch is converted into diastase and sugar. Pepsine also works a similar change upon albumen, whereby this is converted into a soluble and diffusible modification called peptone. There are the best reasons also for believing that pepsine exists in the gastric juice, in the form of "infinitely minute particles of transparent material", similar to those met with in vaccine lymph. Thus starch may be converted into sugar by mere contact, or by what, for the want of a better term, we call "catalytic" action; and thus it seems quite possible that the analogous metamorphosis of albumen into peptone may take place in some similar manner, and independently of the agency of living ferments. Dr. Sanderson, moreover, distinctly suggests that it is in this sense that an analogy should be considered to exist between the action of ferments and of contagia, when he says: "Pepsine is but one of a group of substances which perform what in a general sense may be called zymotic functions in the animal economy, all of which have this peculiarity in common, that they induce important chemical changes in other kinds of substances, without themselves participating in the transformations they effect. *This faculty of causing chemical changes in other contiguous matter is all that is implied when the process of infection is compared to a zymosis.*" So far it would seem that the occurrence of "chemical changes" is the only probable bond of union in the two cases. And inasmuch as it has not yet been certainly shown that organisms are the causes, and not the mere accompaniments, of putrefactive and fermentative processes, we must be all the more cautious not too hastily to regard them as essential to other complex processes to which the former are only supposed, and not proved, to be analogous.

PRELIMINARY EDUCATION IN THE EDINBURGH SCHOOL.

AN auspicious beginning has been made of a very important reform in the University of Edinburgh. We fully endorse the opinion of Professor Christison, that the report on the subject submitted to the University Court is "one of the most important reports as to literary education" that has been before the University for a number of years. The matter nearly concerns our own profession.

When Sir Alexander Grant was appointed to the Principalship at Edinburgh, two years ago, the first matter that engaged his attention, affording him a subject for his inaugural speech, was the very small proportion of students in the Faculty of Arts that continued at the university for the full term of four years, and took the degree of the Faculty. Not two in a dozen, it appeared, who had it in their power to proceed to the degree of Master of Arts, ever so graduated. Now, without unduly exalting the examining function, it is not too much to say that, if five-sixths of the students leave the university without taking a degree, it betokens a vast amount of aimlessness and unprofitableness in their studies. To a certain extent, and in less reprehensible particulars, it is a continuance of the state of things which Carlyle professes to have encountered there in the beginning of the century. He says: "Had you walled-in a square enclosure, and then turned loose into it eleven hundred Christian striplings, to tumble about as they listed from three to seven years.....you had, not indeed in mechanical structure, yet in spirit and result, some imperfect resemblance of our High Seminary." The framers of this report have, with commendable candour, given their opinion of the causes of the prevailing desultoriness in the Faculty of Arts. Briefly, they amount to this: that the programme of studies for the Arts degree is unattractive, and that a large number of students, whose studies in the present circumstances are more or less abortive, would pursue them to the consummation, if the curriculum held out

sufficient inducement. The reform to supply the required attraction takes the shape of the revival of the obsolete degree of B.A. The resuscitation, however, is only of the name; for the programme of study is thoroughly in accord with modern ideas. New wine is to be poured into the old bottles; and it is no doubt a very politic and eminently sagacious step to make use of an old form for a newly modelled institution. The great point in the new scheme is that a candidate for the degree may "go out" in any five out of a number of subjects, and that these five need not include the classics, and may include the natural sciences. It is proposed, however, to make a concession to the classics, but it is a very moderate one. It is part of the scheme that there should be a preliminary examination, to be called the First Arts Examination, in which Latin and Greek are an essential element; but it is so arranged that this step may be got over by the student before commencing attendance on the classes of the University. So far as university instruction is concerned, a student may altogether ignore the classics in the curriculum for his degree, provided that he have shewn a satisfactory knowledge of them in the preliminary examination. On another point, the propositions of the report are open to criticism. "To prevent", says the report, "the Arts degree from becoming too purely scientific, it might be well to lay down the rule that not more than two of the subjects of natural science should be professed." If the principle be sound, it applies equally to the rest of the subjects that naturally group themselves together. The degree will become too purely philological if English, Latin, Greek, and Hebrew be all professed; and too much of the abstract sciences of logic, ethics, political economy, history, may be taken together. It seems to us ungenerous thus to handicap the natural sciences; and, on general principles, if it be a student's bent to apply himself to the objective sciences, why saddle him at an advanced stage of his education with a partial and inept study of the classics or the abstract sciences? This limitation, moreover, contradicts what is laid down in an earlier part of the report, that the principle of optional subjects is desirable on the ground of allowing certain groupings of the classes "suitable for" certain of the professions.

Let us now make the application to our own profession. Though this very able report omits to enumerate the medical profession among those that would benefit by the establishment of the new degree, yet it is probably correct to say that the well-defined class of desultory students who take out a few subjects at random in the Faculty of Arts, in their imperfectly organised efforts to carve out for themselves an useful course of preliminary study, is as largely recruited from those about to engage in the profession of medicine as from intending members of the scholastic, legal, or engineering professions. If it is commendable for the prospective schoolmaster, lawyer, and engineer, to go through an organised course of university instruction, and to crown his study by a degree in non-professional subjects, it is equally commendable for the future practitioner of medicine. As Dr. Stokes forcibly urged at the Newcastle meeting, it is highly desirable that he be induced to delay his entrance on his *brod-studien*, or bread-winning studies, and that "the young men coming up for medicine be first educated in everything besides medicine." There is even, as we have often urged, a special benefit to be reaped by the medical student from such an arrangement as that under review. If chemistry, zoology, and botany were established in the non-professional faculty, as they ought to be, the department of medicine would be relieved of an enormous incubus. Partly to this effect, the suggestion has already been made in these columns that the numerous bursaries at the University of Aberdeen, at present restricted to students in the Faculty of Arts, should be available, also, for medical students during their natural science studies. We are unwilling to pursue the matter further at present, but we believe it pregnant with great issues. It is, perhaps, not too much to hope that the Scotch universities are in a fair way satisfactorily to solve the problem of their medical pupils' preliminary and non-professional training.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

II.

On the fallacy of supposing that School-Examinations have a similar effect to those necessary to be passed for Diplomas.

THE facts previously referred to lead naturally to the consideration of what seems a rather common fallacy; namely, the supposed good of frequent school-examinations, as distinguished from those necessary for a diploma. It cannot be disputed for a moment that these are a most valuable supplement to lectures and other formal methods of teaching; and the value of the tutorial method is apparently becoming more and more recognised in hospitals and medical schools. But how compel the idle, or moderately idle, man to attend such classes; or, if he be present, to profit by what he hears? It may be said that it is the duty of the teachers of a medical school to compel a student to avail himself of all such opportunities of instruction; and doubtless it is so, so far as the thing is possible. It is their duty, also, it might be added, to communicate with friends, parents, guardians, when persuasion and counsel alone are insufficient. This also may be readily granted. But, suppose all this to be done, is the matter always much furthered? The persuasion and counsel are beneficial, and the student attends the class diligently—for a week, perhaps ten days—and is able to answer at least one question out of six. He feels, probably, that he is an altered man, but thinks it dangerous to continue attendance too regularly, lest such perfection be only temporary; so he occasionally misses a time or two; and then for another time or two he is unavoidably prevented; and sometimes he means to go, but does not; and then the end of the term is so near that it is not worth while to fret himself until after the vacation, especially as the important examination is still a twelvemonth off. This is only an instance of a single type of student. But there are others: the man who thinks all class-examinations are “a mistake”; the man who does not like to be examined before his fellow-students, and, therefore, shirks when he can; the incorrigibly idle man; the conceited man; and many others—all these make up together a numerous class, which can be reached only in one way, and that is by exacting from them a proof of the possession of the proper knowledge at their diploma-examinations. To attempt to compel them to attend class-examinations; or, if they be present, to make them learn anything, is a labour to which few teachers will subject themselves, and not perhaps without reason. Their best satisfaction is, that the class of students to which reference is here made can be reached in another way, more easily, profitably, and surely. A man *must* obtain his diploma; and anything in which the examiners for this choose to test him, he must study. There is no way of escape, and therefore it is that he will prepare himself. The function of class-examinations is to help those who will help themselves—not to force knowledge into unwilling minds, nor to make the idle man’s way so easy, by persuasion and cramming, as positively to give a premium to laziness.

A medical school must be indeed a bad one which does not consider itself bound to take all care possible of those—good, bad, and indifferent—entrusted to its charge. But school-examinations do not appear to be a reliable means of attaining the object desired as regards the class of students to which reference is here made. They seem rather for the industrious than for the idle; rather for those who can take care of themselves than for those who need to be taken care of; they are more fitting for those who in their work legislate practically for themselves, than for those who require the legislation, throughout their student career, to be done by others.

AMONG the many eminent residents of Paris who are perforce living just now in London is Professor Liebreich, the accomplished ophthalmologist, who came hither to superintend the new edition of his *Atlas Ophthalmologique*, and found himself unable to return to Paris, which was meantime sealed by the investing armies.

No official or complete returns of the entries of students at the provincial schools have yet been made; and we are unwilling to publish any numbers until we have the whole in a complete form.

A COURSE of lectures on the Elements of Physical Science will be delivered by Professors Huxley, Guthrie, and Oliver, in the Lecture Theatre of the South Kensington Museum, on Wednesday, the 9th inst., and on every succeeding Saturday and Wednesday. An advanced course of lectures on “Physics and Human Physiology,” by Professors Huxley and Guthrie, will commence on the 15th inst., and be continued on every succeeding Friday and Tuesday.

THE PRINCESS LOUISE.

PROFESSOR LISTER of Edinburgh has, it will have been observed, paid a visit to Balmoral. He was, we understand, summoned to see the Princess Louise. The Princess met with a slight sprain a fortnight since; and, its effects not having passed away so quickly as such little troubles often do, it was thought desirable to have recourse to the services of the Queen’s Surgeon in Scotland. The Princess’s knee is in a state of irritation from sprain and over-exertion.

ARMY MEDICAL SERVICE.

AN Examination of Candidates for Commissions in the Medical Department of Her Majesty’s Army will be held in London in course of February next. Candidates having the necessary qualifications to practise medicine and surgery under the Medical Act, and who are unmarried and not under 21, nor above 28 years of age, are eligible to attend. Application for admission to this Examination should be made in writing, without delay, to the Director-General of the Army Medical Department, War Office.

SMALL-POX AS IT USED TO BE.

ADVICES have reached Toronto from Fort Garry, October 8th, *via* St. Cloud the 20th, that the small-pox is committing fearful ravages in the West; that the Indians are dying in thousands, and the plains are covered with painted corpses; and that the stench is dreadful. The Government proposes to send a medical man thither.

THE REGISTRATION OF DISEASE.

DR. WALTER DICKSON’S last Annual Report on the Health of the Customs Force in London is a document of much interest. As the registration of diseases is justly attracting the attention of the Association in its endeavours to benefit the profession and the public, this contribution to the vital statistics of civilians in London, accurate in its data, if not very extensive, will have a special interest. Dr. Dickson has long advocated with force and ability a general scheme of registration; and, in his remarks on rheumatism and other important but rarely fatal diseases, has not failed to point out the expediency of obtaining more precise information than is now obtainable.

AN AMBULANCE.

THE “Diary of an Ambulance”, of which we publish the first part to-day, by Dr. W. Mac Cormac, will probably prove the most important and extensive record of surgical work at the seat of war which can be published in this country. The numerous operations at the Hospice d’Asfeld were performed almost without exception by this surgeon, and so performed as to elicit unusually strong expressions of admiration from no less eminent a judge than Stromeyer. The only other British ambulance in which the opportunity occurred of much operative work was that directed by Dr. Frank. Dr. Frank’s notes will also be published in this JOURNAL, when he can find time to prepare them. He is at present at work with his ambulance, having started again for the seat of war this week. As we have already observed, however, and as Dr. Mac Cormac points out, the work of other ambulances, if less brilliant, was not on that account less useful or less honourable.

EXTENSION OF THE GLOUCESTERSHIRE BRANCH.

WE are happy to learn that the Council of the Gloucestershire Branch have decided to admit members resident in Herefordshire and Monmouthshire. As these counties are of limited extent, they do not support branches of their own. We therefore hope that members of the Association practising therein will not only readily avail themselves of the opportunity liberally afforded, but induce other practitioners in their neighbourhood to join at once the Association and the Branch. Application should be made to A. Fleischmann, Esq., of Cheltenham, the Honorary Secretary of the Gloucestershire Branch.

DYING UNNECESSARILY.

DR. PETER HOOD relates, in the current number of the *Practitioner*, the following two remarkable cases which seem to show, he says, that even aged persons are sometimes allowed to die unnecessarily.

"There are many facts which seem to show that even aged people are sometimes allowed to die unnecessarily. Instances might be quoted of persons who were believed to be dead, but were recovered, and amongst them not the least remarkable was that of a celebrated west-country baronet who was laid out in his coffin. His old butler volunteered to watch his master's corpse throughout the night; but, most probably thinking the time would hang heavy on him, he invited a friend to share his vigil with him. This butler's only fault, as a servant, was his indulgence in stimulating beverages; and he did not omit, on this occasion, to have recourse to them. As the night wore on, the idea rose in the butler's mind that there would be no harm if he administered to his late master a glass of the brandy he and his companion were engaged in drinking, and he proposed it to his comrade, saying, 'He has been a good master to me for many years, and has given me many a glass, and I will do the same by him before he is taken from our sight.' He did as he said, and poured a glass of brandy down his master's throat, which had the instantaneous effect of recalling him to life, and he survived for many years.

"A somewhat analogous case occurred in my own practice some years ago. One evening about eight o'clock, the coachman belonging to the Dowager Lady C., ran to my house and begged me to come to his mistress directly, for from what the servants told him, he said, she was either dying or dead. The distance was short from my house, and I was speedily there. Lady C. was in her bedroom, sitting in a high-backed chair, and behind it stood a medical man. His first observation to me was, 'Her ladyship is gone,' and indeed she presented all the appearance of death having taken place. Her face was deadly white and cold, her jaw had dropped, but her eyes were closed. I felt her pulse, and detected the faintest possible thrill beneath my finger, and I could only compare it to the tension of the finest cambric thread. Lady C.'s daughter-in-law was standing beside me, and I asked her for some brandy, which she immediately ran for and brought. I poured out a large wineglassful and poured it over the tongue, and it ran down the throat as readily as if it had been poured into a jug. The moment it had reached the stomach Lady C. revived, gave a spasmodic gasp, opened her eyes, and said, 'Bring me a basin.' A basin was brought to her, and she at once vomited into it, bringing up her dinner, which had been only hashed hare. She as speedily regained perfect consciousness, and inquired of me, 'what I did there at that time of the evening?' At this time Lady C. was 80 years old, and she lived for five years afterwards."

PROPAGATION OF SCARLATINA.

DR. BELL, Professor of Medicine in the University of St. Andrew's details, in a contemporary, the circumstances attending an outbreak of scarlet fever which was clearly traceable to the use of milk poisoned by the desquamating cuticle given off from the hands of infected persons who were employed to milk the cows of a particular dairy. The facts are shortly these. Between the 9th of May and the end of July, several cases of scarlet fever occurred among the servants and students of a certain educational institution, healthily situated, well built, airy, and isolated in position. At the end of July the students dispersed. No fresh case occurred in the place (St. Andrew's) till the 8th of August, when the servant in a family visiting the place, and who had only been there a week, was seized with the disease. On the 9th, a nurse in another family of visitors sickened, and she and five others in the same house were attacked. Having accidentally heard that the boy who brought milk to the college where the disease first appeared had

"peeled off the skin", according to his own statement, at the time of the outbreak, Dr. Bell ascertained the following facts. On May the 1st, the wife of the farmer who supplied the milk returned from a visit to a place where two deaths from scarlet fever had occurred, and fell ill within a few days. She milked the cows. After a while, the boy, whose occupation it was, also, to milk the cows and to take the milk to town, had the disease lightly, and in due time "peeled." He continued all the time at his work. But now comes the interest of the case. On making out a list of the houses in which scarlet fever had showed itself in St. Andrew's, and asking the dairywoman for a list of the houses which she supplied with milk, with one exception there was a perfect agreement in the lists. In every house to which milk had been sent, scarlet fever had occurred. The cases were twenty-six in all. The attack of the members of the two families of visitors is accounted for by the fact that, when the college broke up at the end of July, the milk thus made available for the use of other customers was sent to the very houses in which the visitors resided. We call the attention of our readers to this important and highly valuable piece of investigation by Dr. Bell. It lies in the power of every practitioner to render a great public service by investigating the origin of cases of scarlatina which occur in his practice, and communicating the results. We have already urged our Associates to take up this task, with a view of helping to furnish materials for preventive legislation, and we again bring the subject under their notice.

BRITISH MEDICAL BENEVOLENT FUND.

WE are sorry to have to state that the funds of this excellent institution are still quite inadequate to meet the many cases of distress constantly arising among those belonging to our profession. At the last meeting, there were *eighteen* applications, and less than £70 at the disposal of the Committee; and we are informed by the Secretary that there are already several cases waiting most anxiously for the relief which they hope to get from the November meeting. Death has just removed another excellent friend of the Society—viz., Mr. J. Bacot, one of the Vice-Presidents. Dr. G. Burrows, F.R.S., has been elected President, in the room of the late Sir James Clark, Bart.; and Mr. Henry Sterry has been elected a Vice-President.

EAST SUFFOLK HOSPITAL.

SUNDAY, October 9th, being the day fixed in Ipswich and East Suffolk as "Hospital Sunday", collections were made in a great many of the churches and chapels in that district, which realised altogether about £550. No doubt this sum would have been much larger, had it not been that a great number of the harvest-thankofferings were sent to the fund in aid of the sick and wounded in the Franco-Prussian war. On October 6th, an amateur concert was given in the Ipswich Music Hall by Mr. Lindley Nunn, Mus.B.(Cantab.), in aid of the hospital funds; the profits amounted to £90. The Board of Management have unanimously elected Mr. Nunn a life-governor. A few days ago, a lady, who refused to give her name, called at the hospital and paid to the house-surgeon, Mr. G. S. Elliston, £500 in notes, as an anonymous donation to the institution. The East Suffolk Hospital has been recently rebuilt.

BABY-FARMING.

DR. J. THOMPSON DICKSON has published, in pamphlet form, a paper which he lately read before the Dialectical Society on the subject of baby-farming. The author commences by reflecting upon the apathy of modern society. He then reverts to the articles which appeared in the *Pall Mall Gazette*, and to the labours of the BRITISH MEDICAL JOURNAL Commission, which in 1868 so aroused public attention to the subject that the matter gained a hearing in both Houses of Parliament, with a promise of consideration during the recess. Before Parliament met again, however, a new Minister occupied the Cabinet, fresh political measures came on for discussion, and the subject was put aside until the horrible revelations of the Brixton case again revived it. The author urges the necessity of action while the subject is fresh

in everyone's mind; and details the various conditions throughout the country under which baby-farming is conducted. He describes two classes of baby-farmers: the one, "whose profession is more properly defined as that of the murderess than the nurse"; the other, "the foster-mother of the helpless infant orphan whom she tends with solicitude and care". The children in charge of both these classes of nurses, being entities of the State and helpless, are, he maintains, entitled to a similar State protection with lunatics. After reviewing and condemning the French system, the author holds that the remedy for our own defects lies in a more perfect system of registration; and pleads for a modification of the verdict of society in respect both to the fault of the mother and the misfortune of the child. He specially refers to Scotland, a country remarkable for the amount of illegitimacy, yet possessing the social advantages of a perfect registration, great facilities of marriage, and a humane consideration for unmarried mothers and their dependents, together with well-defined bastardy laws, so that baby-farming in Scotland is almost unknown, and the causes of baby-murder have no existence.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

AN ordinary general meeting of the above Society was held at the rooms, 53, Berners Street, on Wednesday, October 26th. The chair was taken by the President, Dr. Burrows. The attendance of members was more numerous than of late at general meetings—showing, it is to be hoped, an increasing interest in the affairs of the Society on the part of those most concerned in its welfare. After the usual reading of minutes of the annual general meeting and of the Quarterly Courts of Directors, the acting Treasurer's half-yearly statement of accounts was read. The receipts of the half-year available for payment of grants and expenses amounted to £1,590:7:8; the grants and expenses, to £1,513:9:1; leaving only a very small balance in favour of the Society. A sad falling off was manifest in donations, the total for the half-year being only £65:11. Mr. George Cooper of Brentford was unanimously elected a vice-president, in the place of Mr. Bacot, deceased. The proceedings terminated by a vote of thanks to the Chairman.

HEREFORDSHIRE MEDICAL ASSOCIATION.

THIS Association held its Annual Meeting at Hereford on October 12th, Mr. C. E. Thompson, of Ross, President, in the Chair. Dr. McCullough of Abergavenny was elected President, and Mr. VEVERS, of Hereford, Vice-President for the coming year. The Report read at the meeting was brief, and was occupied entirely with a notice of the Medical Acts Amendment Bill of last session. Respecting the constitution of the General Medical Council, the following principles were laid down. "In the first place, the Crown, on behalf of the public interest, must nominate its full share of members; secondly, the profession itself must be fully represented; and, thirdly, as a matter of economy and business-like efficiency, the members composing the Council should be much less numerous than they are at present." With regard to the mode in which the profession should be represented, the Association was apparently most in favour of indirect representation. "The best and most simple plan, and, therefore, the right one, would be for the general profession to choose its representatives to the Council, for the Colleges or Corporations to which they severally belong; or, if this may not be, then certainly the profession should choose a certain number of representatives on the Council by general vote; and this would be aided, doubtless, by a considerable reduction in the number of representatives from the Corporations themselves." The Herefordshire Association contains fifty-seven members; and we must say that we should very much like to see it either become a branch of the British Medical Association, or, what would be still better, agree to an amalgamation with the Gloucestershire Branch, which, as will be seen from a note published in another place, is holding out the right hand of fellowship to the profession in Herefordshire and Monmouthshire. Such a combination would make up an important branch, which would, both from its magnitude and from the moral support derived by it from

its connection with the parent Association, possess much greater power for good, both locally and generally, than any isolated body of the profession can ever obtain.

THE PERILS OF PRACTICE.

THE untimely death, from typhus, of Mr. Skinner, at the outset of what promised to be an useful and honourable career, furnishes another sad example of the dangers incurred by medical men in the exercise of their profession. He may be said to have fallen a victim to his zeal for knowledge, and to his conscientious devotion to the care of patients under his charge. He was one of two sons of Mr. Skinner, a farmer, of Tunstall, Norfolk, and came up to London in 1867, entering as a student of St. Mary's Hospital. Here he soon became known as one of the most earnest and indefatigable workers in the school—a character which he sustained in every department throughout the entire period of his attendance on lectures and hospital practice; while his kindly nature and unassuming goodness gained for him the respect and regard of all who knew him. After passing his examination at the College of Surgeons, he continued to work in the wards, and at the beginning of October accepted a temporary appointment as assistant resident medical officer to the Fever Hospital, carrying into his new duties the same assiduity which he had always displayed; and, giving perhaps more time to his patients and less to necessary recreation than was desirable, he contracted typhus. On Wednesday evening, October 12th, he attended the meeting of St. Mary's Hospital Medical Society, apparently in good health; next day, the initial symptoms of fever set in. The attack did not appear to be of more than average severity; and no very alarming indications presented themselves till Saturday, the 22nd, when he became violently delirious. On the evening of the 23rd, however, the delirium was replaced by profound sleep, which seemed to promise a favourable crisis; but, on the 24th, diarrhoea came on, accompanied by tympanitis, and, though apparently arrested, recurred several times; and eventually he sank on the morning of the 29th. His death has cast a gloom over the school and hospital at St. Mary's, where he was universally respected and beloved.

ST. BARTHOLOMEW'S HOSPITAL REPORTS.

WE have already expressed a doubt whether the multiplication of separate hospital reports is not an evil, rather than a good. Unless disentombed from them by the kindly offices of the reviewers and reporters in the journals, many excellent papers find in these reports a nameless grave. The circulation of these volumes is limited by their miscellaneous and costly character. Their number, and the absence of any indication of the probable subjects of the various papers, is better calculated to conceal from the medical public generally the opinions and observations of the authors, than to make them largely known or commonly available. The new volume of *St. Bartholomew's Hospital Reports* does something to confirm this opinion. This volume contains, besides much inevitable "padding", some very good papers—enough nearly to fill the pages devoted to original papers in three ordinary numbers of a good weekly journal. There they would have been purchasable for one sixth or tenth of the present price, and would have found five or six thousand readers, here and abroad; and, by the extensive system of foreign exchanges amongst journals, would have rapidly permeated British and foreign medical literature, and made permanent additions to the world's knowledge. As it is, we believe Guy's men, or St. George's men, or London Hospital men, are not expected to buy St. Bartholomew's Reports, any more than the latter would buy their neighbours'; they have enough to do each to buy his own. Moreover, it is not to be expected that readers throughout the country shall buy all these Reports. Manchester has already shown that she can produce a volume of Reports quite equal to those of any metropolitan hospital; and so last year did Liverpool. We doubt, indeed, whether the Manchester volume is not likely this year to carry the palm for general weight and excellence of matter; although the St. Bartholomew's volume has the advantage of a paper of uncommon excellence by Mr. Savory. The multiplication of these volumes of hospital reports is becoming a somewhat serious tax on medical readers; and it is no small aggravation of their difficulties in this respect, that they are likely to find in such volumes a great deal of miscellaneous commonplace matter, which is only produced in obedience to the summons of the editor.

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 Hicks, James H. Esq. Plymouth
 Hodge, Benjamin T. Esq. Surgeon to the Dispensary, Sidmouth
 Hounsell, H. S. M.D. Physician to the Consumption Hospital, Torquay
 Huxley, James U. M.D. Surgeon to the Torbay Infirmary, Torquay
 Kempe, Arthur, Esq. Surgeon to the Devon and Exeter Hospital, Exeter
 Lillies, G. W. M.D. Chudleigh
 Littleton, Thomas, M.B. Physician to the Dispensary, Plymouth
 Mackenzie, Frederick, Esq. Surgeon to the Infirmary, Tiverton

Mackenzie, John I. M.B. Medical Officer to the Dispensary, Sidmouth
 Macreight, William W. M.D. Physician to the Torbay Infirmary, Torquay
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 Metcalfe, F. Esq. Infirmary, Torquay
 Michell, Sloane, Esq. Dolton
 Miles, George, Esq. Plympton St. Mary
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 Swain, William Paul, Esq. Surgeon to the Royal Albert Hospital and Eye Infirmary, Ker Street, Devonport
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DORSETSHIRE.

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 Maling, Edwin A. Esq. Surgeon to the Sunderland Infirmary, Bishopwearmouth
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 Modliu, Robert, Esq. Sunderland

Moore, George, M.D. Physician to the Hospital Hartlepool
 Morgan, George B. Esq. Surgeon to the Sunderland Infirmary, Bishopwearmouth
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 Renton, George, Esq. Shotley Bridge
 Renton, John, Esq. Shotley Bridge (dead)
 Renton, William M. M.D. Shotley Bridge
 Richardson, William, Esq. Surgeon to the Dispensary, Stockton-on-Tees
 Robinson, William, M.D. Medical Officer to the Dispensary, Gateshead
 Robson, James, Esq. South Shields
 Robson, Robert N. Esq. Durham
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 Saville, John J. Esq. Sunderland
 Scott, James, Esq. Gateshead
 Shaw, George, Esq. Senior Surgeon to the Durham County Hospital, Durham (dead)
 Shiell, William R. Esq. Chester-le-Street
 Smallman, Richard S. M.B. House-Surgeon to the Hospital, Hartlepool
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 Smith, Robert A. Esq. Sunderland
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 Stevenson, Henry R. L.R.C.P.Ed. Whickham
 Stoker, William, Esq. Surgeon to the Durham County Hospital, Durham
 Taylor, Richard, L.R.C.P.Ed. Whickham, Gateshead (dead)
 Thompson, Robert F. M.D. Jarrow
 Thomson, J. C. M.D. Cassop, Ferry Hill
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 Wilson, James, L.R.C.P.Ed. Sunderland
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 Wood, T. O. Esq. Dunston, Gateshead
 Yeld, Henry J. M.D. Surgeon to the Infirmary, Sunderland
 Young, Thomas, Esq. South Shields

ESSEX.

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 Welsh, F. F. Esq. Surgeon to the Hospital, Saffron Walden
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 Williams, Edward, M.D. Consulting-Physician to the Essex and Colchester Hospital, Colchester
 Wyman, W. S. M.D. Hatfield Broad Oak

GLOUCESTERSHIRE.

Number of Members. .144.

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Gloucestershire.

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 Atchley, G. F. M.B. Surgeon to the Bristol General Hospital, and Lecturer on Physiology in the Medical School, Cotham, Bristol
 Averill, Alfred, Esq. Tetbury
 Bartley, Robert T. H. M.D. Surgeon to the Bristol Eye Hospital, Clifton
 Batten, R. W. M.D. Physician to the Infirmary, Gloucester
 Beddoe, John, M.D. Physician to the Bristol Royal Infirmary, Clifton
 Bernard, David E. Esq. Bristol
 Bernard, R. M. Esq. Senior Surgeon to the Bristol Royal Infirmary, Clifton
 Blagden, R. Esq. Minchinhampton
 Board, Edmund C. Esq. Lecturer on Forensic Medicine in the Medical School, Bristol
 Boughton, J. H. Esq. Tewkesbury
 Bradley, Edward, Esq. Cheltenham
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 Brittan, Frederick, M.D. Physician to the Bristol Royal Infirmary, Clifton
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 Budd, William, M.D. Consulting Physician to the Bristol Royal Infirmary, Clifton
 Burder, George F. M.D. Physician to the Bristol General Hospital, and Lecturer on Materia Medica and Therapeutics in the Medical School, Clifton
 Burleigh, Alfred, Esq. Surgeon-Accoucheur to the Bristol Dispensary, Cotham
 Burroughs, Benjamin P. B. Esq. General Hospital, Bristol
 Burroughs, J. B. Esq. Clifton
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 Campbell, Charles M. M.D. Staunton
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 Colledge, T. R. M.D. Consulting-Physician to the Ophthalmic Infirmary, Cheltenham
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 Cookson, Ambrose D. Esq. Gloucester
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 Cooper, William, Esq. Surgeon-Accoucheur to the Bristol Dispensary, Bristol
 Corbould, George Giles, Esq. Consulting Surgeon to the Dispensary, Bristol
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 Cubitt, George R. Esq. Surgeon to the Hospital, Stroud
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 Davies, David, Esq. Consulting Surgeon to the Dispensary, and Medical Inspector of Health, Bristol
 Davies, Thomas H. W. Esq. Bristol
 Day, Wm. E. L.R.C.P.Ed. Barton Hill, Bristol

Devereux, Daniel, Esq. Tewkesbury
 Dew, Henry R. Esq. Assistant-Surgeon to the Eye Hospital, Bristol
 Dobson, N. C. Esq. House-Surgeon to the General Hospital, Bristol
 Dowson, C. H. Esq. Demonstrator of Anatomy in the Medical School, Bristol
 Dutton, Douglas John, Esq. Dursley
 Elcum, C. F. Esq. Cheltenham
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 Ellis, Thomas S. Esq. Surgeon to the Infirmary, Gloucester
 Evans, Thomas, M.D. Consulting Physician to the Infirmary, Gloucester
 Fisher, Stephen W. M.D. Physician to the Hospital for Children, Redland, Bristol
 Fleischmann, Alfred, Esq. Cheltenham
 Fox, Edward L. M.D. Physician to the Bristol Royal Infirmary, and Lecturer on Medicine in the Medical School, Clifton.
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 Gloag, G. A. Esq. Resident Medical Officer to the Dispensary, Bristol
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 Grace, H. Esq. Kingswood Hill, Bristol
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 Greig, Charles, Esq. Clifton
 Griffiths, L. M. Esq. Hotwells, Clifton
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 Hatton, John, L.R.C.P.Ed. Coleford
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 Hawkins, Clement J. Esq. Consulting Surgeon to the General Hospital, Cheltenham
 Hickey, Thomas, Esq. Surgeon to the County Prison, Gloucester
 Highett, Charles, Esq. Bristol
 Hore, Henry Augustus, Esq. Bristol
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 James, Joshua, Esq. Bristol
 Jessop, Henry E. Esq. Cheltenham
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 Lansdown, F. P. Esq. Surgeon to the General Hospital, and Lecturer on Anatomy in the Medical School, Clifton
 Lawrence, John, Esq. Clifton
 Leonard, Crosby, Esq. Surgeon to the Royal Infirmary, and Lecturer on Surgery in the Medical School, Bristol
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 Linton, Sir W. M.D. Inspector-General of Hospitals, Royal Army, Cheltenham
 Lucy, William, Esq. Cotham, Bristol
 Ludlow, Ebenezer, M.B. House-Surgeon to the Royal Infirmary, Bristol
 M'Bride, James, L.R.C.P.Ed. Bristol
 Macgowan, A. T. Esq. Kingswood Park, Bristol
 Macrorie, David, M.D. Mount Vernon, Stroud
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 Martyn, Samuel, M.D. Physician to the Bristol General Hospital, and Lecturer on Medicine in the Medical School, Clifton
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 Moore, George, Esq. Moreton-in-the-Marsh
 Morgan, William F. Esq. Consulting Surgeon to the Royal Infirmary, Bristol
 Morris, Charles William, Esq. Chipping Campden
 Norton, John A. M.B. Resident Medical Officer to the Dispensary, Bristol
 Paine, W. H. M.D. Physician to the Hospital, Stroud
 Partridge, Thomas, L.K.Q.C.P. Stroud
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 Ruddock, Richard B. Esq. Clifton (dead)
 Rumsey, Henry W. M.D. Cheltenham
 Sankey, W. H. Octavius, M.D. Lecturer on Mental Diseases in University College, London, Sandywell Park, Cheltenham

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 Taylor, Theodore T. Esq. Cirencester
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 Wintle, H. Esq. Oakfield, Clifton
 Withington, J. B. Esq. Assistant House-Surgeon to the General Hospital, Bristol

HAMPSHIRE.

Number of Members. .73.

Branch. .Reading.

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 Bencraft, Henry, Esq. Southampton
 Bentham, Samuel, Esq. Southsea
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 Elliott, Ernest, M.D. Surgeon to the Royal Portsmouth, Portsea, and Gosport Hospital, Southsea
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 Falls, W. S. M.D. Physician to the Sanatorium, Bournemouth
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 Fox, Luther O. M.D. Broughton
 Gibson, James E. Esq. West Cowes

Giles, W. F. Esq. Hythe, Southampton
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 Haslam, James, Esq. Heckfield
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 Isle of Wight
 Hopgood, Philip D. Esq. House-Surgeon
 the Royal Portsmouth, Portsea, and
 Gosport Hospital, Portsmouth
 Kealy, John R. M.D. Medical Officer to the
 Dispensary, Gosport
 Keele, Charles P. Esq. Surgeon to the
 Borough Gaol, Hythe, Southampton
 Lake, G. A. K. M.D. Surgeon to the Royal
 South Hants Infirmary, Southampton
 Langdon, T. C. Esq. Surgeon to the Hants
 County Hospital, Winchester
 Longmore, Thos. Esq. C.B. Deputy In-
 spector General, Professor of Military
 Surgery in the Army Medical School,
 Netley
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 Manley, John, M.D. Superintendent of the
 County Asylum, Fareham
 Martin, J. H. C. M.D. Portsmouth
 Mayo, Charles, Esq. Surgeon to the Hants
 County Hospital, Winchester
 Miller, John W. M. M.D. Southsea
 Moore, Thomas, Esq. Petersfield
 Morley, Frederic, Esq. Portsmouth
 Newman, Adam P. M.D. Hill, Southampton
 Norman, H. Burford, Esq. Southsea
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 Page, Frederick, M.D. Milton, Southsea
 Parkes, E. A. M.D. Professor of Hygiene
 in the Army Medical School, Bitterne,
 Southampton
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 Porter, J. Vining, Esq. Bloomfield Lake,
 Isle of Wight (dead)
 Pritchard, John F. Esq. Portsmouth
 Shorto, J. R. Esq. Surgeon to the Royal
 South Hants Infirmary, Southampton
 Simpson, T. Pemberton, M.D. Medical
 Officer to the Royal Portsmouth, Port-
 sea, and Gosport Hospital, Southsea
 Smith, Henry R. Esq. Southsea
 Smith, Robt. Esq. Sandown, Isle of Wight
 Smith, William A. Esq. Surgeon to the
 Sanatorium, Bournemouth
 Snow, William V. M.D. Bournemouth
 Sweeting, Robert B. Esq. Basingstoke
 Thomson, J. Roberts, M.D. Bournemouth
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 Wight
 Ward, Thomas, Esq. Southampton
 Webb, Charles, Esq. Basingstoke
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 Whicher, James, Esq. Southsea
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 Wills, Douglas, Esq. Kingston, Portsea
 Wilson, G. M.D. Portsea
 Winkfield, W. B. Esq. Shirley

HEREFORDSHIRE.

Number of Members..13.

Branch..Gloucestershire.

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 Willett, Edmund S. M.D. Wyke House, Isleworth
 Williams, A. Wynn, M.D. Physician to the Samaritan Hospital, Montagu Square
 Williams, Charles J. B. M.D. F.R.S. Consulting Physician to the Brompton Hospital for Consumption, Upper Brook St.
 Williams, C. Theodore, M.D. Assistant-Physician to the Brompton Hospital for Consumption, Park Street, Grosvenor Sq.
 Williams, H. Llewelyn M.D. Leonard Place, Kensington
 Williams, Henry W. M.D. Fulham Road
 Williams, Joseph, M.D. Chichester Street, Upper Westbourne Terrace
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 Willis, Julian, Esq. Resident Medical Officer, Great Northern Hospital
 Willoughby, E. F. Esq. Surgeon to the Holloway and North Islington Dispensary, Marquess Road, Canonbury
 Wilson, Erasmus, Esq. F.R.S. Professor of Dermatology in the Royal College of Surgeons, Henrietta Street, Cavendish Square
 Wiltshire, Alfred, M.D. Physician to the British Lying-in Hospital and Assistant-Physician to the West London Hospital, Wimpole Street
 Winslow, Forbes, M.D. D.C.L. Cavendish Square
 Wood, W. M.D. Visiting Physician to St. Luke's Hospital, Harley Street
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 Young, Edward P. Esq. Surgeon to the Westbourne Dispensary, Delamere Crescent

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NORFOLK.

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 Cadge, William, Esq. Surgeon to the Norfolk and Norwich Hospital, Norwich
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 Copeman, Edward, M.D. Physician to the Norfolk and Norwich Hospital, Norwich
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 Vores, William, M.D. Great Yarmouth
 Wales, T. Garneys, Esq. Downham Market (dead)
 Wales, T. G. jun. Esq. Downham Market
 Waller, J. T. Esq. Fleggburgh

NORTHAMPTONSHIRE.

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 Ward, Henry D. M.D. Blyth
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 Wilson, Robert, M.D. Alnwick
 Wilson, Thomas, Esq. Wallsend
 Winship, William, Esq. Newcastle-on-Tyne (dead)

NOTTINGHAMSHIRE.

Number of Members..41.

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Buckoll, E. C. Esq. Nottingham
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 Calvert, C. Esq. Southwell
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 Hett, Henry N. Esq. Worksope
 Higginbottom, J. Esq. F.R.S. Nottingham
 Higginbottom, Marshall Hall, Esq. Nottingham
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 Johnson, Osborn, Esq. Bassingham
 Mickle, A. G. M.B. House-Surgeon to the General Hospital, Nottingham
 Osborne, J. H. Esq. Southwell
 Prichard, William, Esq. East Retford
 Ransom, William H. M.D. F.R.S. Physician to the General Hospital, Nottingham
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 Savile, George T. M.D. East Retford
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 Spurr, J. Esq. Carlton-in-Lindrick
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 Stephenson, T. Appleby, M.D. Surgeon to the Eye Infirmary, Nottingham
 Stevenson, Frederick, Esq. Nottingham
 Stiff, W. P. M.B. Resident Physician to the Lunatic Asylum, Nottingham
 Taylor, Charles B. M.D. Surgeon to the Eye Infirmary, Nottingham
 Taylor, Henry, Esq. Surgeon to the Dispensary, Nottingham
 Thompson, John N. Esq. Nottingham
 Thompson, Joseph, Esq. Surgeon to the General Hospital, Nottingham
 Waring-Curran, J. L.K.Q.C.P.I. Sutton-in-Ashfield
 Watchorn, Isaac, M.D. Nottingham
 White, Joseph, Esq. Surgeon to the General Hospital, Nottingham
 Wilkinson, W. Esq. Harthill, Worksope
 Wright, James, Esq. Bottesford
 Wright, Thomas, M.D. Surgeon to the General Hospital, Nottingham
 Yates, Walter, Esq. Nottingham

OXFORDSHIRE.

Number of Members..29.

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 Batt, Augustine, M.D. Witney
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 Chesterman, Shearman, Esq. Banbury
 Coleman, W. T. M.D. Henley-on-Thames (dead)
 Crespi, Alfred J. H. L.K.Q.C.P. Magdalen Hill, Oxford
 Dewar, James, M.D. Banbury
 Douglas, George C. Esq. Sulgrave, Banbury
 Drinkwater, William, Esq. Bicester
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RUTLAND.

Number of Members..4.

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Ashforth, George M. M.D. Market Overton (dead)

Brown, Frederick W. Esq. Uppingham
 Row, William, Esq. Market Overton
 Seaton, Daniel, Esq. Surgeon to the Rutland Dispensary, Oakham

SHROPSHIRE.

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 Brookes, W. P. Esq. Much Wenlock
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 Chuue, Henry C. Esq. Much Wenlock (dead)
 Clement, Wm. Jas. Esq. M.P. Shrewsbury (dead)
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 Gwynn, Samuel T. M.D. Whitechurch
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 Hickman, R. M. Esq. Newport
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 bridge Dispensary, Dawley Green
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SOMERSET.

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 West Somerset

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 Adams, Joseph D. M.D. Martock
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 Alford, Henry, Esq. Consulting Surgeon
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 Taunton
 Alford, Henry J. M.B. Surgeon to the Taun-
 ton and Somerset Hospital, Taunton
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 Bartrum, John S. Esq. Surgeon to the
 Mineral Water Hospital, Bath
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 Bush, William, Esq. Senior Surgeon to the
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 Water Hospital and Royal United Hos-
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 Fox, Charles Joseph, M.D. Brislington
 (dead)
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 Mare
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 Harries, Charles Alexander, Esq. Bath
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 and Somerset Hospital, Taunton
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 deard
 Nash, R. Esq. Hatch Beauchamp
 Norman, John W. Esq. Dunster
 Norris, G. R. Esq. Surgeon to the Dispen-
 sary, Wiveliscombe
 Norris, Hugh, L.R.C.P.Ed. South Pether-
 ton
 Olivey, Hugh P. Esq. North Curry
 Parsons, H. F. M.B. Beckington
 Parsons, Joshua, Esq. Frome
 Pearce, F. E. L.R.C.P.Ed. Wellington
 Penny, H. J. Esq. Taunton
 Plowman, Thomas, Esq. North Curry
 Pooley, Charles, Esq. Surgeon to the Sana-
 torium, Weston-super-Mare
 Pranker, John, Esq. Langport
 Randolph, Henry W. Esq. Surgeon to the
 Wiveliscombe Dispensary, Milverton
 Reynolds, William, Esq. Wellington
 Rigden, George W. Esq. House-Surgeon
 to the Hospital, Taunton
 Robinson, R. B. Esq. Dulverton
 Rogers, George, M.D. Long Ashton
 Salter, John R. Esq. Taunton
 Skeate, Edwin, Esq. Bath
 Smart, John N. Esq. Bedminster
 Smith, Charles I. M.D. Physician to the
 Eastern Dispensary, Bath
 Spender, John Kent, M.D. Surgeon to the
 Mineral Water Hospital and the Eastern
 Dispensary, Bath
 Stockwell, Thomas G. Esq. Surgeon to the
 Mineral Water Hospital and Royal
 United Hospital, Bath
 Stone, Robert Nathaniel, L.R.C.P.Ed. Bath
 Surridge, James, M.D. Wincanton
 Swete, Horace, M.D. Medical Superinten-
 dent of the Sanatorium, Weston-super-
 Mare
 Terry, George, Esq. Mells, near Frome
 Terry, John, Esq. Bailbrook, Bath
 Trevor, William, Esq. Dulverton
 Walker, William C. Esq. Shepton Mallett
 Walter, W. W. Esq. Stoke-under-Ham
 Watson, Thomas Sandon, M.D. Bath
 Waugh, A. Esq. Midsomer Norton
 Weatherley, Frederick, Esq. Portishead
 Wine, H. C. Esq. Bedminster
 Winterbotham, Washington L. M.B. Sur-
 geon to the Infirmary, Bridgewater
 Woodforde, Francis Henry, M.D. Taunton

STAFFORDSHIRE.

Number of Members..84.

Branch..Birmingham and Midland
 Counties.

Alcock, Annerley, Esq. Smethwick
 Arlidge, John T. M.D. Physician to the
 North Staffordshire Infirmary, New-
 castle-under-Lyme
 Belcher, Robert Shirley, Esq. Surgeon to
 the Dispensary, Burton-on-Trent
 Birt, Joseph, B. M.D. County Asylum,
 Burntwood, Lichfield
 Browne, William, M.D. Lichfield
 Chapman, George, Esq. Brierley Hill
 Clark, James, M.D. Chasetown, Walsall
 Coleman, E. Hayling, Esq. Consulting-
 Surgeon to the South Staffordshire Hos-
 pital, Wolverhampton
 Coleman, John M. M.D. Wolverhampton
 Collins, Henry, M.D. Wolverhampton
 Cooke, John, M.B. Tettenhall
 Cooke, William H. M.D. Aldridge
 Cooper, Richard, Esq. Leek
 Cotterell, Peter A. M.D. West Bromwich
 Davies, William, Esq. Smethwick
 Davis, Robert A. M.D. Medical Superin-
 tendent of the Stafford County Asylum,
 Burntwood, Lichfield
 Dawes, William J. Esq. Longton
 Day, Henry, M.D. Physician to the Gene-
 ral Infirmary, Stafford
 Downes, W. Esq. Handsworth
 Dreury, G. O. M.D. Walsall
 Duncalfe, Henry, Esq. West Bromwich
 Duun, Frederick, Esq. Wolverhampton
 Evans, Alfred P. Esq. West Bromwich
 Fernie, Edward, M.D. Stone
 Folker, W. H. Esq. Surgeon to the North
 Staffordshire Infirmary, Hanley
 Fraser, John, M.D. Wolverhampton
 Garman, John C. Esq. Wednesbury
 Garman, William, C. Esq. Wednesbury
 Handy, J. Esq. Darlaston
 Harrison, A. J. M.B. Walsall
 Hayes, John, L.R.C.P.Ed. Beech Cliff,
 Newcastle
 Hichens, J. S. Esq. Lichfield
 Hicks, Charles, Esq. Smethwick
 Holyoake, T. Esq. Kinver, Stourbridge
 Hopkins, E. C. Esq. Wednesbury
 Hopkins, George H. Esq. Stone
 Hopkins, Wm. L.R.C.P.Ed. Handsworth
 Jackson, James F. Esq. Smethwick
 Jackson, Thomas V. Esq. Surgeon to the
 South Staffordshire Hospital, Wolver-
 hampton
 Jackson, W. F. M. Esq. Smethwick
 Kelly, P. M. L.R.C.P.Ed. Walsall
 Kite, W. J. Esq. West Bromwich
 Latham, Alfred, Esq. Darlaston
 Lomax, H. T. Esq. Stafford
 Lowe, George, Esq. Burton-on-Trent
 Macaulay, J. Campbell, Esq. Cannock
 Malim, G. W. Esq. Bilston
 Mauby, F. E. Esq. Wolverhampton
 Mauley, John, Esq. Surgeon to the Infir-
 mary, West Bromwich
 Martin, E. N. L.R.C.P. Burton-on-Trent
 Miller, Richard M. M.D. Physician to the
 South Staffordshire Hospital, Wolver-
 hampton
 Millington, Wm. M.D. Physician to the
 South Staffordshire Hospital, Wolver-
 hampton
 Monckton, D. Henry, M.D. Rugeley
 Moore, Richard B. Esq. Wolverhampton
 Moore, Robert W. Esq. Wednesbury
 Morgan, Herbert M. Esq. Lichfield
 Morgan, M. Butler, Esq. Lichfield
 Newnham, Christopher A. Esq. Surgeon
 to the South Staffordshire Hospital,
 Wolverhampton
 Norris, W. L. Esq. Brierley Hill
 Orton, Charles, Esq. Medical Officer to the
 North Staffordshire Infirmary, New-
 castle-under-Lyme
 Partridge, S. Esq. Darlaston, near Wed-
 nesbury
 Pearce, Edward S. Esq. Brierley Hill
 Phillips, D. Wild, Esq. Rowley Regis
 Pope, W. H. Esq. Wolverhampton
 Ritchie, John J. Esq. Leek
 Rowland, H. M. Esq. Wolverhampton
 Sansome, T. Esq. Hill Top, West Bromwich
 Smith, Richard W. Esq. Harbourne
 Soper, R. W. Esq. Wolverhampton
 Somerville, James H. Esq. Bloxwich
 Summers, Llewellyn J. Esq. Wolver-
 hampton (dead)
 Sutcliffe, Henry, Esq. West Bromwich
 Sutton, William, Esq. Smethwick
 Taylor, Moses, Esq. Cannock

Thomson, J. L.R.C.P.Ed. Kingswinford
 Turton, Frederick, Esq. Wolverhampton
 Tylecote, E. T. M.D. Great Haywood
 Tylecote, J. H. M.D. Sandon, Stone
 Underhill, Francis W. Esq. Tipton
 Underhill, Thomas, Esq. Great Bridge,
 Tipton
 Underhill, William L. Esq. Tipton
 Wades, John W. B. M.D. Hanley
 Welchman, C. E. E. Esq. Lichfield
 Weston, Edward F. Esq. Surgeon to the
 General Infirmary, Stafford

SUFFOLK.

Number of Members..68.

Branch..East Anglian.

Adams, Edward B. Surgeon to the Dis-
 pensary, Bungay
 Andrew, William W. M.B. Earl Soham
 Barkway, F. T. Esq. Lavenham
 Barkway, H. Esq. Davenham
 Bartlet, A. H. M.D. Surgeon to the East
 Suffolk Hospital, Ipswich
 Bartlet, John H. M.D. Surgeon to the East
 Suffolk Hospital, Ipswich
 Beck, Henry, Esq. Needham Market
 Blackett, Edward R. M.D. Physician and
 Surgeon to the Dispensary, Southwold
 Bullen, George, Esq. Consulting Surgeon
 to the East Suffolk Hospital, Ipswich
 Chevallier, Barrington, M.D. Physician to
 the East Suffolk Hospital, The Grove,
 Ipswich
 Clarke, F. W. Esq. Bury St. Edmund's
 Clinhe, W. H. Esq. Medical Officer to the
 Dispensary and Infirmary, Lowestoft
 Cooper, Charles, Esq. Needham Market
 Cresy, T. G. Esq. Aldeburgh
 Crowfoot, Wm. Edward, Esq. Consulting-
 Surgeon to the Dispensary, Beccles
 Durrant, Christopher Mercer, M.D. Phy-
 sician to the East Suffolk Hospital,
 Ipswich
 Ebdon, W. H. Esq. Haughley
 Edwards, George C. Esq. Ipswich
 Elliston, George S. Esq. House-Surgeon
 to the East Suffolk Hospital, Ipswich
 Elliston, William A. M.D. Surgeon to the
 East Suffolk Hospital, Ipswich
 Faircloth, Richard, Esq. Newmarket
 Farrington, A. C. Esq. Redgrave
 Freeman, Spencer, Esq. Stowmarket
 Fuller, Harry, Esq. House-Surgeon to the
 Suffolk General Hospital, Bury St. Ed-
 mund's
 Fyson, Robert, Esq. Newmarket
 Gissig, John Stearn, Esq. Surgeon to the
 Dispensary, Woodbridge
 Goodwin, John W. M.D. Physician to the
 Suffolk General Hospital, Bury St. Ed-
 mund's
 Gorham, Richard V. Esq. Yoxford
 Growse, John L. Esq. Bideston
 Growse, Robert, Esq. Bideston
 Gull, Frederick, Esq. Ipswich
 Hammond, Charles C. Esq. Consulting Sur-
 geon to the East Suffolk Hospital, Ipswich
 Hammond, Charles W. M.D. Ipswich
 Harper, John W. Esq. Stowmarket
 Harris, F. H. Esq. Mildenhall
 Haward, Frederick, Esq. Halesworth
 Hele, Nicholas F. Esq. Aldeburgh
 Hinnell, G. J. Esq. Bury St. Edmund's
 Image, W. Edmund, Esq. Surgeon to the
 Suffolk General Hospital, Bury St. Ed-
 mund's
 Jeffery, Edward, M.D. Lowestoft
 Jones, Robert Edwards, Esq. Long Mel-
 ford, Sudbury
 Kerry, Thomas, Esq. Lidgate, Newmarket
 Kirkman, John, M.D. Resident Physician
 to the Suffolk Lunatic Asylum, Melton
 Leech, Henry P. Esq. Woolpit
 Ling, J. C. Esq. Saxmundham
 Long, Charles, Esq. Resident Medical
 Officer, Bow Asylum, Ipswich
 Mann, Charles P. Esq. Boxford
 Marshall, Charles G. Esq. Surgeon to the
 Dispensary, Woodbridge
 Matthews, Benjamin F. Esq. Norton
 Mead, George B. M.D. Newmarket
 Miller, Walter W. M.D. Eye
 Moore, H. G. Esq. Ipswich
 Muriel, John Thomas, Esq. Hadleigh
 Pearce, Arthur, M.D. Botesdale
 Pearson, T. Esq. Stowmarket
 Pretty, George Wilson, Esq. Pressingfield
 Ray, James, Esq. Lowestoft
 Read, Charles G. Esq. Stradbroke
 Rendle, Charles B. Esq. Saxmundham
 Sampson, George G. Esq. Surgeon to the
 East Suffolk Hospital, Ipswich

Simpson, Edwin, Esq. Long Melford, Sudbury
Taylor, Henry, Esq. Ixworth
Tench, E. B. Esq. Wickham Market
Thompson, Robert, Esq. Brandon
Vandenbergh, Algernon S. Esq. Ipswich
White, W. M. M.D. Lavenham
Williams, John, M.D. Physician to St. Leonard's Hospital, Sudbury
Worthington, F. S. Esq. Medical Officer to the Dispensary and Infirmary, Lowestoft

SURREY.

Number of Members. 134.

Branches { South Eastern.
Metropolitan Counties.
Adams, Rutherford, M.D. Croydon
Anderson, W. M.D. Medical Officer to the Dispensary, Richmond
Armstrong, Henry, M.D. Peckham
Bailey, Thomas, Esq. Godstone
Balchin, Richard, Esq. Godalming (dead)
Barton, Alfred B. M.D. Hampton Court
Bateman, W. A. F. Esq. Medical Officer to the Infirmary, Richmond
Berney, Edward, Esq. Croydon
Brown, Alfred Gardiner, Esq. Trinity Square, Southwark
Brown, John, M.D. Battersea
Brushfield, T. N. M.D. Medical Superintendent of the County Asylum, Brookwood, Woking
Bush, John, Esq. The Retreat, Clapham
Butler, Thomas M. Esq. Assistant Medical Officer to the Surrey County Hospital, Guildford
Campbell, John, M.D. Knaphill, Woking
Carpenter, Alfred, M.D. Croydon
Chaldecott, Charles William, Esq. Dorking
Chaldecott, Horace, Esq. Dorking
Chaldecott, Thomas A. M.D. Chertsey
Chessall, William, M.D. Horley
Clapton, Edward, M.D. Physician to and Lecturer on Materia Medica at St. Thomas's Hospital, St. Thomas's Street
Clark, Frederick Le Gros, Esq. Surgeon to and Lecturer on Surgery at St. Thomas's Hospital, St. Thomas's Street
Clark, Willington, Esq. Sutton
Clarke, E. G. Esq. Putney
Cleaver, Henry A. Esq. Croydon
Clothier, Henry, M.D. Haslemere
Coles, William F. M.D. Croydon
Cope, Walter, Esq. Croydon
Corbould, Francis J. M.D. Penge
Craigie, John, M.B. Reigate
Cresswell, Alfred, Esq. South Norwood
Croft, John, Esq. Assistant-Surgeon to St. Thomas's Hospital, Penton Place, Kennington Park Road
Cuolahan, Hugh, M.D. Bermondsey
Dalton, Benjamin N. Esq. South Norwood
Davies, W. Esq. York Town, near Bagshot
Day-Goss, Saml. M.D. Kennington Park Rd.
Diver, Ebenezer, M.D. Caterham
Duke, Allen, M.D. Norwood
Evans, Thomas, Esq. Trinity Square
Eyton, A. Esq. Cottage Green, Camberwell
Galton, John H. M.D. Anerley
Gervis, Henry, M.D. Assistant Obstetric Physician to St. Thomas's Hospital, St. Thomas's Street
Graham, A. R. M.B. Holmwood, Weybridge
Greene, W. T. M.B. Old Kent Road
Hallows, Frederick B. Esq. Redhill
Hamilton, T. W. M.D. Mitcham
Hearnden, W. A. M.D. Sutton
Hetley, Frederic, M.D. Norwood
Hicks, J. Braxton, M.D. F.R.S. Obstetric Physician and Lecturer on Midwifery at Guy's Hospital, St. Thomas's Street, Southwark
Hill, William B. Esq. Camberwell Road
Holman, Constantine, M.D. Reigate
Hubbert, Philip, Esq. Croydon
Hulme, Edward C. Esq. Guildford
Jackson, Henry W. Esq. Egham
Jardine, J. L. Esq. Capel, Dorking
Jeaffreson, Horace, M.D. Wandsworth
Johnson, Jeffery S. Esq. Surgeon to the Hospital, Croydon
Jones, Arthur O'Brien, Esq. Epsom
Jones, Sydney, Esq. Assistant-Surgeon to and Lecturer on Anatomy at St. Thomas's Hospital, St. Thomas's Street
Jones, W. Price, M.D. Surbiton
Kelsey, Arthur, Esq. Redhill
Kelson, G. Esq. South Norwood
Kough, Edward, M.B. Bagshot
La Fargue, George F. H. M.D. Godalming
Lanchester, Henry T. M.D. Surgeon to the Hospital, Croydon

Lashmar, Charles, M.D. Croydon
Leslie, Walter A. Esq. Betchingley
Lilley, Frederick J. L.R.C.P.Ed. South Lambeth Road
Love, Gilbert, Esq. Wimbledon
Lownds, Thomas M. M.D. Egham
Lund, George, M.D. Denmark Hill
Marshall, Edward, Esq. Mitcham
Mason, Charles L. Esq. Surbiton
Morton, John, M.B. Assistant Medical Officer to the Royal Surrey County Hospital, Guildford
Napper, Albert, Esq. Cranleigh, near Guildford
Napper, A. A. Esq. Chiddingfold, Godalming
Oswald, J. W. J. Esq. Lambeth Walk
Owen, Francis, Esq. Leatherhead
Owens, Henry, M.D. South Norwood
Parsons, Frederic W. Esq. Wimbledon
Paul, John H. M.D. Camberwell
Phillips, Edward, Esq. Bermondsey Street
Philpot, H. J. M.D. East Dulwich
Pinder, Edward, Esq. Camberwell Green
Pollock, Robert J. Esq. Wimbledon Park
Ray, E. R. Esq. Dulwich
Rendle, James D. M.D. Medical Officer to the Government Convict Prison, Park Hill, Clapham Park
Ridge, John J. M.D. Grafton Square, Clapham
Roe, Peter H. Esq. Surgeon-Major, Upper Norwood
Rogers-Harrison, C. H. Esq. Lansdowne Road, Clapham Road
Roots, W. S. Esq. Kingston-on-Thames
Roper, Alfred G. Esq. Surgeon to the Hospital, Croydon
Rugg, George P. M.D. Stockwell Villa, Clapham Road
Seaton, Edward C. M.D. Surbiton
Sewell, J. J. Esq. Caterham Valley, Redhill
Shapland, J. D. Esq. Thornton Heath, Croydon
Shaw, George, Esq. Battersea
Shorthouse, J. H. M.D. Carshalton
Shurlock, Mainwaring, Esq. Chertsey
Skimming, R. M.D. East Moulsey
Sloan, Samuel G. Esq. Farnham
Smart, William R. E. M.D. C.B. Inspector-General R.N. Beverley Road, South Penge Park
Smith, Rowland, Esq. Cobham
Soper, William, Esq. Surgeon to the Jews' Hospital, Clapham Road
Spitta, Robert J. M.D. Clapham Common
Stedman, Arthur, Esq. Great Bookham
Stedman, James R. M.D. Surgeon to the Royal Surrey County Hospital, Guildford
Stedman, John B. Esq. Godalming
Steele, John S. Esq. Reigate
Stewart, William, M.D. West Dulwich
Stilwell, George, Esq. Epsom
Stowers, N. Esq. Kennington Park Road
Strong, Henry J. M.D. Croydon
Sutcliffe, Joseph H. Esq. Ripley
Sutcliffe, W. G. Esq. Ashville Place, Battersea Park
Sutherland, William, M.D. Croydon
Tapson, John, M.D. Victoria Road, Dulwich Wood Park
Tapson, Joseph Alfred, Esq. High Street, Clapham
Taylor, Charles, M.D. Camberwell
Taylor, Henry S. Esq. Surgeon to the Royal Surrey County Hospital, Guildford
Tilley, S. Esq. Paradise Row, Rotherhithe
Tomkins, Charles P. L.K.Q.C.P.I. Croydon
Trentler, William J. M.B. Kew Green
Turner, A. N. Esq. Clifton Villas, Penge
Turner, John S. Esq. Auerley Road, Upper Norwood
Wagstaffe, William W. Esq. Demonstrator of Anatomy in St. Thomas's Hospital, Kennington Road
Walters, John, M.B. Reigate
Warwick, R. A. M.D. Medical Officer to the Infirmary, Richmond
Webster, George, M.D. Dulwich
White, J. R. M.B. Redhill
White, Samuel S. Esq. Mostyn Road, Brixton
Whitling, Henry T. Esq. Croydon
Williams, W. Rhys, M.D. Medical Superintendent, Bethlem Hospital
Willis, Robert, M.D. Barnes
Yate, Frederick, Esq. Godalming

SUSSEX.

Number of Members. 94.

Branch. South Eastern.

Adamson, J. Esq. Rye (dead)

Addison, W. F.R.C.P. F.R.S. Consulting Physician to the Hospital for Children and the Dispensary, Brighton
Adey, Charles A. M.D. Physician to the East Sussex Infirmary, St. Leonard's-on-Sea
Allen, Bryan H. M.B. Surgeon to the Dispensary, Hastings
Allison, W. J. Esq. Brighton (dead)
Ashenden, Charles, Esq. Hastings
Axford, C. J. Esq. St. Leonard's-on-Sea
Bagshawe, F. M.D. St. Leonard's
Beard, Charles I. M.B. Brighton
Bostock, Edward I. Esq. Horsham
Bostock, John S. Esq. Horsham
Boxall, H. Esq. Wisborough Green, Horsham
Braid, James M.D. Burgess Hill
Browne, George, Esq. Brighton
Bull, John Henry, Esq. Lindfield
Burrows, J. Cordy, Esq. Consulting Surgeon to the Hospital for Children, Brighton
Byass, Thomas Spry, M.D. Cuckfield
Cann, Thomas M. Esq. Newhaven
Candle, Adolphus W. W. Esq. Hienfield
Collet, Henry J. M.D. Consulting Surgeon to the Infirmary, Worthing
Cooke, John, M.B. Hastings
Couling, Henry, Esq., Surgeon to the Dispensary, Brighton
Cunningham, J. M. M.D. Hailsham
Davies, Robert C. N. Esq. Rye
Dawson, Richard, M.B. Brighton
Dill, Richard, M.D. Brighton
Dixon, Joseph, Esq. Surgeon to the Hove Dispensary, Brighton
Duke, Roger, Esq. Battle
Fenn, Edwin, Esq. Fletching
Fuller, Thomas, M.D. New Shoreham
Furner, Edmund J. Esq. Surgeon to the Sussex County Hospital, Brighton
Giles, George F. M.D. Surgeon to the Dispensary, Hastings
Goldsmith, John, M.D. Surgeon to the Infirmary, Worthing
Gravelly, Richard, Esq. Newick, Lewes
Greenwood, Thomas B. Esq. Horsham
Hall, Alfred, M.D. Physician to the Dispensary, Brighton
Hall, William H. M.D. St. Leonard's
Harland, H. M.D. Mayfield
Harris, W. J. Esq. Surgeon to the Infirmary, Worthing
Hayman, Charles C. M.D. Eastbourne
Hester, James T. Esq. Hastings
Hodgson, George F. Esq. Brighton
Holman, George, Esq. Uckfield
Holman, Henry, Esq. East Hoathly
Holman, Henry M. M.D. Hurstpierpoint
Holman, Thomas, Esq. East Hoathly
Humphry, Frederick A. Esq. Assistant-Surgeon to the Sussex County Hospital, Brighton
Ingram, W. G. L. Esq. Midhurst (dead)
Johnstone, Athol A. Esq. Surgeon to the Hospital for Children, Brighton
Lowdell, George, Esq. Surgeon to the Sussex County Hospital, Brighton
McCarogher, Joseph, M.D. Consulting Physician to the West Sussex Infirmary, Chichester
Macrae, John, Esq. Lewee
Martin, Timothy H. Esq. Crawley
Mathews, Henry J. D. Esq. Horsham
Mercer, William, Esq. Wadhurst
Moore, Daniel, M.D. Hastings
Moore, George, M.D. Hastings
Moore, W. Withers, M.D. Assistant-Physician to the Sussex County Hospital, Brighton
Mudd, Frederick C. Esq. Uckfield
Murray, J. Jardine, Esq. Surgeon to the Eye Infirmary, Brighton
Ormerod, Edward Latham, M.D. Physician to the Sussex County Hospital, Brighton
Parry, Richard, M.D. Brighton
Paxton, Francis V. M.B. Physician to the West Sussex Infirmary, Chichester
Penfold, Henry, Esq. Surgeon to the Eye Infirmary, Brighton
Phillips, T. B. M.D. Physician to the Dispensary, Brighton (dead)
Pitcock, Frank W. Esq. Ardingley, Hayward's Heath
Prince, C. Leeson, Esq. Uckfield
Richards, David, Esq. Brighton
Roberts, Bransby, Esq. Eastbourne
Rogers, Robert J. Esq. Brighton
Rugg, Richard, Esq. Brighton
Smith, Edward, Esq. Battle
Smith, Heckstall, Esq. Hove, Brighton

Smith, John P. M. Esq. Brighton
Smith, Thomas, Esq. Crawley
Stephens, Joseph, M.D. Brighton
Taaffe, Rickard P. B. M.D. Surgeon to the Eye Infirmary, Brighton
Tatham, George, Esq. Brighton
Taylor, John, Esq. Ticehurst
Ticehurst, Frederic, Esq. Surgeon to the East Sussex Infirmary, Hastings
Trollope, Thomas, M.D. Assistant Physician to the East Sussex Infirmary, St. Leonard's-on-Sea
Turner, Richard, Esq. Surgeon to the East Sussex County Prison, Lewes
Tyacke, Nicholas, M.D. Physician to the Infirmary, Chichester
Underwood, John, M.D. Assistant-Surgeon to the East Sussex Infirmary, Hastings
Wallis, Frederick, Esq. Bexhill
Wallis, William, Esq. Hartfield
Weekes, W. H. Carlile, Esq. Hurstpierpoint
Whately, Edward, Esq. Brighton
Williams, S. W. Duckworth, M.D. Medical Superintendent of the Sussex County Asylum, Hayward's Heath
Wilson, Robert J. M.D. St. Leonard's-on-Sea
Winter, John N. Esq. Brighton
Winter, Thomas B. Esq. Brighton
Wooldridge, William, Esq. Preston, Brighton
Worthington, George F. J. L.K.Q.C.P. Worthing

WARWICKSHIRE.

Number of Members. 170.

Branch. Birmingham and Midland Counties.

Adkins, H. Esq. Meriden, near Coventry
Anderson, Mark F. L.R.C.P.Ed. Surgeon to the Hospital, Coventry
Aroher, John, Esq. Edgbaston
Baker, Alfred, Esq. Senior Surgeon to the General Hospital, Birmingham
Baker, Robert L. M.D. Leamington
Barker, John, Esq. Coleshill
Bartlett, Edwin, Esq. Edgbaston
Bartlett, Thomas H. M.B. Surgeon to the General Hospital, and Professor of Anatomy and Physiology in Queen's College, Birmingham
Bassett, John, Esq. Professor of Midwifery in Queen's College, Birmingham
Bellot, William H. M.D. Moreton Lodge, Leamington Priors
Berry, Samuel, L.R.C.P.Ed. Professor of Diseases of Women and Children in Queen's College, Birmingham
Bicknell, Edward, Esq. Surgeon to the Provident Dispensary, Coventry
Bindley, Samuel A. Esq. Edgbaston
Birt, Thomas, M.D. Leamington
Bodington, George, L.R.C.P.Ed. Sutton Coldfield
Bodington, G. F. M.D. Sutton Coldfield
Bourne, Thomas S. Esq. Kenilworth
Bowen, H. Esq. Kineton
Bracey, Charles J. M.B. Professor of Anatomy in Queen's College, and Surgeon to the Hospital for Children, Birmingham
Bracey, W. Arthur, Esq. Surgeon to the Midland Eye Hospital, Birmingham
Brown, Christopher F. Esq. Leamington
Brown, John, L.K.Q.C.P. Coventry
Bucknill, Henry W. Esq. Rugby
Bucknill, S. Birch, M.D. Rugby
Busby, Ralph A. Esq. Leamington
Carter, Thomas A. M.D. Physician to the Warneford Hospital, Leamington
Chavasse, Pye Henry, Esq. Birmingham
Chavasse, Samuel, Esq. Birmingham
Cheeshire, Edwin, Esq. Senior Surgeon to the Birmingham and Midland Eye Hospital, Birmingham
Clarke, John, Esq. Kenilworth
Clayton, Mark H. Esq. Birmingham
Cornhill, John, Esq. Birmingham
Cox, Henry, Esq. Camp Hill, Birmingham
Dartnell, George Russell, Esq. Inspector-General of Hospitals, Henley-in-Arden
Darwen, John, Esq. Birmingham
Davies, J. Birt, M.D. Coroner for the Borough of Birmingham, Birmingham
De la Cour, George F. M.D. Resident Physician to the Dispensary, Birmingham
Denne, Henry, Esq. Birmingham
Dewes, Edward, M.D. Physician to the Hospital, Coventry
Downson, Arthur H. Esq. Stratford-on-Avon

Drever, John, Esq. Birmingham
 Drummond, Alexander, M.B. Birmingham
 Duke, Abraham, M.D. Rugby
 Earle, J. Lumley, M.D. Physician to the Hospital for Children, Birmingham
 Ebbage, Thomas, Esq. Leamington
 Edwards, John, M.D. Sparkbrook, Birmingham
 Elkington, George, jun. Esq. Surgeon to the Hospital for Children, Birmingham
 Elkington, Thomas, L.R.C.P.Ed. Penny Compton
 Evans, George F. M.D. Birmingham
 Farquharson, Robert, M.D. Rugby
 Figgins, Henry, Esq. Islington, Birmingham
 Fleming, Alexander, M.D. Senior Physician to the Queen's Hospital, Birmingham
 Fletcher, T. Bell E. M.D. Senior Physician to the General Hospital, Birmingham
 Foster, Balthazar W. M.D. Physician to the General Hospital, and Professor of Medicine in Queen's College, Edgbaston, Birmingham
 Fox, Edward C., M.D. Birmingham
 Fyfe, George, M.D. Kineton
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Simpson, Sir James Y. Bart. M.D. D.C.L. Professor of Midwifery in the University, Edinburgh (dead)
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REVIEWS AND NOTICES.

AN INTRODUCTION TO THE OSTEOLOGY OF THE MAMMALIA: being the substance of the Course of Lectures delivered at the Royal College of Surgeons of England in 1870. By WILLIAM HENRY FLOWER, F.R.S., Hunterian Professor, etc. London: Macmillan and Co. 1870.

ALL who of late years have examined the College of Surgeons' museum, must have agreed in recognising its zealous curator as "the right man in the right place". To lecture with thorough success immediately after Professor Huxley could not but be for most men a severe trial of ability; yet it is a task which the same curator has perfectly accomplished in his first course of Hunterian lectures. During that course, the College theatre was filled by hearers who demonstrated by their perseverance their esteem for the instruction which they received from Professor FLOWER.

The substance of that first course has just been published by Messrs. Macmillan, as a compact volume, convenient for the hand or the pocket. It is abundantly illustrated by above a hundred original figures, and forms a complete manual of the osteology of the highest class of animals—the mammalia.

Too many treatises on kindred subjects have the great fault of an unsystematic arrangement, and such an incompleteness that it is always doubtful whether the inquirer will find any special point of which he may be in search. In Professor Flower's book the arrangement is so good, and the treatment of the subject so complete, that the student can conveniently ascertain concerning any mammal, any point of osteology, provided it be not one of such minute detail as to be beyond the compass of the book.

Each considerable portion of the skeleton (as the skull, the spine, the pelvis, etc.) is treated separately; its general or typical condition being first described, and then the special peculiarities of all the orders being gone through in each case. This is, moreover, done with that thoroughness, that pains-taking and scrupulous accuracy, which is characteristic of all Professor Flower's works. No positive statement is made which is not thoroughly trustworthy; and when any point is not certain, it is stated with due reserve, as in speaking of the nature of the odontoid process of the axis at page 30.

The work is brought down to the latest scientific advance; the interesting and important researches of Professor Gegenbaur and Mr. W. K. Parker are made use of, and even the quite recent observations of Mr. G. W. Callender with regard to the human premaxilla.

It is somewhat late in the day for the discovery of new bones in the human skeleton; nevertheless, Mr. Flower has added to the number a, "tympano-hyal". This "can generally be recognised in the skull of an infant at birth, and for a few years after, as a cylindrical piece of bone, with a truncated lower extremity, about one-twentieth of an inch in diameter, seated in a depression on the hinder border of the tympanic, immediately to the anterior and inner side of the stylo-mastoid foramen" (p. 134).

In a concluding chapter, the question as to the correspondence between the bones of the anterior and posterior extremities is gone into. Here the Professor follows the suggestion originally made by Mr. Mivart, that the scapula and ilium are essentially columnar bones; and that the subscapular fossa of the former answers to the gluteal surface of the latter, and the spine and acromion to the ilio-pectineal line.

The work is one eminently adapted for professional students; but it also suits a much more extensive class; namely, all who are interested in anatomy, or surgery, or zoology. The descriptions are so clear, the style so plain and simple, and devoid of unnecessary or unexplained technicalities, that it may be profitably used by anyone wishing to learn the A B C of anatomy. Such an one, provided with the bones of a dog only, may, by the careful study of this book, become an excellent osteologist. It is, therefore, specially fit for schools and colleges, while at the same time it is so full of information that no practised anatomist can rise from its perusal without having made some decided acquisition.

We cordially recommend this work to all classes of our readers.

NEW BOOKS AND NEW EDITIONS.

Vertigo or Dizziness: its Causes, Importance as a Symptom, and Treatment, is the title of a thesis presented by Dr. J. BRADBURY, for the Degree of Doctor of Medicine in the University of Cambridge. The author has been led to give special attention to the subject of vertigo, because, though generally described as a symptom of various

diseases, it is in many instances the principal cause which induces the patient to seek relief. The diseases with which vertigo is frequently associated are: anæmia; prolonged lactation; amenorrhœa; menorrhagia; rheumatism and gout; plethora and suppression of long accustomed hæmorrhage; morbus cordis; dyspepsia and intestinal flatulence; embolism, and atheroma, of the cerebral arteries; certain affections of the ear; epilepsy (*petit mal*); adventitious products of the brain. Cases in illustration of these various conditions are given. There is also the vertigo which has been called by Dr. Ramskill "essential", probably, in Dr. Bradbury's opinion, associated with dilatation of the right ventricle of the heart. As to the proximate cause, Dr. Bradbury believes, on physiological and pathological grounds, that "it is in the majority of cases a disordered cerebral circulation." The prognosis varies with the state to which the vertigo is to be attributed. A chapter on treatment, in which the author gives his reasons for the treatment which he adopts in vertigo, according to its cause, concludes the book; which contains throughout evidence that the author has carefully studied the subject on which he has written.

In his *Fifth Annual Report on the Sanitary Condition of Merthyr Tydfil*, Mr. T. J. DYKE finds grounds both for congratulation and for warning. The death-rate among young children during 1869 was 416 out of each 1,000 deaths, the mean of the three past years having been 431, and that in 1852, 527. Again, the number of deaths of persons above 70 years of age was 95 per 1,000; in 1852, it was 55. The average age at death was, in 1852, 17½ years; in 1866-68, 26 years; and in 1869, 25¾ years. As compared with the mortality of town-districts in England, that of Merthyr was in 1869 2.6 per 1,000 below the average. The number of deaths from enteric fever is noted to be constantly diminishing; and Mr. Dyke hopes that, when sanitary measures are more fully carried out, the disease will become very rare in the district. Typhus fever, for some time epidemic in the district, ceased to spread in March of the present year. Further details on this disease are deferred to the next report. By the adoption of a process of cleansing and disinfection in about a hundred instances, the spread of the fever was in each case arrested. Mr. Dyke points out that there are still various sanitary improvements necessary to be carried out, the progress of which, especially in reference to house-drainage, has been impeded by legal difficulties. There were, in 1869, 1,269 deaths; an increase of 137 over the average of the preceding two years. The increase was in the deaths from constitutional and local diseases; in those from contagious epidemic diseases, there was a decrease. There are various other matters of interest referred to in this report, which is creditable to Mr. Dyke's reputation as an energetic and efficient officer of health.

Ambition's Dream: a poem.—"Ambition's Dream" is the title of a short poem, evidently by a member of our profession. It displays much vigour in the use of language, is perfectly readable, and is also sound in its teachings. It deals with the manœuvres of personal ambition, especially in reference to medical success and it touches also on the higher aspects of medical science. It also glances at the present state of affairs in politics, etc.; and after some running criticisms on recent opinions, ends by denouncing the existing carelessness as to the prosperity of the British colonies. The author regards colonisation as the one remedy for over-abundant population, and looks onward hopefully for his country to the time

"When nursed beneath unbounded skies,
New arts and industries arise,
And pride to be, and not to seem,
Deposes vain *Ambition's Dream*."

On a New Method of Effectually Remedying the Defects of Harelip. By WILLIAM STOKES, jun., M.D., Surgeon to the Richmond Surgical Hospital, Dublin, etc. The object of the operation which Mr. Stokes describes, is to prevent the occurrence of two deformities often left after the treatment of hare-lip: viz., a notch on the border of the lip, and a vertical groove. For this purpose, Mr. Stokes first makes an incision across the lip through its entire thickness, on each side, extending as far as two or three lines from the red border. Having applied *serres fines* to the ends of the flaps, to make them hang down and to arrest hæmorrhage, he next, if the cleft do not extend into the nose, cuts naturally with scissors through the entire thickness of the lip at the upper angle. He then makes an incision on each side, from the upper point of the vertical incision down to that first made, just outside the edge of the red border, taking care to avoid wounding the mucous membrane of the lip. A quadrilateral flap is thus formed on each side. The two flaps are turned back; their broad raw surfaces brought into apposition; and a spear-pointed needle is introduced at the lower end of the incisions from one side to the other. A second needle, higher up, may be necessary; or the surfaces may be brought together by fine entomologists' pins. The surfaces of the flaps may be approximative

by the figure-of-8 suture. The lower points of the incisions first made through the lip on the two sides are brought together by sutures of Chinese silk. Mr. Stokes has operated in this way in three cases, of two of which he gives drawings. The operator certainly appears to have been thoroughly successful in his object.

INTRAUTERINE INJECTIONS.

Dr. T. G. THOMAS, of New York, an excellent authority, makes the following important statement on this subject.

My impression is that intrauterine injections do not constitute an advance in the treatment of uterine diseases; that they have done, and are going to do, a great deal of harm; and that, though they are popular, their evil results will cause them, after a more thorough trial, to be discarded.

In making such an assertion, I must, of course, sustain it by proof. I commenced the use of intrauterine applications, both solid and fluid, at least ten years ago. At that time I was extremely fond of them, and treated many a case as endometritis of the body which I should now treat as cervical endometritis. One method which I very often employed was that brought forward by Dr. Lente, of dipping a probe into the fused nitrate of silver, and passing it up to the fundus uteri and around the cavity, so as to cauterise its whole surface. Once, after I had made such an application of the solid nitrate, the patient became dangerously ill with the symptoms of cholera morbus, due entirely to this cause. A year or two later, a lady, who had been for some time under my care for corporeal metritis and endometritis, became discouraged, and at my suggestion consulted one of the best gynaecologists of this city. I saw her again at the end of a week, when she had a phlegmon of the size of my fist, in one broad ligament. The inflammation had been set up by the introduction of an ointment of calomel through the cannula of Dr. Lente.

I have mentioned these cases where solid applications to the cavity of the uterine body have done injury merely to illustrate the fact that solid applications, which are less harmful than fluid ones, are, when made to this locality, not free from danger. Let us see how the matter stands with the injection of fluids. Dr. Nott has said that the entrance of any injected fluid into the peritoneal cavity cannot produce a serious effect immediately, but time must first elapse for inflammatory action to become established. In this statement I think that the doctor is in error. A case which I saw some years ago in company with Dr. Peters, bears upon this point. The lady was known to have simple ovarian tumour, I think about as large as the fist. Called to her in the night, I found her almost in collapse, saying she was sure the tumour had broken. She was right, and her terrible prostration was due entirely to the entrance of the fluid of this benign ovarian cyst into the peritoneum.

My own impression is that, where intrauterine injection is practised, a certain number of the cases will die from penetration of the fluid through the Fallopian tubes. This certainly does produce the most intense agony, and the most sudden and fearful collapse.

But it will be said that, in these cases, the cervix was not dilated, and that, had it been so, no evil would have resulted. I reply that the very dilatation so coolly talked of theoretically, is itself attended by danger. Within a fortnight past I have had one of the most melancholy cases I have ever met in practice. The lady had come to me, three months before, with anteversion of the uterus. I had treated her with an anteversion pessary, and now considered that part of the treatment completed. So I told her, "I am to-day going to dilate the neck of your womb, and to do nothing else." I did this at my office, using three of Dr. Peaslee's dilators; and she left for her home at Staten Island, promising to write me. Next evening I was summoned to Staten Island, where I found the lady with violent pelvic peritonitis, of which she died. I think the mischief was done by the dilatation of the neck of the uterus. Yet I am very sure that the dilators were passed with requisite skill.

Some time since, a gentleman wrote me, from St. Paul, Minnesota, that he had known a case where a small amount of a solution of iodine was injected into the cavity of the uterus, and the woman died suddenly of peritonitis.

It is by no means a final argument against any procedure that selected cases should speak badly for it. The question is very different, however, from that in such a capital operation as amputation of the neck of the uterus, for example, which you enter upon expecting, and the patient and her friends expecting, that there is at least a chance of a fatal issue. Such an operation is justifiable and often imperative, as offering the only chance for life, though it may be a very small one.

But, if the woman be suffering simply from some slightly annoying affection, she does not expect to die from the routine procedure to which you resort for its relief; and you have no right to employ any means attended with such hazard.

Again, I see no necessity for intrauterine injections. My impression is, that the uterus rarely contains over a drachm of fluid, and that it is an error to represent it as often containing a considerable amount of putrescent discharge. But, if it have within it such fluid requiring removal, dilate the cervix, and replace the organ, if ante- or retroverted, or flexed, and what is to hinder the fluid from coming out? The dilatation itself will accomplish much. Then, in addition, if necessary, give ergotine, or ergot, and general tonics, and, if required, introduce the cotton-wrapped probe. Every one knows the difficulty of removing the plug of viscid mucus from the cervical canal. For this purpose I keep a supply of little bits of sponge, not larger than my finger's end, which, being wet and squeezed, will wipe the canal nicely, and then can be thrown away. This done, I see no difficulty in passing up the probe armed with cotton, and painting over the whole internal surface.

For myself, I never use intrauterine injections, even for the hæmorrhage of abortion. If we know anything about the pathology of uterine hæmorrhage, we know that it should be stopped by closure of the vessels from contraction of the tissue of the uterus itself. After delivery we all recognise that the only proper thing to do is to empty out the clots and stimulate the uterus to contraction. And, even after abortion, I look upon the injection of styptics as a bad plan. Take, as an example, a case which came before me a few days ago. A woman had been bleeding for three months after an abortion. It seemed to me there must be something in the uterus to cause the flow; for, otherwise, what is there in an abortion to keep up hæmorrhage for such a length of time? In such a case, you may take it for granted that something has been left behind. The doctor in charge of the case consented to my dilating the cervix and introducing the curette; I took away a number of little bulbous bodies, remains of the placenta—those little granulations which bleed if you look at them, and pour out blood profusely if you touch them with a probe. The next day the hæmorrhage had completely stopped, and within a week the patient's general condition was greatly improved. I mention this not as a case important in itself, but as a type of many where success may be attained by a comparatively minor procedure—for I esteem the use of the curette as a far less grave operation than the injection of the uterine cavity.

I wish it to be distinctly understood that I have been objecting not to intrauterine medication, by such means as those mentioned by Dr. Peaslee—the brush or probe, for instance—but to the special form of medication by injections; and I include even the injection of warm water, which I think can hardly ever be necessary.

Dr. E. R. PEASLEE, writing on the same subject in the *New York Medical Journal* for July 1870, distinguishes between uterine or endometrial injection and endometrial ingestion. He admits the dangers of injection; but regards ingestion, or the simple operation of bringing a medicinal agent into direct contact with the uterine mucous membrane, as being more efficacious if proper instruments be used, and almost if not perfectly safe, when applied in the proper conditions.

The agents employed for endometrial ingestions are thus commented on.

The tincture of iodine is perhaps the most valuable in cases of metrorrhœa, being used at first of the strength of ʒj to ʒj water, then ʒij to ʒj water, and so on up to the full strength, if required. In cases of very long standing, it may be used pretty safely at first with an equal quantity of water. The applications may be repeated in from four to seven days, or less frequently, according to their strength and effects. The weak solutions may be applied every two or three days, till the tolerance of the uterus is ascertained.

The sulphate of zinc may also be used as just explained, beginning with grs. v to ʒj water, and going on to a saturated solution even. The same may be added in regard to alum, tannic acid, and sulphate of copper. Nitrate of silver is a valuable remedy, and is usually applied unnecessarily strong. It may range from grs. v to ʒj to ʒj of water.

The tannate of glycerine, from ʒj to ʒj tannic acid, to ʒj glycerine; iodine (Churchill's) ʒss to ʒj glycerine; and chloride of zinc, ʒss to ʒj glycerine, should be added. Chromic acid should be used, if at all, with much care, and as weak as one part acid to ten parts water at first. Finally, very rebellious cases may require the strong solutions recommended by Dr. Kammierer; viz., chromic acid two parts, water one part; iodine one part, iodide of potassium two parts, water four parts; carbolic acid and water equal parts; pyroligneous acid undiluted. These are applied once in from three to eight days.

If the endometrium be too sensitive at first to admit of the pre-

ceding applications, or become more sensitive from a too strong application, Magendie's solution may be applied to it with an equal quantity of water. A saturated solution of chlorate of potassa is also found to be a very soothing remedy.

In cases of metrorrhagia, the persulphate or the perchloride of iron (the latter being seldom used in America) bears the palm. Maunsell's solution may at first be injected with an equal amount of water; and in urgent cases I have never met with any unpleasant effects from using it in full strength. Saturated solutions of tannic acid and of alum are very efficacious in urgent metrorrhagia.

As a preliminary to injection or ingestion, Dr. Peaslee insists on dilatation of the cervical canal; for which purpose he has devised a set of steel dilators, which he holds to be more rapid in action than spongetents or laminaria, and which he has found very satisfactory. In injection, as well as ingestion, it is necessary to—“1. Dilate the cervical canal; 2. Cleanse the uterine cavity of any secretion; and then, 3. Maintain the dilatation, carry the remedy fairly into contact with the endometrium. And all this may be certainly effected by means of the instrument I have already mentioned; substituting for the silver tube the following modifications of it; viz.: This tube is but one and three-fourths inch long, and has but two fenestræ instead of three, these being opposite to each other; commencing also one and a quarter inch from the collar, and extending to the conical end of the tube. The thread passes through the collar at the point which should be the lowest when the instrument is introduced, and thus indicates the precise position of the fenestræ (right and left) in the uterine cavity. This tube being passed into the uterine cavity in the manner before explained, the medicament is carried through the fenestræ and painted over the whole extent of the endometrium at will, by a mass of cotton as large as will easily traverse the fenestræ, attached to a steel wire with the surface at its extremity roughened like a *rat-tail* file, to secure a firmer attachment of the cotton. In cases of metrorrhœa, no previous injection is required to cleanse the cavity; that object being easily accomplished by a mass of dry cotton swept over the endometrium by the applicator just described. In the same way, also, any excess of the medicament may be removed, if this is indicated by symptoms following this ingestion; or Magendie's solution may be applied as after injection. And if, for any reason, it be desirable, the tube can be kept in place indefinitely by a tampon. Obviously the method just described is equally applicable to the ingestion of solid substances into the uterine cavity, if in any case they are to be preferred.”

Dr. Peaslee sums up his paper with the following conclusions.

1. Endometrial applications should be but very rarely resorted to by the gynecologist; being proper only in cases of metrorrhœa and metrorrhagia, and perhaps sometimes in chronic endometritis without a discharge. 2. Endometrial ingestion, as proposed in this paper, may be accepted as perfectly safe in the cases and circumstances specified; injection is rendered far safer by the method here proposed, but is still not so safe nor so efficacious as ingestion. 3. Injection should be restricted to urgent cases of metrorrhagia, and to certain cases of hæmorrhage after delivery; and here it may be regarded as indispensable. 4. The weaker solutions should be tried in each case before the very strong are resorted to, both to prove the necessity of the latter and the tolerance of the uterus. 5. Applications to the endometrium demand a delicate surgical dexterity; and those who possess neither tact nor experience in this direction will probably produce more mischief than benefit by their use.

DERMATOLOGY IN VIENNA.

PROFESSOR HEBRA delivered the introductory lecture of his course on skin-diseases in his new theatre in Vienna, on the 10th October. He said that in former times he had patients with skin-diseases, but no special clinical wards for them, so that for nearly thirty years he was obliged to teach in the wards of the General Hospital; notwithstanding which, his lectures were frequented by thousands of visitors from all countries. He then described the means of, and the aids to teaching which were at his disposal. The cases of skin-disease, he said, had amounted for many years to one-seventh of all the patients admitted. In the decennial period from 1850 to 1860, 227,000 patients were admitted into the General Hospital, of whom about 30,000 suffered from diseases of the skin.

“The average annual number of patients with skin-diseases is, then, 3,000. If to these be added 1,000 patients visited at their homes, the number is raised to 4,000; i.e., at least 300 each month, or ten each day. This number allows something to be learned and taught, especially when there has already been the opportunity of studying 100,000 cases of skin-diseases. Yes, 100,000 skin-disease patients at least have

afforded us means of observation and experience in this hospital during thirty years; and the scientific observation of these cases has rendered it possible for us now to assemble in these spacious premises, to give systematic order to the clinical instruction hitherto only tolerated, to assert the privileges of dermatology in common with the other branches of medicine, and to give it a permanent position.”

Speaking of the dermatological museum commenced by him, he said that the number of drawings and preparations had reached 506; and of these excellent copies have been made by the pencil of Elfinger and Hertzmann. Of these latter, the Imperial Academy of Sciences has published an Atlas in seven parts, containing seventy-four chromolithographs, and Enke of Erlangen a small Atlas of two parts and twelve plates. Of the Manual of Skin-diseases published by Hebra in conjunction with his pupils, in Virchow's *Pathology of Therapeutics*, four parts of the first volume have for some time been before the public, and have been translated into English, Italian, and French; the first part of the second volume is in the press.

POOR-LAW MEDICAL RELIEF.

THE following note has been communicated to us by Dr. Joseph Rogers.

Within the last few days, I have read the evidence given on March 31st by Earl Devon, ex-Inspector, Secretary, and President of the Poor-law Board, before the Royal Sanitary Commission; and I find in it such errors, that I hope that you will allow me to correct them.

In answer to a question given by the Chairman, he said “that there were 3,435 district and 685 workhouse medical officers, making altogether 4,120. As to those district medical officers, the average salary *per annum* is £68.” Further on, in answer to a question given by Mr. Powell, he said: “The average salary both of district and workhouse medical officers is £68 for the whole.” When I first saw the statement I felt astonished that a sum, so much in excess of what I had always been led to believe was the average salary, should have been put forward in evidence on apparently such respectable testimony; and for a time I was at a loss to discover how this amount had been arrived at, when I remembered that the gross amount put down in the report of the Poor-law Board 1869-70 for medical relief was £282,000; on dividing this by 4120, it brought out £68, the amount assumed by Earl Devon as having been the average payment to each officer.

Here let me note that this evidence was given some three or four months before it was publicly known what was the total of gross or of medical relief for 1869-70, as the annual report was not issued until June.

Now, against the correctness of this distribution I enter my protest, and for these reasons: it is very well known to all who have paid attention to the subject, that the gross amount returned by the clerk to a Board of Guardians as having been expended on medical relief is constantly made up of a number of items, which never reach the pockets of the medical officer. Thus the late Mr. Griffin pointed out that, in thirteen metropolitan unions, the difference between the medical relief column of the Poor-law Board and the actual sum received by the medical officers was over £4000 in one year. He also showed that in St. Pancras, vaccination fees, the cost of wines and spirits, subscriptions to hospitals, and the cost of scrofulous patients at Margate, were all included under this heading. Six years after Mr. Griffin made this statement, I found that the St. Pancras return was still in excess; and through Dr. Lush I drew Mr. F. Peel's attention to the subject, and begged that in future reports the medical officers' salaries should be separately set out, and gave the St. Pancras return as a case in point. He promised attention to it. The next year the amount returned from St. Pancras was reduced from £3325:3 (1867-68) to £1313:7 (1868-69), but the alteration was limited to this union only.

I could, if chose, cite several instances of unions where similar fallacious returns have been made, and give the figures. Now I do not suppose that Earl Devon knew any better, and therefore I entirely acquit him of all intention to mislead the Commission; but I am perfectly satisfied that the fallacious character of these annual returns, as an index of the average salaries of the medical officers, is well known in the office; and I did feel surprised to find that Mr. Lambert was on the Commission and present when this evidence was given, and yet did not correct it.

Whilst on this subject, I may as well inform your readers that early in the last session Dr. Lush, M.P., moved for a return of the sum paid out of the Consolidated Fund in aid of medical relief. You are probably aware that half the salaries come from this source. This return, if furnished, would give the correct amount. I heard at the time that

the return was granted. Being very desirous of seeing it, I have applied at Hansard's repeatedly for it, but up to the present it has never been presented. Comment on this latter transaction is unnecessary.

In Ireland, you can get all this information in the annual report of the Commission; but then they are proud of, and support in every way, their medical officers.

SPECIAL CORRESPONDENCE.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

The Constitution of the Board of Curators.—Female Students.—Sir A. Grant's Inaugural Address.—Inaugural Address of Professor A. R. Simpson.

THE General Council of the University had quite a field-day here on Friday last. During a *sedesunt* of nearly six hours, the Council debated, among other things, several questions of paramount importance. First under consideration was the new scheme of the revival of the B.A. degree, the object of which is to adapt the Arts curriculum to the wants of students looking forward to the several professions. Then followed a long debate on the vexed question of the constitution of the Board of Curators, and the alleged incapacity of the Town Council representatives in the Board. Lastly, the medical education of women was taken up, this discussion being conducted entirely by professors of the University.

Respecting the Board of Curators, at present composed of four representatives from the Town Councils and three others, it was almost unanimously admitted by the various speakers that the present constitution of the Board tended to produce factious opposition of the municipal party towards the others, and *vice versa*; and it was generally agreed that some change was necessary. A more purely academical constitution of the Board was advocated by certain speakers; while, on the other hand, the municipal element was not without its champions. Dr. Alexander Wood considered that the frequent pecuniary assistance that the Town Council had rendered to the University from the date of the original charter to the present time formed an intimate bond between the two Corporations, and justified the share which the Town Council had in the disposal of the University patronage. He had watched the history of the University, and had seen the Town Council element on several occasions prove a salutary check on the professors. It was the Town Council that had prevented the great extra-academical school of medicine in Edinburgh from being prohibited as qualifying to teach university students. Then, again, there was a proposal made by the University professors, which, in the words of the Commissioners of 1830, amounted to this: that general education was rather a defect than a recommendation to a medical man. It was the Town Council that effectually set its face against these reactionary views. The present Curatorial Court, he said, conducted its business like a Star Chamber, and a jury of honest independent citizens, amenable to public opinion, was much to be preferred. It was at length agreed to defer the matter till next meeting of the Council in April, and meanwhile to refer it to a committee.

Dr. Crum Brown opened the discussion on Female Medical Education by proposing the motion which was printed last week, to the effect that the University Court should make provision for imparting the instruction which it was previously decided in the abstract that females should receive. His motion was interpreted to mean that males and females should be taught together in the same class. The opposition was led by Professors Turner and Lister. Mr. Turner quoted anonymous testimony against the working of the system at Vienna and Zurich, and also the following curious morsel from the west of Scotland. A few days after the debate in the University Council in April last, he received a letter from a clergyman in the west of Scotland, who had two sons studying medicine in the University, and who said: "I cannot but think that young men will be exposed to fearful dangers, for, if they once learn to disregard modesty in the female, their own principles must suffer severely. I should be exceedingly sorry to remove my sons; but my duty will render it absolutely necessary, as I dare not expose them to a degrading system, and risk their higher interests for the benefits of a good professional education." Professor Turner declared emphatically that it was altogether repulsive to him to teach certain details of the medical education to mixed classes. Professor Lister, so far as he then could see, was ready even to resign the office he so highly valued rather than bring himself to teach clinical surgery

to males and females conjointly. The professor was applauded. Professor Blackie, on the other hand, followed by Professor Bennett, considered that the previous speakers were morbidly susceptible, and that their aversion to instruct females through every detail of medicine arose from a mistaken notion of delicacy. Neither delicacy nor indelicacy, said they, had a place in the clear and frosty atmosphere of scientific truth. Professor Bennett held that Mr. Turner's information as to Vienna and Zurich was of no value, as it was not sufficiently authenticated. On the other hand, he himself had last winter given a full course of lectures on physiology to females. He had entered fully into all the very delicate subjects referred to, and there had been no trouble whatever in the matter. The view of the naked form, contended Dr. Bennett, is not in itself indelicate, provided the mind be in a scientific attitude; and this was the frame of mind in which females, no less than males, would approach the study of it.

At the close of the debate, Professor Christison rose and said that, so far from "the highest lady in the land" being in favour of the medical education of members of her sex, the Queen wished it to be known that she was entirely opposed to it.

The Council then proceeded to the vote, when forty-six affirmed the motion, and forty-seven opposed it. Regarding the result of this vote, it is to be remembered that the decision of general councils is merely of the nature of a *plébiscite*, and that the real legislative authority in this case rests with the University Court, which may institute steps on its own account. A more serious blow to the interests of female medical education is the decision of the managers of the Royal Infirmary not to issue tickets for hospital practice to females. This decision was come to at a meeting held on Monday.

Principal Sir Alexander Grant opened the session on Tuesday by an address in Queen Street Hall. Probably not fewer than a thousand students listened to it, whose behaviour was throughout most decorous. At the outset, the Principal commented on the losses that the professorate had sustained during the past year, paying graceful tributes to the memory of Sir James Simpson and Mr. Syme, whom he described as the two men in whom the reputation of the University mostly consisted; and to Professor Allman, on his resignation. He enumerated the prominent incidents in the career of each of the late professors, and their contributions to their respective departments. The Principal's reference to Mr. Syme, daily retiring from his surgical labours in the city to the quiet of his beautiful flower-gardens at Millbank House, was a highly artistic stroke. Mr. Syme's fame, he said, rested not with the public, but in the annals of his own profession. The names of Dr. Waldie and Dr. Duncan were incidentally introduced *à propos* of Sir J. Simpson's researches on anæsthetics. The mention of Dr. Duncan's name called forth well-marked and very persistent applause. At the remark, "Sir James Simpson was the idol of the Town Council", the speaker was interrupted by a considerable amount of laughter and hissing; and when he proceeded, "but not the less do I hear him spoken of with the greatest regard by those belonging to the highest social circles", the implied social contrast of the two classes of admirers was evidently relished. The Principal then went on to speak of recent benefactions to the University, and a number of other topics, and concluded by exhorting his audience to purity and innocence of life. It was, he said, on the deep thinking and high aspirations of students and those of student age that the greatness of a nation depended; and he pointed his moral by a reference to the national characteristics of Germany in contrast with those of her defeated rival. The reference to Germany was received with rounds of cheering, mixed with some dissent.

The inaugural lecture of Professor A. R. Simpson was announced for two o'clock to-day (Wednesday), in the chemistry class-room. Half an hour before the time, numbers of elderly citizens, including a few clergymen, began to arrive, and ultimately formed a considerable portion of the audience. By two o'clock, every corner of the immense class-room was densely packed, the doors and passages being entirely blocked up. Shortly afterwards, the Principal, preceded by the mace-bearers, and followed by Professor Simpson and other professors, entered by a side-door. Of the medical professors, Dr. Christison, Mr. Spence, Dr. Balfour, and Dr. Laycock were present. Several professors from the faculties of Divinity and Arts also occupied seats around the lecturer. The demeanour of the students plainly indicated a stormy meeting. Dr. Simpson's self-possession seemed never to be disturbed from first to last. His reception on rising cannot be described otherwise than as equivocal. His friends applauded lustily; but a large part of the audience were less friendly. After waiting a few minutes, amidst a perfect Babel of noises, he was allowed to proceed. He began by referring to the appointment of the former incumbent of the Chair thirty years previously, when he was interrupted by another burst of noise. The uproar seemed to be directed against the unctuous and somewhat funereal

tone of voice which appeared to be natural to the speaker. He proceeded to say that great changes had occurred in that interval; and he proposed to give a very brief sketch of the advances made in his own special department. He thereupon began at once to explain the recent origin of the now prevalent views as to menstruation. As he proceeded, isolated phrases, such as "monthly flow," "menstrual period," and other technicalities, which were almost alone audible, seemed, from a variety of causes, to fall incongruously on the ears of his audience, and were received with shouts of laughter and uproar. After proceeding in this way for some time, subjected to a running commentary from numerous voices in the crowd, Dr. Simpson gave way to Principal Grant, who, after some delay, got a hearing, and appealed to the students to treat the professor with courtesy. Amidst continual interruptions, the lecturer got through a further instalment of his lecture, when the noise again culminated. This time, Professor Christison rose, and was greeted with loud applause. One voice, with a well-marked highland accent, inquired "Who are you?" to which the professor replied that he joined the University in 1811, and he surely did not require to explain who he was at this time of day. Since his first connection with the University, said Dr. Christison, he had never seen so uproarious an assemblage of students; whereat several voices replied something about there never having been so great provocation. "Why should not every man have a fair hearing?" inquired the professor energetically; and this sentiment, in the abstract, was cheered to the echo. On Dr. Simpson's resuming, however, the interruptions continued more or less. At one point, the whole audience rose to their feet to observe an altercation between two students in the centre of the crowd; and these two individuals engrossed the attention of everyone, from the Principal downwards, for the space of several minutes. The cry of "The Town Council" was raised now and again, some members of that body being understood to be present. Other sources of confusion were introduced, and Professor Simpson concluded his lecture short of the end. Speaking slowly and with great emphasis, he said there were some present not members of his class. He had still a few sentences to read, but he would reserve them for his class. The Principal and professors then retired, and the audience began to disperse. Meanwhile, several extempore orators among the crowd mounted on the desks, and communicated their opinions concerning the personages and events of the day. Such scenes have been seen before, and at other universities, but rarely if ever at this; and, for the credit of the school, it may be hoped they will not be repeated.

BIRMINGHAM.

THE following is from our Birmingham correspondent.

Medical as well as general politics are rarely quiet for long here. The present time is not exceptional. The commencement of the medical session always causes a little stir, after the lull of the vacation. This year, more *éclat* than usual was given to the event by the holding of a *conversazione* on the opening day. Over two hundred and fifty were present, including many old students and lecturers, and the professors and students of the present day. The scientific part of the *soirée* was made interesting by the usual microscopes and microscopic apparatus, and also by a demonstration by Mr. Wills of the process of formation of crystals by the aid of the oxyhydrogen microscope, and by Dr. Norris's experiments on the formation of rouleaux in the blood; these latter being of very great interest, and being demonstrated by Dr. Norris to successive visitors with unwearied kindness. The success of this first *soirée* in connexion with the opening of the School will, it is to be hoped, render the entertainment annual. Not only does it engender friendly feeling between students and professors, but tends to the general harmony of the profession. Moreover, it cannot fail to induce a deep and wide-spread interest in the Queen's College among the profession in the district. The details of the *conversazione*, which must have been very arduous, were carried out by Dr. Foster, to whom the great success is mainly due.

Considerable changes have been and are being made in the staff of the two hospitals. At the General Hospital, an extra physician and an extra surgeon, each with care of out-patients, have been added to the honorary staff. For the surgical appointment two gentlemen are already in the field, either of whom will prove an additional source of strength to the clinical work of the hospital. At the same time, a resident stipendiary registrar will be appointed, who will assist directly in the teaching of the students, and, by relieving him of some of his duties, will permit the house-surgeon to devote more time to the instruction and superintendence of the dressers. Several other changes at the hospital were proposed; viz., a reduction of the staff of full surgeons, and an increase in the staff by the addition of assistant-surgeons;

and the addition of special ophthalmic, dental, and obstetric officers. A Committee, appointed at the annual meeting, carefully investigated the requirements of the hospital; and, in accordance with their report, these offices were not formed. Much as such appointments may advantage a London Hospital and School of Medicine, here they are of questionable advantage; the special institutions in the town attracting most of the special cases, and also the best men in the several specialities. The decision arrived at by the adjourned meeting is therefore quite agreed in both by the majority of the hospital staff and the profession in general. The Queen's Hospital has, however, decided to revive its midwifery department. Three local accoucheurs were in the field. One of these, and one, moreover, whose claims for the post and whose chances of success were thought very good, has just withdrawn his application—we hear, from the occurrence of symptoms of illness, which would render any addition to his present labours ill advised. The profession in the town will sympathise with him in being thus denied applying for a post, for which many years of hard work and original research had well fitted him.

The Queen's Hospital is losing its highly popular house-surgeon, who is one of the candidates for the honorary surgeoncy at the General Hospital. It is possible, even probable, therefore, that his surgical knowledge and undoubted aptitude for teaching will still be utilised to the benefit of the students.

The Branch held its first meeting at the commencement of the month, and a fortnight later the first meeting of its Pathological Section. Mr. Baker, Senior Surgeon to the General Hospital, was appointed Chairman of the Section, in the place of Dr. Heslop, its first Chairman. With the Section Dr. Heslop's name will be permanently associated, as the success which it has attained is in no small degree to be ascribed to the great interest he has shown in its work. The report of the meeting will appear in your columns. It was in every way most enjoyable and successful.

The entry of new students at the College is a small one—eighteen, I think—a falling off from the last year, when we were the fourth largest of the English schools. The falling off is, I suppose, accidental, as I hear that the school is in thorough good working order, and is popular. The attendance at the introductory lecture by Mr. Berry would lead one to think it so. A large number of old students assembled to welcome their old teacher, whose elegant and gentle address must have reminded much of the highly popular midwifery lectures of past days. Dr. Fleming gave a very able and instructive introductory address to the clinical work of the Queen's Hospital; it was heard by every one here, and has no doubt received, from its publication in your pages, a wide circle of interested readers.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting is appointed for Tuesday, November 8th, at Maidstone; MATTHEW ADAMS, Esq., Chairman.

Order of events.—At 2.30 P.M. To attend a Clinique at the Ophthalmic Hospital.—At 3.30 P.M. To attend a Clinique at the General Hospital.—At 4.30 P.M. Chair to be taken, and meeting to be commenced.

Papers promised.—1. A Medical Subject. By Dr. Monckton.—2. A Surgical Subject. By Mr. Wm. Hoar.

At 5.30 P.M. Dinner at the Star Hotel.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary*.
Rochester, October 25th, 1870.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT MEDICAL MEETINGS.

THE November meeting of the members of the above District will be held on Thursday, November 10th, at 2.30 P.M., at the Sussex County Hospital, Brighton: Dr. ORMEROD, Senior Physician to the Hospital, in the Chair.

Dinner will be provided punctually at 5.30, at the Old Ship Hotel. Charge, not including wine, 5s.

All members of the South Eastern Branch are entitled to attend, and to introduce friends.

Gentlemen who intend to join the dinner, are particularly requested to inform me on or before Tuesday, the 8th instant.

FREDK. CHAS. MUDD, *Honorary Secretary*.
Albion Villa, Uckfield, October 31st, 1870.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting of the above Branch will be held at the Fountain Hotel, Canterbury, on Thursday, November 10th, 1870, at 3 P.M. The President of the Canterbury Book-Club in the Chair.

Dinner will be provided at 5 o'clock precisely. Charge, 5s., exclusive of wine.

All members of the South Eastern Branch are entitled to take part in these meetings, and to introduce friends.

Notices have been received of the following communications to be read at the Meeting:—Dr. Wilks, The Exhibition of Sulphurous Acid in Typhoid Fever; Mr. Osborn, Case of Ruptured Uterus; Mr. Garraway, Case of Obstructed Colon; Dr. Bowles, Case of *Post partum* Hæmorrhage—Death.

CHARLES PARSONS, M.D., *Honorary Secretary*.
2, St. James's Street, Dover, October 24th, 1870.

EAST YORK AND NORTH LINCOLN BRANCH: HALF-YEARLY MEETING.

THE half-yearly meeting was held at Brigg, on September 28th. Present, KELBURNE KING, M.D., President, in the Chair, and fourteen members and visitors.

Papers and Cases.—The following were read:—1. A Peculiar Form of Hare-lip, and its Treatment. By Kelburne King, M.D.—2. The Treatment of Infantile Diarrhoea. By G. F. Elliott, M.D.—3. Case of Hydrophobia treated by Hypodermic Injection. By T. B. Keetley, Esq.—4. Case of Operation for Relief of Contracted Cicatrices after Severe Burn. By J. B. Moxon, Esq.—5. Amputation of Arm. By W. J. Lunn, M.D.—6. Calculus passed per Rectum. By R. M. Craven, Esq.—7. Sulphurous Acid as a Lotion in Skin-Affections. By R. H. B. Nicholson, Esq.—8. Staff and Catheter in one. By D. Mackinder, M.D.

A Dinner was held afterwards.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT SOCIETY.

A MEETING of this Society was held on Thursday, October 20th, at the White Hart Inn, Reigate. Dr. HOLMAN presided; and eighteen members and three visitors were present.

Papers, etc.—1. Dr. CARPENTER read a paper on the Causation of Convulsions in Infants.

2. Dr. G. C. P. MURRAY read a paper advocating the early application of the Forceps, especially in Primipara.

3. Dr. LANCHESTER read the notes of a case in which he had induced Premature Labour by the method advocated by Dr. Barnes.—Dr. HOLMAN narrated a somewhat similar case, in which the dilating bags had successfully overcome the resistance of old cicatricial tissue of the cervix.

4. Dr. HOLMAN gave the history of a case of Abscess of the Liver, which was tapped after attaining an enormous size. The patient subsequently died of exhaustion.

The Next Meeting was arranged to be held in Croydon, early in December.

The Dinner took place at 7 P.M., and was attended by twenty of those present at the meeting.

CUMBERLAND AND WESTMORLAND BRANCH: AUTUMNAL MEETING.

THE autumnal meeting of the above Branch was held at the Keswick Hotel, Keswick, on Wednesday, October 19th, at 1 P.M. Present, THOMAS PARSONS, M.D., President, in the Chair, and about twenty members and visitors.

The minutes of the preceding meeting were read and agreed to.

Papers.—1. *On the Preparations of Conium and their Doses.* By HENRY DODGSON, M.D., Cockermouth.—Dr. Dodgson commenced by stating that his attention had been called to the subject on reading the notes of the Gulstonian Lectures, by Dr. John Harley, on Conium, Belladonna, and Hyoscamus; and by a subsequent paper in the *Practitioner*, by the same author, on the Treatment of Chorea by the Succus Conii. He was surprised to find that Dr. Harley stated that all the preparations of conium were worthless except the succus; and that even doses of from three drachms to an ounce of this preparation were

administered and considered not only safe, but absolutely necessary to produce any physiological effect. He had repeated some of Dr. Harley's experiments both on himself and others, and could fully confirm the accuracy of that gentleman's observations as to the largeness of the dose required. He had even found it necessary to administer larger doses, and had himself taken as much as an ounce and a half of the succus, procured from various London and provincial makers. He also commented upon the worthlessness of both the extract and tincture, having taken thirty grains of the former and an ounce of the latter at once, without any marked result. After briefly describing the physiological effects of a full dose of conium, and stating that it acted upon the motor centres of the brain and motor columns of the spinal cord, and that it did not appear to possess narcotic properties, although it caused disordered vision and staggering gait, Dr. Dodgson gave a short history of four cases of chorea which he had treated with the succus conii in doses of from six drachms to an ounce. In one of these the remedy was not persevered with; the remaining three improved rapidly under the treatment, and ultimately recovered, although two of them were intractable cases that had previously resisted the ordinary plan of treatment. He said that these cases tended to confirm Dr. Harley's opinion as to the value of conium in similar affections; but they were too few to be of much value, taken by themselves. They served, however, to show how large a dose of the succus conii was required, and also to point out the discrepancy between the dose recommended in text-books of materia medica, and even in the *British Pharmacopœia* itself (from thirty minims to a drachm), and that required in practice. This might in part be owing to faulty preparation, or to gathering the leaves of the plant at improper seasons. He believed that the so-called "succus" was sometimes prepared from dried leaves, which would doubtless explain its want of activity. Owing to the largeness of the dose of the succus, he had been led to try the active principle of the plant—conine. He had found it necessary to take half a minim of it to produce the full physiological effects, although he had been led to infer that a much smaller dose would suffice: possibly, the sample with which he experimented was not pure. As this alkaloid was soluble both in water and in alcohol, he recommended it to be used in preference to the officinal preparations by any one wishing to test the therapeutic value of conium.

Dr. ELLIOT thanked Dr. Dodgson for his paper. He had not had much experience of conium *per se*, but had used it in conjunction with other drugs. The experiments related by Dr. Dodgson would induce him to give a further trial to conium in larger doses.—Dr. DICK had long given up the use of all preparations of conium on account of their uncertainty of strength.—Dr. EASTWOOD had had some experience of conium in the treatment of mental and nervous disorders; and he agreed with Dr. Dodgson as to the largeness of the dose required.—The PRESIDENT and Dr. DICKSON also joined in the discussion; and Dr. DODGSON briefly replied.

2. *On Nitrous Oxide Gas and its Use as an Anæsthetic.* By R. MACLAREN, M.D., Carlisle.—The paper briefly sketched the history of the gas, from its discovery in 1776 by Dr. Priestley, to its successful introduction as an anæsthetic in this country in 1868. Next were described the modes of manufacture and administration of the gas, including two ingenious additions to the apparatus, the inventions of Mr. Warwick Hele of Carlisle. One of them, by a bell sounding, indicated the quantity breathed; the other automatically showed the time required to produce anæsthesia. The chemical characters of the gas were related, and its action on the human subject when administered pure. The author then gave his own experience of it, and a slight *resumé* of the cases in which the gas had been given by Mr. Warwick Hele or himself since the time-indicator had been in use. Of these, 9 were anæsthetised in one minute; 17 in one minute and 20 seconds; 5 in 1 minute and 40 seconds; 5 in 2 minutes; and 1 in 2 minutes and 20 seconds. The various theories of the action of the gas were stated; the author giving it as his impression that facts were not yet sufficient to enable us to decide on what the physiological action of the agent depends. Its advantages and disadvantages as an anæsthetic were then touched on; the writer stating it as his belief that, so soon as the apparatus and gas became cheaper, it would come into general use in all short operations, and that it would be constantly given in many cases where surgeons are not now in the habit of employing anæsthesia, as in applying the potential cautery, opening small abscesses, etc.; but that it did not seem likely to supersede chloroform in long operations. Its safety was the great inducement to its use. Lastly, the cases in which it seemed to be unsafe were alluded to. In this category were placed phthisis, chronic bronchitis, emphysema, etc., or any disease causing serious impairment to the breathing. Heart-disease was not considered to be absolutely a contra-indication; brain-diseases (including many cases of insanity) were. But, in any of the above-mentioned cases, the author

believed that, if an operation were absolutely necessary, and though short in duration it seemed likely to be very hurtful to the patient's condition if performed without an anæsthetic, the administrator, being thoroughly aware that he was running some risk, and on the watch for the first symptom of danger, could give the gas more safely than chloroform.

Immediately after the reading of the paper, the gas was administered by the author to a patient of Mr. Tweddle's, suffering from lumbar abscess, and the abscess was opened under its influence. Dr. Henry Barnes then subjected himself to its action; and, on discussion being commenced, gave a description of his feelings while inhaling the gas, comparing them favourably with those which he had experienced after taking chloroform, especially as to the absence of disagreeable after-effects. On commencing the inhalation, he did not feel any choking sensation, the gas being as readily respired as air; but, after taking it for about twenty seconds, his breathing became more frequent, and he then rapidly lost consciousness. On regaining consciousness, the only probable after effect was a slight headache, which lasted about an hour.—Dr. ELLIOT drew attention to the fact that nitrous oxide was employed long before other anæsthetics now commonly in use, and that surgeons were now returning to the oldest anæsthetic. It was not and should not be placed in competition with chloroform, but had special uses and advantages of its own. He believed that its action was due to its being an asphyxiating agent.—Dr. DICK asked how long a patient had been kept under its influence, and if any fatal cases had occurred from its administration.—The PRESIDENT inquired if any serious surgical operation had been performed under its influence?—Dr. MACLAREN, in reply, stated that Dr. Barnes had inhaled the gas for one minute, and that he exhibited its influence completely and fully. He did not agree with Dr. Elliot in thinking that its action was due to simple asphyxia, as, when inhaled in quantity insufficient to produce insensibility, it was exhilarating, and in this matter contrasted its effect with nitrogen. In reply to Dr. Dick and the President, he stated that patients had been kept under its influence for twenty minutes by alternating it with air; and that amputation of the breast had been performed. Two fatal cases are on record: in one, the cork used as a mouth-plug was found in the pharynx; and in the other, the lungs "were riddled with tubercles".

3. Dr. ELLIOT of Carlisle made some remarks on the use of the *Stomach-Pump in Certain Cases of Poisoning*. Two cases had made a strong impression on him. One was a case of opium-poisoning, where nearly four ounces of laudanum had been taken; the other was a case of alcoholic poisoning, where the patient had been drinking for some time, and had last taken a ginger-beer bottle full of whiskey at once. Both were apparently moribund, and could not be roused from their condition of utter insensibility. The stomach-pump was used, and very little came away from the stomach. Dr. Elliot then pumped warm water in and out of the stomach for four hours. He then left the patients, expecting that they would die, and was surprised at his visit next day to find them both quite recovered. He found himself unable to explain the *rationale* of the success of the treatment; but he firmly believed, from the symptoms presented, that both would have died if they had been left alone.—A lively discussion ensued, in which Dr. Dick, Dr. Dickson, and Dr. Crerar, took part.

4. Dr. DICKSON mentioned the particulars of a *Pit Accident* which had lately come under his notice. Through the breaking of a rope, a cage with four men was precipitated to the bottom of the pit, and they sustained fracture above the ankle-joint in each case. Two of the men had both legs broken; and one of them were reported to have walked one hundred yards in that lamentable condition.—Some remarks on the cases were made by Drs. Dick, Elliot, and Tweddle.

This terminated the ordinary part of the business. A series of novel and interesting surgical instruments and scientific apparatus had kindly been sent for exhibition by Messrs. Wood of Manchester. The local Committee had made arrangements for visiting Derwentwater Lake and other objects of interest in the neighbourhood; and some of the members availed themselves of the opportunity, although, owing to the unfavourable state of the weather, they were unable to go through the whole programme.

Dinner.—At half-past four, the members reassembled for dinner, under the Presidency of Dr. P'Anson; Dr. Elliot occupying the Vice-chair. The meeting was regarded as one of the most successful and agreeable ever held by the Branch.

RADCLIFFE INFIRMARY, OXFORD.—By an alteration of the Rules at the last quarterly Court of Governors, the House-Surgeon, Apothecary, and other officers, are in future to be appointed by the Committee of Management, instead of by the Court of Governors, from two names selected by the Committee.

REPORTS OF SOCIETIES.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, OCTOBER 5TH, 1870.

J. O. FLETCHER, M.D., President, in the Chair.

Recovery from Chloroform-Asphyxia.—Dr. HARDIE related the particulars of two cases of recovery from this accident by means of faradisation of the phrenic nerves, as proposed by Duchenne de Boulogne in 1855, and first adopted by Ziemmsen in 1858. The first case was that of a boy from whom Dr. Hardie was removing a tumour over the right scapula. Dr. Gumpert administered the anæsthetic. The tumour was diagnosed to be fatty, but proved to be a cyst with curdy contents, and Dr. Gumpert's attention was momentarily directed from the condition of the patient by the unexpected escape of fluid. On again looking at the boy's face, he observed that respiration had ceased, and the pulse could not be felt. The face was livid, and this soon passed into pallor. Cold affusion, drawing forward the tongue, artificial elevation of the ribs, and the application of galvanism over the chest and other parts, were tried without avail. In this way, it was estimated that nearly three minutes passed; and the condition of the patient appeared perfectly hopeless. Dr. Gumpert, in accordance with Ziemmsen's injunctions, applied both poles of the battery to the root of the neck, one over each phrenic nerve, pressing deeply towards it. This was immediately followed by a spasmodic gasp. The walls of the chest were then compressed, and the battery again applied; and so on, alternately, till the patient was satisfactorily restored. The other case was that of a woman aged 42. Dr. Hardie was dissecting a cancerous gland from the axilla, chloroform being administered by Dr. Armistead. In this case, also, respiration and pulsation had quite ceased, the former some appreciable time before the latter. Cold affusion, etc., was had recourse to without effect, and no time was therefore lost in applying galvanism in the same manner as in the former case. There was not an immediate response to the stimulus, but after a time a short gasp came, and the patient was soon out of danger. It was supposed that here the patient was in an apparently lifeless state for at least sixty seconds. Dr. Hardie adverted to the importance of having a clear understanding of the mode of death in chloroform inhalation, and of the means to be adopted to avert the calamity. The discussion which ensued was adjourned till the next meeting.

Transplantation of Skin.—Dr. BARLOW showed a boy with a large ulcer on the dorsum of the foot, caused by a burn, in which he had transplanted, at different times, small pieces of skin, after the method of Reverdin. All of them had adhered most satisfactorily, and were seen to have grown to different sizes according to the time which had elapsed since they were inserted.

Ovarian Cyst.—Dr. THORBURN exhibited an ovarian cyst which he had lately removed. The patient recovered well. He also mentioned a case which he had recently had the misfortune to lose on the operating table.

Electrolysis in Bronchocele and other Tumours.—Dr. WAHLTUCH read a paper on a case of bronchocele successfully treated by electrolysis and the subcutaneous injection of iodine. The patient was a lady aged 27. The tumour was of the size of a hen's egg, and had existed four years. Various means had been tried to reduce it without effect. The electrolytic treatment was begun in July 1869. At first, eight Daniell's elements were used, and one needle inserted. These were gradually increased to sixteen elements and four needles. The operation was performed first twice, then once a week, till January 5th, 1870; in all, twenty-eight times. The mode of application was to insert into the tumour a needle connected with the negative pole of Althaus's permanent battery, and to close the circuit with a sponge on the skin from the positive pole. The current was kept up for ten minutes, at first, gradually increasing to sixty minutes. After the twenty-fourth application, the tumour was reduced to the size of a hazel-nut, and then remained stationary. The treatment was therefore suspended for a time, and then iodine was injected, the quantity and strength being gradually increased. From February to July, Dr. Wahltuch operated sixteen times; and at the latter date, the tumour had disappeared. In September there was no recurrence of it. Dr. Wahltuch explained the details to be attended to, and said that no pain or inconvenience was complained of. He then described the mode of action of electrolysis, and afterwards reported several other cases in which he had used it with success, such as warts and cystic tumours.

CORRESPONDENCE.

FUNCTIONAL HEMIPLEGIA IN CHILD-BEARING WOMEN.

SIR,—As the extremely interesting paper on "Functional Hemiplegia in Child-bearing Women", by Dr. Clifford Allbutt, of this town, has not elicited any comment, I feel it almost incumbent on me to make some remarks on it.

While admitting that these cases have occurred in child-bearing women chiefly, Dr. Allbutt states that the hemiplegia also occurs in connexion with leucorrhœal discharge. An interesting instance of this is under my care in the out-patient department of this institution at present.

G. W., aged 23, a domestic servant, had been in good health, but not strong. She was always very pale. The family is strong and healthy. On Monday, August 21st, she felt headache. Previously to this, she had felt her legs ache much after any exertion, such as walking up steps. Within a day or two of this date, she first noticed a leucorrhœal discharge. On Thursday, August 24th, she was in the water-closet, when she suddenly felt a pricking sensation in the left side, and became so hemiplegic (left) as not to be able to walk out of the closet; neither could she hold anything in her left hand. On August 30th, I first saw her, and found her in bed, pallid, with an anæmic *bruit*. She had very little power over her left side, but could feel distinctly. Being unfortunately unable to hear Dr. Allbutt's paper read at Newcastle, and not being acquainted with his special views on left hemiplegia with female troubles, I was considerably puzzled with the difference between the perfect sensibility and the imperfect motor power. In the absence of any cramps, I felt inclined to regard it as spinal anæmia, gave a favourable prognosis, and prescribed five grains of carbonate of ammonia, fifteen minims of tincture of belladonna, fifteen minims of tincture of nux vomica, and half an ounce of infusion of cinchona, to be taken three times a day. On September 19th, the patient was sitting up. The power over the left side was improving. I prescribed five grains of citrate of iron and quinine in infusion of calumba three times a day. On the 21st, she continued improving. The mixture was continued. An injection of five grains of sulphate of zinc to an ounce of water was ordered. On the 30th, improvement was progressing; the discharge was much better. When she walked quietly, no difference between the sides was perceptible; but she felt the difference in doing anything. On October 17th, she is very nearly well. She does not yet quite feel both sides "a pair".

There is one interesting point about this case—viz., no mention of any local treatment till September 26th: and for this reason, I had inquired after the uterine function, and received an answer of all being well. When talking the subject over with Dr. Allbutt, I mentioned to him this apparent exception to the rule. He told me to inquire carefully. I did so, and again was told that all was well. On my next visit, a neighbour was deputed to confide to me the foregoing information on that portion of the case. It thus corroborates in a striking manner the position which Dr. Allbutt had taken up.

Another case, more like those Dr. Allbutt relates, is also now under care here, doing well under tonics, even in spite of pregnancy; but there is nothing sufficiently marked about the case to lead me to relate it.

In demonstrating that there is a class of hemiplegia which is amenable to treatment, and explaining its nature and pathology, all must feel obliged to Dr. Allbutt for the light he has thrown on an obscure disorder, and the hope which we can now hold out to one class at least of those who labour under that dreaded ailment, paralysis. There is, too, every reason to suppose that the lesion is mesocephalic, and connected with localised cerebral anæmia from vaso-motor spasm. Though forming the diagnosis of spinal anæmia in the above case, I felt the difficulty of unaffected sensation.

Dr. Allbutt has remarked on its occurrence in the left side. He will, I know, excuse my suggesting that its being so is connected with its mesocephalic origin, and thus it contrasts with right hemiplegia from embolism. The left cerebral artery is larger, and in a more direct line from the heart, and consequently more exposed to the risk of a clot being washed in; while, the right cerebral artery being less, and in a less direct line, its branches are more liable to be affected with vaso-motor spasm in anæmic conditions. This may be found an aid to diagnosis on the case being first seen, and is not without scientific interest. Of vaso-motor disturbance and spasm of the arterioles we know little, though Dr. Handfield Jones states that it may be sufficient to "obliterate the radial pulse" in the algid stage of ague. That this spasm is connected with debilitating causes is no more than we can expect, as, the more

imperfect the nutrition of a part, the more likely is its function to be disturbed; and therefore this result of vaso-motor spasm is intimately associated with one of the most debilitating class of agents—uterine and vaginal discharges in women.

The importance of recognising this class of cases is not only most important to the patient, as directing an appropriate treatment, so intimately associated with the result—and to Dr. Allbutt's directions as to treatment there is nothing to add—but also to the physician, as being a guide to him in his prognosis, which in this division of hemiplegic cases is hopeful, the lesion being amenable to treatment.

With the ground once broken in this direction, we may fairly hope to be soon placed in the position of having a large number of recorded observations from which we may still further generalise; and which, too, will aid us materially in clearing this obscure field of pathology.

I am, etc., J. MILNER FOTHERGILL, M.D.

Leeds Public Dispensary, Oct. 1870.

OBITUARY.

CHARLES WALKER, ESQ., WIRKSWORTH.

WE regret to have to announce the death of Mr. Charles Walker of Wirksworth, Derbyshire. The deceased was a member of a wealthy family who have been long connected with this district. After concluding his studies at Manchester and London, he proceeded to Paris, with a view of increasing his store of knowledge. He remained at Paris one year, and returned to England during the prevalence of the cholera at Manchester in 1848, and was appointed one of the staff of medical officers by the Committee of Health. In 1849, he succeeded to the practice of Mr. Shaw of Wirksworth. He was highly and deservedly esteemed by his numerous patients for his uniform kindness, and his loss will be felt by a very large circle besides his personal friends.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the ordinary quarterly meeting, on October 27th, 1870, the following gentlemen, having passed the required examinations, were admitted as members.

Brunton, Thomas Lauder, M.D. Edin., Davies Street, Berkeley Square
Keene, James, London
King, Robert, M.B. Camb., the Middlesex Hospital
Murray, John, M.D. Aberd., Bryanston Street
Nicholls, John Frederick, M.D. St. And., Devizes
Williams, David William, M.D. St. And., Lynn

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, October 27th, 1870.

James, Cyrus, Highworth, Wilts
Salt, George, Dunmow, Essex
Weatherhead, John Frazer, City Prison, Holloway

The following gentlemen also on the same day passed their first professional examination.

Anderton, John Heyes, Middlesex Hospital
Stuart, Henry Ward, Guy's Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

ALTRINCHAM HOSPITAL AND PROVIDENT DISPENSARY—Resident Dispenser: applications, 7th.
BRISTOL ROYAL INFIRMARY—Assistant House-Surgeon: applications, 12th.
CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Manchester—House-Surgeon: applications, 12th.
CUMBERLAND CONSTABULARY—Surgeon.
DENTAL HOSPITAL OF LONDON—Dental Surgeon: applications, 8th.
Dental House-Surgeon: applications, 12th. Secretary: applications, 12th.
DERBYSHIRE GENERAL INFIRMARY, Derby—House-Surgeon: applications, 5th.
DINGLE UNION, co. Kerry—Apothecary for the Workhouse and the Dingle Dispensary District: 10th.
DONEGAL UNION—Medical Officer for the Workhouse and Fever Hospital and the Donegal Dispensary District: 19th.
EASTERN DISPENSARY, Leman Street, Whitechapel—Resident Medical Officer: applications, 7th; election, 8th.
EASTRY UNION, Kent—Medical Officer for the Ash District.
ENNISTYMON UNION, co. Clare—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Miltown-Malbay Dispensary District: 9th.
GENERAL HOSPITAL, Birmingham—Physician: applications, 17th; appointment, 25th. Surgeon: applications, 17th; appointment, 25th. Medical Registrar and Pathologist.
HOMERTON FEVER HOSPITAL—Resident Medical Officer: applications, 16th.
HOMERTON SMALL-POX HOSPITAL—Resident Medical Officer: applications, 16th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Resident Clinical Assistant: applications, 5th; Medical Committee, 7th.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Lecturer on Comparative Anatomy and Zoology. Curator of the Museum: applications, 5th.

LIVERPOOL SOUTHERN HOSPITAL—Senior House-Surgeon: applications, 10th.

MANSFIELD UNION—Medical Officer and Public Vaccinator for District No. 2.

MANSFIELD WOODHOUSE VILLAGE INFIRMARY—Surgeon.

MIDDLESEX HOSPITAL—Assistant-Physician: applications, 15th; election, 24th.

MITFORD AND LAUNDITCH UNION, Norfolk—Medical Officer for the Hardingham District.

MORPETH DISPENSARY—House-Surgeon: applications, 25th; election, Dec. 9th.

PADDINGTON—Medical Officer for the Eastern District: 9th.

ST. GEORGE DISPENSARY, Mount Street, Grosvenor Square—Physician-Accoucheur.

ST. MARYLEBONE—Medical Officer for St. John's District.

UNIVERSITY OF LONDON—Examiner in Chemistry: applications, 15th.

WESTERN GENERAL DISPENSARY, Marylebone Road—Physician; Physician- (or Surgeon-) Accoucheur; Surgeon-in-Ordinary: applications, 7th; election, 9th.

WESTHAMNETT UNION, Sussex—Medical Officer and Public Vaccinator for the Rumboldswyke District: applications, 11th; election, 14th.

WEST SUSSEX AND CHICHESTER INFIRMARY AND DISPENSARY—Surgeon: 17th.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY—Surgeon.

WHITEHAVEN COLLIERIES—Surgeon to the Howgill Division.

WORKSOP UNION, Notts—Medical Officer for the Cuckney District.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

ROBERTS, John Ll., M.B., appointed Physician's Assistant in the Royal Infirmary, Manchester.

*WRIGHT, Charles J., Esq., appointed Lecturer on Physiology in the Leeds School of Medicine.

BIRTHS.

HARMER.—On November 1st, at Hawkhurst, the wife of *W. Milsted Harmer, M.R.C.P., of a son.

SOPER.—On October 23rd, at Clapham Road, the wife of *William Soper, Esq., Surgeon, of a daughter.

MARRIAGE.

*SMITH, Walter, Esq., Surgeon, of William Street, Regent's Park, to Susan, youngest daughter of the late Alexander G. Ross, Esq., of Bradford, Yorkshire, at St. Giles's, Camberwell, on October 31st.

DEATHS.

*CHILCOTE, Walter Edwin, Esq., Surgeon, of Bridgetown, Totnes, at Brixham, aged 53, on October 20th.

LOE, Charles, Esq., at Leeds, on October 15th.

LOE.—On October 28th, at Leeds, Louisa, the wife; and on October 30th, Louisa Neville, the infant daughter; of *James S. Loe, Esq., Surgeon.

THE NORFOLK AND NORWICH HOSPITAL will, next year, have been formed one hundred years, and it is proposed to commemorate the event by a considerable enlargement of the building.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Gardner, Box; Dr. Sawyer, Birmingham; Mr. P. H. Holland, London; E. T. T.; Mr. W. Taylor, Cardiff; Dr. Henry Barnes, Carlisle; Dr. Drysdale, London; Mr. A. Sarjeant, Sandy; Mr. H. H. Barker, Blackburn; Messrs. Weiss and Son, London; Mr. J. Godfrey, Northampton; Mr. John Fox, Bath; Mr. Haward, London; Mrs. Heckford, London; Dr. Phillips, London; The Secretary of the Ethnological Society; An Old Associate; Mr. R. W. Watkins, Towcester; Etudiant avancé; Mr. C. J. Wright, Leeds; Dr. Parsons, Dover; Messrs. W. H. Smith and Son, London; Dr. Taylor, Penrith; Dr. Ransome, Bowden; Mr. W. Stokes, Dublin; Dr. Nicolson, Portland; Dr. Walter Dickson, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. C. Theodore Williams, London; Dr. D. Embleton, Newcastle-upon-Tyne; Dr. Mapother, Dublin; Dr. Blandford, London; Mr. W. Tresidder, London; Dr. E. Symes Thompson, London; Dr. Maudsley, London; Our Birmingham Correspondent; Mr. A. F. McGill, Leeds; Dr. J. Ford Anderson, London; Mr. T. E. Jones, Tyn Tull; Mr. T. Watkin Williams, Birmingham; Mr. A. Fleischmann, Cheltenham; Mr. T. Q. Couch, Bodmin; M.D.; Mr. W. B. Fegen, Weymouth; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. W. Boyd Mushet, London; Mr. Arkwright, Bowden; The Secretary of the Royal Medical and Chirurgical Society; Dr. Lanchester, Croydon; The Secretary of the Clinical Society; The Secretary of the Royal College of Surgeons, Edinburgh; Dr. Broadbent, London; Mr. J. F. Grove, Birmingham; Messrs. Calvert and Co., Manchester; Mr. T. Churton, Erith; Mr. Ward, Newcastle Emlyn; Messrs. Harvey and Reynolds, Leeds; Mr. W. A. P'Anson, Newcastle-upon-Tyne; Mr. G. C. Coles, London; Mr. J. F. Furniss, Castle Eden; Our Dublin Correspondent; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. J. D. Hill, "Primary Excision of the Knee-joint", and "Aneurism by Anastomosis"; Dr. Sansom, "On Putrefaction, Fermentation, and Morbid Infection".—Epidemiological Society.—Entomological Society.

TUESDAY.—Ethnological Society of London, 8 P.M. Mr. Hector McLean, "On the Kimmerian and Atlantean Races"; Mr. C. R. Markham, "Note on the name Aymard"; Mr. David Forbes, F.R.S., "Reply to this Note".—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Hilton Fagge and Mr. Durham, "On the Electrolytic Treatment of Hydatid Tumours of the Liver": succeeded by Second Special General Meeting, to confirm Proceedings of that of October 25th.

WEDNESDAY.—Hunterian Society, 7.30 P.M., Meeting of Council. 8 P.M., Open Meeting for Exhibition of Pathological Specimens, and Discussion of Miscellaneous Cases. Dr. Peacock, "On the Leper Hospital at Lisbon".

FRIDAY.—Clinical Society, 8.30 P.M. Mr. Durham, "A remarkable Case of Spontaneous Fracture of the Femur"; Dr. Wiltshire, "On Paroxysmal Hæmaturia"; Mr. T. Smith, "On the Nature of the so-called Congenital Tumour of the Sterno-mastoid"; Dr. Handfield Jones, "A query as to the safety of Subcutaneous Injections"; Mr. Pollock, "Report of Cases of Skin-grafting and Skin-transplanting".—Royal Astronomical Society.

EXPECTED OPERATIONS AT THE HOSPITALS.

GREAT NORTHERN HOSPITAL, Wednesday, November 9th, 2 P.M. Amputation at the Thigh, for Abscess of Tibia, by Mr. T. Carr Jackson.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

DENTAL SURGERY IN GENERAL HOSPITALS.

WE extract the following from the third annual report of the Croydon Hospital, finding it to be a more detailed and useful report of departmental work in a general hospital than is often met with, and considering it to be not only interesting and creditable in itself, but capable of affording useful suggestions for other institutions. The Croydon General Hospital contains eighteen beds. Its dental surgeons are Mr. S. L. Rymer, L.D.S., and Mr. J. Steele, L.D.S. Their report included in the general report of the institution for 1870, is as follows. "The number of patients received in the course of the last twelve months has been 260; of operations, etc., performed, 334. The classification is as follows:—Extractions under nitrous oxide gas, 148; under electricity, 20; ordinary, 40; stoppings, 73; miscellaneous, including scaling and regulation cases, 53; total operations, 334. The introduction (in September last) of the use of the nitrous oxide gas has proved a great boon, as the extraction cases which present themselves at the hospital are generally severe in character. By aid of the gas, the most troublesome of these operations have been performed without pain, and with safety. The gratitude of the patients has been evinced by their readily contributing small amounts, according to their means, towards the expenses attendant upon the administration of the gas. In the twenty cases of extraction in which electro-galvanism was employed, a decided mitigation of pain was observed; and this agent may, therefore, be regarded as an useful auxiliary in certain instances. The dental surgeons would again call the attention of all who can influence their poorer neighbours, to the importance of daily cleansing their teeth, and of having the faulty ones attended to in time. The proportion of extractions to other operations recorded would then be much smaller, and many teeth, not being in too advanced a stage of disease, could be rendered permanently useful."

NOTICE.—It is requested that all Letters, etc., intended for the Editor or the Publisher of the BRITISH MEDICAL JOURNAL be addressed solely to the Office, 37, Great Queen Street, London, W.C.

E. S. P. is thanked. The document which he forwards from "Mr. Talbot Bridgewater, M.D., and Mr. Clarendon, M.D., M.R.C.S., etc., etc., with their compliments," is professionally absurd and scandalous. The persons named are not Members of the London College of Surgeons. In fact, their names do not appear in the Register.

AN OLD ASSOCIATE.—The Licence of the Royal College of Physicians does not give the title of M.D.—The fee is fifteen guineas.

UTILISATION OF SEWAGE.—The system of applying sewage to the cultivation of land has been for some time under experiment at Lodge Farm, Barking, under the superintendence of Mr. Henry J. Morgan; and a report on the subject for the year ending August, 1870, has been just issued. It appears that, under circumstances of exceptional difficulty, the result has been favourable; as from 184 acres 23 perches of rather porous land cultivated with sewage, a return of £5,423:9:9 has been obtained—500,871 tons having been applied to 112 acres 3 roods 23 perches; while the balance in favour of the farm is £1,232:1:5, from which a deduction of £612:17:4 is made—the amount of loss by the death of dairy-cows.

ACCORDING to the *Standard*, 50,000 illegitimate children are annually born in this country; and while the highest mortality among legitimate children reaches 30 per cent., the mortality amongst illegitimate children reaches 90 per cent.

DR. H. BARNES (Carlisle).—Omitted by accident: safely received.

REGISTRATION OF DISEASE, AND THE POOR-LAW MEDICAL SERVICE.

SIR,—In the remarks made by several members of the deputation which waited on Mr. Göschen on the 17th instant, it was urged that no system of registration of disease could be satisfactory until the whole Poor-law medical system had been recast, several speakers intimating that the direction of the change should be towards the Irish system. Whilst admitting to the fullest extent the need for reform in the Poor-law medical system, I am at a loss to understand how any one conversant with the working of the Poor-law in this country could find any difficulty in at once grafting upon it a system of disease-registration. No change that I can conceive could make it a more efficient instrument for this purpose than it is at present.

Every Poor-law medical officer is already required to register every case of sickness which he is called upon to treat. The only thing required to make this available for public purposes, would be to append to each weekly return a statistical portion, in which should be printed, in the left hand column, the names of diseases, and, in horizontal lines, the age, in decennial or any other periods. The insertion of a figure opposite the name of the disease, and under the proper heading for age, would, as only new cases would be entered, suffice, with a very little expenditure of time, to make a perfect registration of the diseases treated within any given medical district. If cases of zymotic diseases were returned weekly, and other cases only monthly or quarterly, it would still further reduce the work. Forms so filled in should be returned to the Clerk to the Guardians for each Union, who should be directed without delay to forward them to some district authority, whose duty it should be to collate the information so used, according to some definite form, and transmit the same to the statistical department of the Poor-law Board, which would find no difficulty in embodying them in an annual report.

Poor-law medical officers would require, and ought to have, some definite remuneration for this service, but it need not be much. The machinery for this purpose is ready to hand, and of the very best description, and the whole might be in active operation in a short time. The diseases treated by the Poor-law Service would form a fair index of the sanitary condition of a locality, and the knowledge of them a valuable assistance to the sanitary supervision of the country.

The only addition to the present organisation required would be that in each district (the area of which would have to be determined upon, and which might be raised to those at present assigned to a Poor-law Inspector) there should be an officer, with medical knowledge, whose business it should be to collate the returns as they were issued, and transmit them to the Poor-law Board. He would, at the same time, be able, as occasion required, to direct, by letter, the attention of Boards of Guardians, or any other sanitary authorities, to any unusual prevalence of disease in any fever district indicated by the returns.

By this means, the local authorities would be kept alive to the conditions requiring their attention. Such an officer might, in addition, perform the duties of a Medical Inspector of the Poor-law arrangements within his district, and from time to time, by personal supervision, see how the work was done, note shortcomings in local authorities, and keep the Board informed on all the more salient points in the sanitary condition of his district. Of course, special localities and special circumstances might and would require extraordinary interference, as they do at present. Under the system proposed, these special circumstances would be noticed earlier, and thus interference might be more prompt and efficient. Moreover, this constant supervision would engender a more active spirit in local authorities.

That there is need for a reform of our Poor-law medical organisation, no one can for a moment deny. All I contend for is, that it rests on other grounds, and is fettered by other conditions, than those which apply to the registration of disease. The common sense of the public demands medical inspection of the vast areas of disease under the control of the Poor-law Board, and there is no reason whatever why this inspection should not be combined with an efficient registration of disease. Medical inspectors, with sufficient clerical assistance, might readily collate the returns from large areas in a form suitable for the purposes of public health, and return them to the Poor-law Board.

Whatever may be the hereafter of our sanitary legislation, I do not think that it will be either wise or in the interests of the public, to amalgamate the care and inspection of sick paupers with any system hereafter to be adopted of public health. The Poor-law work ought to be in conformity with the system of public health, and ought to be so organised as to render material assistance in our future sanitary organisation, but it must be distinct. Unless the principles on which Poor-law relief is at present administered are to be swept away, which would be a huge social mistake, it would never be wise to separate the medical relief of paupers or its inspection from the control of the Poor-law Board. Such, at all events, are the views of one who has spent a great portion of his life in the practical work of the Poor-law.

Castle Gate, York.

P.S.—The suggestions in this letter affect only principles, and make no pretence to a detailed system.

I am, etc.,

S. W. NORTH.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

HYDRATE OF CHLORAL.

SIR,—Will you kindly inform me how hydrate of chloral ought to be kept, as some I have in a bottle with a cork-stopper is undergoing, I suppose, some chemical change, as the salt is blackening at the edges? Does the change affect the therapeutic use of the drug?
I am, etc.,
October 29th, 1870.

E. T. T.

TREATMENT OF ITCH.

SIR,—As Surgeon of a County Gaol, may I ask those of your readers who hold similar appointments what is the cheapest, most certain and expeditious way of treating the itch, with the least interruption to the labour imposed on the prisoner?
I am, etc.,
Bodmin, October 29th, 1870.

THOMAS Q. COUCH.

MICROSCOPES.—M.A. (Cantab) asks: Which is the best, the cheapest, the handiest, and the simplest microscope, suiting every want a medical man can possibly have? So many and such complex articles are in the market that one is quite confused.

* * To give a dogmatic answer as to the excellence of this or that microscope, would be to do an act of injustice to many of the optical instrument makers. Our correspondent will, however, find a trustworthy guide in the Report on Microscopes by Professor Michael Foster, published three years ago in this JOURNAL, and reprinted in the form of a pamphlet, which may be had at the office of the JOURNAL.

CHEMICAL METHOD OF TREATING THE EXCRETA OF TOWNS.

SIR,—In your notice of Mr. Stanford's paper on a Chemical Method of treating the Excreta of Towns, at page 465 of the JOURNAL, you appear to endorse his extraordinary statements. It is quite fair to quote them as his, as probably you intended to do, but the impression conveyed is that you accept them as correct, which is not creditable to the JOURNAL. It is not true that the only or one chief objection to the dry system is the large quantity of inert material, or the difficulty of obtaining the necessary supply of earth. There is no such difficulty; it is only a question of cost. The real difficulty is in getting any troublesome business regularly done. Pigsties may be kept so clean as to be no nuisance; but the difficulty practically of making everybody keep a pigsty clean is so great, that it is the general conviction that pigs should not be kept in towns; that the profit of so keeping them is not equal to the risk—the practical certainty—of many of them being nuisances. It is just the same with dry closets. No doubt they may, like pigsties, be kept without being offensive; but if they be allowed, everyone will be rendered dependent for his safety upon his neighbours' carefulness. That is the chief difficulty. Why should the risk be incurred? Is it worth while for every one of us to become a maker of manure, for the sake of saving, at the most, say £1 a year per family, two-thirds of a penny a day? As I have before said, I have no fatal objection to the business *per se*, but I decidedly object to it at so low a salary.
I am, etc.,
P. H. HOLLAND.

Burial Acts Office, 8, Richmond Terrace, Whitehall, S.W., October 29th, 1870.

THE *New York Medical Gazette* has the following concerning the recent statement of Dr. Drysdale in medical periodicals that he hears from Mr. Conway, a distinguished American literary man in London, that, since the establishment of facility of divorce in Indiana, U.S., there has been hardly any prostitution in that State, and that comparatively few persons avail themselves of the six months notice for incompatibility granted by the laws. "Whence Mr. Conway derived the above remarkable statistical information" (says our American contemporary), "we cannot guess; but anything more at variance with the commonly received impression on this side of the Atlantic, it would be difficult to conceive. The actual extent of prostitution in the towns of Indiana, we have no means of ascertaining accurately, though, from what we can learn, it would seem to be certainly no less than in other communities; while in the matter of applications for divorce, either the law-reporters of the local press or Dr. Drysdale's informant must be sadly in error. Perhaps, however, Mr. Conway spoke in a vein of unappreciated irony; or, noting his listener's unsophistication, yielded to the American proclivity for hoaxing. Under any circumstances, we would advise Dr. Drysdale not to rest his sociological theory on such a foundation without further investigation of statistical facts."

MID-KENT.—A man holding the qualifications of L.R.C.P. Lond. and L.F.P.S. Glasgow, is not of right entitled to call himself Doctor; but he may designate himself as "Physician and Surgeon".

MR. W. TAYLOR (Cardiff) is thanked for his enclosure: his letter has been attended to.

ERRATUM.—The fibrous tumour of the uterus, reported at the recent meeting of the South Midland Branch (see last week's JOURNAL), was 26 inches in the longer circumference, and 21 inches in the shorter circumference. Its weight was 13 lbs. 6 oz. The induction of premature labour had been proposed to, but declined by, the patient.

MR. ARKWRIGHT (Bowden).—Impossible to publish the case, except as a communication from yourself, and in the usual manner.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, Oct. 3rd; The New York Medical Gazette, Oct. 15th; The New York Medical Record, Oct. 20th; The Boston Medical and Surgical Journal, Oct. 20th; The Madras Mail, August 22nd; The Shield, Oct. 23rd; The Birmingham Daily Post, Oct. 29th; The Darlington and Stockton Times, Oct. 22nd; The York Star, Oct. 1st; etc.

BOOKS, ETC., RECEIVED.

Statistical Report of the Health of the Navy for the year 1868.
Introductory Address delivered at the opening of the Session 1870-71, of the Liverpool Medical Society. By R. Hamilton, Esq. Liverpool: 1870.
An Introduction to the Osteology of the Mammalia. By W. H. Flower, F.R.S., etc. London: 1870.
Laws, List of Officers, etc., of the Poor-Law Medical Officer's Association.

RETROSPECTIVE ADDRESS

OF THE

PATHOLOGICAL SOCIETY OF READING.*

BY R. C. SHETTLE, M.D.,

Physician to the Royal Berkshire Hospital, etc.

GENTLEMEN,—When at the last meeting of the Pathological Society of Reading you did me the honour of electing me to give the annual retrospective address, I felt I could not do otherwise than accept the office; but in doing so I requested, and again ask, your kind indulgence for my shortcomings, which I foresaw would be many; the more especially as, from the little time I have been connected with the Society, I have had but a small amount of experience as to the nature of such addresses. I take it, however, that it is required of me to embody in one paper—which is limited in the time of its delivery to one hour—the whole of the valuable matter that has been discussed and the chief points of interest in cases that have been recorded; and to give a brief but concise account of the papers that have been read during the past year. I am further requested to append some remarks on the action of chloral on the blood, and to enter minutely into the pathology of tetanus. It will be seen at once that it would be perfectly useless to endeavour to embrace and do justice to all these matters, even in a much greater amount of time than could be allotted to this address. I will, however, at once proceed to the work; and, with the exception of the pathology of tetanus, which must be reserved for another time, carry you through the subjects as far as time and your patience will permit.

The first meeting for the Session 1869-70 took place on October 20th; and I find it recorded that Dr. Woodhouse was elected Medical President, and Mr. May, sen., re-elected Surgical President, for the year. It is unnecessary for me to remark that the election of these gentlemen to such important offices reflected as much honour upon the Society as upon them.

After a few other preliminary matters of business had been concluded, Mr. Walford called attention to a case of Emphysema that had been under his care. For some days prior to death, the patient had suffered from constant cough and horribly foetid breath. After death, caries of the cricoid cartilage, and consequent abscess, were found to exist; fibrinous deposits also occurred in the ventricle and pulmonary artery; and Mr. Walford pointed out that these deposits often follow subinflammatory affections of the lungs, such as would be induced by a narrowing of the air-passages.

A Hypertrophied Heart was also exhibited by the same gentleman. The specimen was taken from a man who had died aged 75. For a long time previous to death he had been breathless, and towards the last was generally asleep; but, when roused, always woke up in a breathless state. The chief feature of interest in the case was a large clot in the left ventricle, where, it was supposed, it had existed for some time.

Mr. Maurice exhibited a Tumour which he had removed from the Vulva. It had been growing about a year. It was believed to be fibroid.

Mr. Vines read an important paper on Scarlatina; but I regret to say that this paper is not forthcoming with the others given me by the Secretary, and I am therefore unable to draw attention to the particular points referred to by Mr. Vines. I hope, however, that it will soon be sent to be preserved amongst the archives of the Society.

At the meeting of November 17th, Mr. Moxhay presented a little girl who had been the subject of remarkable Deformities of the Ears and Face. In a paper which Mr. Moxhay read on the case, I find it stated that, in addition to the proper complement of two perfect ears, there were on the right side three rudimentary auricles—one rather a perfect specimen, being divided into helix, antihelix, tragus, and anti-tragus, and a depression from the meatus. Its direction was downwards and forwards; the depression marking the meatus being upwards close to the natural ear, and the top of the helix downwards. On the left side there were two of these abnormal growths—one representing a fleshy lump, with cartilage in and beneath its substance, just below and in front of the proper ear; the second being a mere projecting tubercle,

but exhibiting, when removed, a cartilaginous meatus dipping deep. All these growths had been removed by Mr. Moxhay when the child was exhibited; but photographs of her appearance before the operation were shown. A congenital deficiency of the right ramus of the lower jaw also existed, which gave a singularly strange expression to the face, resembling somewhat the drawing down of the chin by the contraction of the cicatrices of burns. The author of the paper stated that a curious reason was given by the mother of the child for these abnormalities. It seems that the woman was suddenly frightened by a boy who was the subject of contractions in the neck, which drew down his chin and lips in a manner very similar to the deformities described above. Upon receiving the fright, the poor woman immediately put up her hands to her ears.

Numerous other cases of a like nature were referred to, in support of the opinion that a mental impression made on the nervous system of the mother is capable of giving rise to certain abnormal growths or deficiencies in the offspring she is then carrying. As a subject of physiological research, it appears to me that we cannot over-estimate the importance of these facts; and I think we ought to be much obliged to those gentlemen who will take cognisance of such cases when they occur in their practice, and the trouble of bringing them under the notice of the Society.

The next paper was read by Mr. Harrinson, and was entitled Remarks on the Administration of Chloroform in Labour. From the large amount of practical information which Mr. Harrinson has acquired in such cases, we must attach much weight to his opinion, which may be summarised thus: "That, whilst fully concurring in the benefits to be derived from the administration of chloroform in cases of retained placenta, for cross-births, and in exceptional painful cases, etc., there exist decided objections to its administration in cases of ordinary labour." A practical and somewhat long discussion followed the reading of this paper, in which many members took part.

Mr. George May, jun., read a paper on a case of Concealed Hæmorrhage in Labour. The subject of the attack was thirty-eight years of age, and had just passed the eighth month of her first pregnancy. The symptoms appear to have been characteristic of the case, and the diagnosis was accurately made. The treatment consisted in giving an opiate at first, and waiting for other symptoms to manifest themselves; and when such were sufficiently developed, the membranes were ruptured and ergot was given. The child was soon expelled, followed directly by a large dark firm clot. The uterus contracted well. There was no further loss of blood, and the patient made a rapid recovery.

A discussion followed upon the propriety of waiting, as the author of the paper did, for symptoms of an urgent character, or inducing labour as soon as the patient had recovered from the first shock occasioned by the loss of blood. Authorities appear divided as to the best mode of treatment in such cases; but inasmuch as in this case a most satisfactory recovery took place, we are bound, I think, to give Mr. May credit for acting with all the patience, skill, and judgment, that so formidable a case required.

On December 15th, Mr. May, jun., exhibited a small Tumour, supposed to be Neuroma, which he had removed three weeks before from the peroneal nerve. The patient had suffered from it for a long time as a tender swelling, but not painful except when touched, when the pain was excessive.

Dr. Woodhouse presented a specimen of a curious form of Kidney-Disease, which had been removed from the body of an old man who had suffered from excessive anasarca, and had subsequently died exhausted. The kidney was found to be full of small cavities.

Mr. Walford presented a specimen of true Aneurism of the Left Ventricle of the Heart. A large concretion (clot) in the softening stage was found in the cavity. This case is one of much interest, and is reported on fully by Dr. Peacock in the *Medical Times and Gazette* for February 12th, 1870.

Mr. George May related the particulars of a case of *Post Partum* Hæmorrhage, peculiarly interesting from having commenced so late as the twelfth day after delivery. The hæmorrhage was arrested for one day by injection of the solution of perchloride of iron, in the proportion of one to eight; it then returned, and was finally stopped by the administration of ergot and gallic acid by the mouth, and injection of turpentine and gruel into the bowels.

On February 16th, Mr. Maurice showed some Portions of Cloth which he had removed from beneath the skin, near the navel, of a policeman. It appeared that the policeman slipped from a rick, and had fallen on the handle of a prong, which had penetrated the skin about the pubes, and then passed upwards to the navel, carrying with it the portions of the garment exhibited. The man made a good recovery.

I find, gentlemen, that I had the honour of reading the next paper,

* Read at Reading, on July 20th, 1870.

which had reference to the treatment of Scarlet Fever and some of its sequelæ by means of Nitrate of Silver, Nitrate of Potash, and Nitric Acid. It was an attempt to show that scarlet fever, being a disease of the blood especially, is best treated by such remedies as will stimulate the nervous system, and especially assist the kidneys and skin as the great emunctories in eliminating the morbid matter. Purgative medicines, such as the compound jalap-powder, in the treatment of scarlatinal dropsy, were believed to be decidedly injurious.

At the meeting of March 16th, a specimen of Cancer of the Penis in the Horse was exhibited by Mr. Howell, a veterinary surgeon of this town. Mr. Howell was introduced to the Society by Mr. Moxhay, and showed that the diseased portion consisted of the greater part of the penis, with a large pedunculated tumour of cancerous nature adhering to the glans. It had been removed by the actual cautery. A smaller specimen was shown at the same time, which had been removed three years since by the knife. A stone, nearly of the size of a cricket-ball, taken from the stomach of a pony, was also shown by Mr. Howell at the same time.

A remarkable case of Excision of the Ankle-joint next calls our attention. The subject of this operation was a boy ten years of age, who had been admitted into the Royal Berks Hospital with a compound fracture of the ankle-joint: both epiphyses were detached, and the upper portion of the tibia, stripped of periosteum, protruded at the wound. Mr. Moxhay, the surgeon for the week, removed the detached portions, and then sawed off an inch and a half of the detruded tibia. The boy made a very good recovery, and was subsequently exhibited at a meeting of the Society; there was then only a shortening of one inch. It was altogether an excellent specimen of the conservative surgery of the present day; and, indeed, a very short time since all such cases would have been met by immediate amputation.

A protracted and interesting discussion on the Causes of Typhoid Fever and its treatment subsequently occupied the attention of the Society for the remainder of the evening. The opinion appeared to prevail pretty generally that the virus producing it was not confined to the water drunk by the individual; but that it might, and frequently did, originate the malady when it was disseminated through the atmosphere alone. Excessive cold, it was believed, would thus give rise to it, from the blocking up of water-closet drains, and a defective supply of water. Great and sudden changes of temperature were also supposed to predispose individuals to an attack, as such changes depressed the system. With regard to treatment, the stimulating plan with ammonia, port-wine, and brandy, and the unstimulating with belladonna and beef-tea, had each its representatives. In cases of fever, in which hæmorrhage from the bowels occurred, oil of turpentine was mentioned as a valuable remedy, either used externally with fomentations, or given internally with mucilage. Mr. Harrinson appeared to have found much benefit result from the application of a bandage to the abdomen in those cases where there was much tendency to tympanitis.

On the evening of April 13th, Dr. Wells read a paper on an interesting case of Heart-disease, which was accompanied by an unusual development of the aortic valves. The subject of it had suffered from shortness of breath and cough for several winters; but had been pretty well up to a month before Christmas, when he became very much worse, the breath being very short and the cough exceedingly troublesome, and some pain felt in the lower part of the chest. About six weeks afterwards, the legs began to swell, and then the body became oedematous generally. Next, the pulse became rapid (116) and feeble, and he could no longer lie down on account of his breath. The complexion was dark, and towards the last ascites became evident also. The heart-sounds were weak, but no distinct abnormal bruit was audible, and the action was laboured. Some dulness on percussion existed over the lower portion of the right lung; otherwise the lungs were fairly resonant, but there was considerable wheezing audible all over both lungs. The sputum was copious, and of a ropy mucous character; urine free from albumen; specific gravity 1025; the oedema was relieved several times by incision in the ankles and scrotum. On the morning of April 3rd, he was seized with sudden faintness, and the pulse became imperceptible and the breathing more laboured. He rallied a little under the administration of stimulants, but died about three hours after the above symptoms shewed themselves. A *post mortem* examination was made thirty hours after death. Decomposition was commencing; rigor mortis was well marked. There was anasarca of the legs and scrotum. The serous cavities contained a considerable amount of fluid. The right lung presented many firm adhesions, and much oedema; it was greatly congested, especially the lower lobe. In the left lung there was much general emphysema at the apex, and also on the surface of the lower lobe. There were numerous bullæ, varying in size, some very considerable, apparently formed by the visceral layer of the pleura being elevated by the rupture of some superficial air-cells.

The right cavities of the heart were much dilated. There was a little thickening of the tricuspid valve. The aortic valves were abnormal, consisting of only two semilunar folds; one was a large irregular growth, and a little deposit at the base of the other. There was also some slight atheroma of the mitral valves.

A specimen of Cancer of the Omentum, remarkable for the density with which the cancerous growth studded it, was exhibited by myself. A cancerous tumour existed also in the under surface of the liver, which probably, by its pressure on the duct of the gall-bladder, had given rise to the excessive jaundice from which the patient suffered. The immediate cause of death was exhaustion from slight attacks of hæmorrhage in the bowels. The hardened nodules of the cancerous growth in the omentum could be easily felt through the thinned abdominal parietes before death.

I have next to call your attention to an interesting and rare case of Intussusception communicated on the same evening to the Society by Mr. Harrinson. The case, as you will perceive, was rare as to its mode of formation, and from its occurring in an adult. The subject, Mary Homewood, aged 43, married, with four children, had been in good health up to January 7th, 1870, on which day, whilst engaged in household duties, she was suddenly seized with very violent pains in the abdomen. The bowels had not been relieved for three days. Aperients were given, but no action of the bowels took place until the 13th. Stercoraceous vomiting commenced on the 11th. This case appears to have been under the management of a surgeon in London until January 21st, for I find it stated that on this day the patient was first seen by Mr. Harrinson. The symptoms at this date were those of well-marked peritonitis, great pain, tympanitis, and vomiting, which continued throughout the case. The treatment consisted of the administration of opium. The bowels acted about every third day until within a week of death, and the patient survived with but little variation until March 21st, when death took place by asthenic syncope. At the *post mortem* examination, made twelve hours after death, the intussusception was readily found; it commenced at a point of the ileum two feet above the ileo-cæcal valve. The volvulus was eight inches long: it terminated below in an irregular globular expansion, and was connected with the upper part of the invaginated portion by a narrow neck; it was covered by a superficial layer of mucous and submucous tissue; and immediately about the expanded part was found the slit-like opening of the canal of the volvulus. The intestine below, softened and extremely lacerated, was adherent to the pelvic walls and broad ligament. No perforation existed, but the small intestine above was distended with fæcal fluid.

Two boys, who had been operated upon by Mr. Maurice for Excision of the heads of the Femora, were exhibited on the same evening. Sufficient time had not elapsed since the operation for perfect recovery to have taken place, but they were both doing remarkably well, and the operator was congratulated by Mr. Moxhay on his results.

A paper on a case of Tetanus treated by Hydrate of Chloral, which had terminated fatally by Hæmorrhage, was next read by Mr. Moxhay. The poor fellow, the subject of the attack, was an unhealthy man, twenty-five years of age. One of his hands had been lacerated and the arm bruised and burnt, by the limb having been drawn through the hot rollers of a paper-machine on January 15th. The local applications consisted of poultices, and the bowels were cleared out with calomel and colocynth. He went on well until the 26th, when well marked trismus set in; he was then treated with the extract of Calabar bean and the other remedies for the complaint, but the malady continued to increase. Hydrate of chloral was then given, the first dose, half-a-drachm, being administered at 3.40 A.M., January 28; and although the spasms arching his back were very severe, he fell asleep, and continued to sleep until 6.45. He was then visited by Mr. Royds, and slightly roused, when a slight spasm returned, but he speedily relapsed into a quiet sleep, in which he remained until eight o'clock. At 10.15 the spasms returned, but less violently, until nearly 11 o'clock, when, as they were again severe, another half-drachm dose of the chloral was given, after which he again slept until 2.30. From this time until 2.30 A.M. Jan. 31st, the doses of chloral were given at intervals, with the unvarying result of abating the spasm and producing sleep. At this time, he was sweating much, and the spasms were coming on every minute. Another dose of two scruples was given in two ounces of water: this dose was followed by a distressing cough, and the pulse was much quickened, being now 168. The respiration was abdominal, and 70. Sleep was again produced, and he spent a pretty comfortable day, but at 6 P.M. Mr. Royds was called to him and found him pale and pinched, in fact, death-like in appearance. The pulse was very rapid and feeble, hands cold, and the respiration much hurried at times; he said he felt faint, and took, with some difficulty, wine and milk. A beef-tea injection, with three ounces of brandy, was administered; but he did not rally, and died at 7.45 P.M. After death, some blood was noticed about the arm, and, on closer ex-

amination of the poultice and dressings, a quantity was found, probably amounting to four or six ounces, which had evidently escaped from an opening caused by sloughing into the radial subcutaneous vein, which was exposed for some distance in its course; and this was no doubt the unfortunate cause of the fatal termination of the case. The quantity of chloral given was five drachms and fifty grains. The time during which he was kept under its influence was four days, and the last dose was given nineteen hours before death. No reasonable person could doubt the efficacy of the chloral in this case in abating the spasm, and so relieving the sufferings of the poor fellow; and, if chloral could do nothing more than effect such an end in so terrible a disease, there could be no question but that it is a remedy to which we should have recourse; but it becomes a question whether by allaying spasm much is done absolutely to combat the disease. It must be remembered, however, that the individual in this case was an unhealthy subject, and consequently had not that power of resisting morbid action which a stronger man would undoubtedly possess; and it was exceedingly unfortunate that his death should have been brought about, so to speak, by hæmorrhage; but such an event was not to be anticipated.

After the reading of Mr. Moxhay's paper on this very instructive case, a discussion ensued as to whether passive hæmorrhage from the open mouth of a vessel would be favoured when an individual had been kept under the influence of chloral for some time; and also as to whether the effect of chloral on the blood would render the loss of even a small quantity more than usually hazardous. In regard to these points, it is not possible, from the short space of time that can be devoted to this address, to do more than quote some extracts from a leading article that appeared in the BRITISH MEDICAL JOURNAL on April 23rd, ten days after the meeting of the Pathological Society at which the discussion took place. In this paper, it is stated that Dr. Richardson pointed out that the influence of chloral on the blood, if considerable doses were repeated at short intervals, might be very detrimental. Formiate of soda is formed, and the coagulating power of the blood is much diminished. Dr. Reynolds records the case of a lady of middle age to whom doses of chloral had been given for two days, for neuralgia, with good effect. On the third day, a dose of from forty-five to fifty grains was given, and relief from pain followed. In the course of an hour, however, faintness came on, and increased to an alarming degree. Two hours after this dose, she had cold extremities; a rapid, weak, irregular, intermittent pulse; jactitations of limbs; an intolerable sense of sinking and depression at the pit of the stomach; gasping breathing; confusion of thought; etc. Dr. Richardson further says that dangerous decomposition of the blood may occur before coma is produced; and the symptoms in the case recorded by Dr. Reynolds, which symptoms strikingly resembled those named by Mr. Moxhay as occurring at the last in his case of tetanus, were such as would occur if blood were lost. I cannot possibly enter more fully into this matter now; but it is very evident, that not only is passive hæmorrhage from an open vessel favoured by the administration of chloral, but, from the tendency which exists from the continuous administration of the drug to produce decomposition of the blood, a small loss of blood would be very possibly followed by serious symptoms. Moreover, it can scarcely be a question that the tolerance of the drug is much greater in some individuals than in others; and possibly the same person at different times might bear its administration very differently.

At the meeting of May 25th, the particulars of a very interesting case of Ovarian Tumour were brought forward by Mr. Harrinson, who related the particulars as follows. Mrs. C., aged 49, whose catamenia were regular up to September 1st, 1868, but latterly irregular and slight for three or four times, had been ailing, sick, and increasing in size, since the last period in September 1869. Mr. Harrinson first saw her on October 15th, 1869, when she told him she fancied that she was pregnant. On January 7th, 1870, she was still increasing in size; but, on a vaginal examination, he could not make out the signs of pregnancy. The mammae were not enlarged. The abdomen was large; but the outlines of any tumour were ill defined, except that the enlargement mainly occupied the left side. As it became a question whether the enlargement was extrauterine or ovarian, Mr. Harrinson sent her to Mr. Spencer Wells, who, in writing on January 7th, said:—"I feel sure that the tumour is uterine: whether fibrous enlargement or pregnancy, I cannot say, as I don't like to use the sound, on the chance of doing harm. There is a shortened state of the cervix, being suggestive of pregnancy, and rather against the theory of fibroid enlargement." After the receipt of this letter, Mr. Harrinson waited until the beginning of April, when her size had enormously increased. There was ascites, and also œdema of the lower limbs, and also of the lungs. No scruple was now felt about using the sound, as the seventh month of assumed pregnancy had arrived. The instrument entered without obstruction for four inches, and moved equally freely in all directions.

On April 27th, Mr. G. May saw her, and diagnosed left ovarian disease; and on April 28th she was again sent to Mr. Spencer Wells, with the opinion that no pregnancy or uterine tumour could be discovered, but only a swelling containing mainly fluid, but at the upper parts some linear solid. Mr. Spencer Wells replied: "Whether there may or may not be an ovarian cyst to the left, where there is fluctuation, the uterus is evidently enlarged, and has a nodular growth closely attached to its posterior surface, easily felt both by vagina and rectum. Let us hope it may not be malignant. There is evidently also some ascitic fluid, which might be removed by tapping, but not very much." After this, she rapidly went down. Mr. G. May saw her, and tapping was thought to be inexpedient; and she died on May 9th. A *post mortem* examination, made twelve hours after death, revealed very great distension of the abdomen; fluctuation was perceptible. On puncturing with a trochar in the usual situation of paracentesis, a small quantity of fluid slowly trickled out. On laying open the cavity, however, a large quantity, estimated at seven quarts, escaped; and there was found, occupying the abdomen, a large tumour, partly solid, and partly cystic. The trochar had entered one of the cysts. The tumour had adhesions to the great omentum and to the intestines; these were for the most part recent and easily broken down, though at one part it was firmly adherent to the intestine. The tumour sprang from the left broad ligament, and had no other connexion with the uterus, which appeared perfectly healthy, except for a very small nodule at the left of its fundus. It was drawn up by the tumour at its left side, and its fundus tilted towards the right. The left Fallopian tube stretched upwards on the left side of the tumour. The tumour was removed by cutting through its narrow pedicle. In the great omentum was discovered a nodule of the size of a hazel-nut, milky white in colour; on cutting into it, it was found to be firm, but not hard, and a milky juice exuded from it. The tumour, after removal, weighed about seven pounds, and consisted chiefly of a solid oval mass with a thick-walled cyst in its upper part, capable of containing about one pint and a half. On cutting into the solid mass, it was found to consist chiefly of a tough cheesy-looking substance, streaky in appearance with red lines, and with numerous small cells, chiefly at the margin. On examination of a portion with the microscope, small granular cells were found, but without variety; but in the tubercles from the omentum were a variety of cells of variable size and shape. Death was clearly occasioned by peritonitis. The tumour, with the notes of the *post mortem* examination, were sent to Mr. Spencer Wells; and he wrote in reply: "I never saw an ovarian tumour like it, whereas it has all the characters of a fibroid tumour of the uterus in an advanced stage of fatty decay and softening; and I believe it must have been a fibroid outgrowth from the uterus." I have gone fully into this instructive case; for, as Mr. Spencer Wells says, "practically the exact nature is very important; for, if a softening fibroid can give rise to constitutional symptoms resembling those of cancerous cachexia, and can also, as this clearly was, be removed by operation, we undoubtedly ought to remove such a tumour, and might hope that, the cause being removed, the constitutional effect would subside." The case also, in the words of Mr. Harrinson, shows the difficulties that still environ the correct diagnosis of uterine and ovarian tumours.

On the same evening, Mr. Harrinson read a paper on a case of Twin Pregnancy, in which two pouches of fluid presented at the same time. When the os uteri was sufficiently dilated, the anterior bag was ruptured, and the first child was rapidly born; the second child followed in seven minutes, and both mother and children did well. This was followed by a paper on Medical Causation by Dr. Johnstone, for which the thanks of the meeting were accorded him. The subject is undoubtedly, as Dr. Johnstone remarked, a very important one, with regard to the treatment of disease on purely scientific principles; and I regret I cannot now more fully enter upon it, and so do justice to Dr. Johnstone's well digested paper.

Although I have trespassed long upon your time, I must beg that much consideration may be given to the case I have now to bring before your notice. It is a case of Traumatic Tetanus successfully treated by the Hydrate of Chloral, by Mr. George May, jun., and communicated to this Society at their last meeting of June 15th. Joseph Ireson, aged 13, a farm boy, was admitted into the Royal Berkshire Hospital, March 11th, 1870. Three weeks previously, his right hand was caught in a cog-wheel, and all the fingers were seriously injured. Before the accident he had been in good health, and continued well until March 9th, when he complained of sore throat, followed by startings of spasms. Whilst being carried to bed, he suffered from severe spasms, becoming perfectly rigid. He was given fifteen grains of hydrate of chloral, after taking which he was quieter and slept, but cried out with startings in his sleep. A lotion, of one grain of hydrochlorate of morphia to one ounce of water, was added to the poultices, but spasms continued to occur every ten minutes, being brought on by every attempt to swallow.

On the 13th, he was ordered Calabar bean, and powdered rhubarb, of each three grains, every hour. On the 14th, three grains of calomel and ten of rhubarb were added to the powder, the bowels being confined. On the 15th, he had a violent attack of spasm, the eyes being fixed, the face livid, and respiration almost suspended. He was restored by artificial respiration. On the 16th, a grain of Calabar bean powder was ordered every half hour. He took four doses, and then felt faint. In spite of the faintness, chloroform was given with advantage, and twenty grains of hydrate of chloral were injected into the rectum. On the 20th, another attack, almost fatal, was relieved by artificial respiration with the simultaneous administration of chloroform; hydrate of chloral being at the same time injected into the rectum. On April 2nd, ten minims of tincture of cannabis Indica were ordered to be given every four hours. On the 4th, the Indian hemp was omitted. This quantity of chloral was increased to two scruples. On the 19th, the spasms were still severe. From this time they gradually ceased, and by the 29th were scarcely perceptible. On May 15th, he was allowed to leave his bed, having been nine weeks under treatment. The objects aimed at in the treatment were perfect rest and the avoidance of every source of irritation. The food was given of such a nature as could be easily digested without mastication. The injured fingers were soothed by an anodyne poultice. The Calabar bean and Indian hemp did not appear to do good. The hydrate of chloral given by the mouth and by the rectum, although it did not always prevent spasm, yet caused sleep, and thus powerfully aided in the patient's restoration to health. The relief of the spasms of the muscles of respiration afforded by the chloroform, with artificial respiration, Mr. May says is especially worthy of note; and in that opinion I believe we shall all concur; for, had not such relief been afforded, and the respiration thus enabled to go on, it is quite certain that the patient must have died; as it was, his life was spared to treatment deserving the highest praise, and reflecting the greatest credit upon those who had the care of him.

I have thus brought my little work to a conclusion, and for all its imperfections I must again ask your kind indulgence.

ON THE SHOULDER-TIP PAIN, AND OTHER SYMPATHETIC PAINS, IN DISEASES OF THE LIVER.*

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III.

IF we can argue analogically from the other pneumogastric organs, we should conclude that the liver-branches of the par vagum are guided, by the blood-vessels enveloped in the capsule of Glisson, to the acini of the organ, ramifying within and around these, and that they are destined to the bile-ducts and their continuations down to the transverse fissures and to the duodenum. We know already that the gall-bladder and cystic duct are provided with plexuses proper to themselves from these and the sympathetic nerves.

Now, the system of bile-ducts constitutes the essential secreting portion, so to speak, of the liver, as the bronchi and air-cells do of the lungs; the mucous membrane, with its gastric glands, of the stomach; and the lining membrane and muscles of the heart—and these are the parts, in these several organs, to which their pneumogastric nerves are distributed. But to prove or to disprove that the hepatic twigs are really given to the system of bile-ducts, and the sympathetic twigs to the blood-vessels, a more minute and correct anatomy is wanted.

In the absence, however, of satisfactory anatomical information as to the symmetrical arrangement of the hepatic nerves of the par vagum in reference to the right and left lobes, it may not, perhaps, be unreasonable to conjecture that the right vagus supplies mainly the right, and the left vagus mainly the left lobe. For the liver, at an early period of foetal life, is a symmetrical organ, the two lobes being equal, and more equally disposed on each side of the median line of the body than they afterwards are. (Quain's *Anatomy*, 7th Edition, vol. ii, p. 879.) Thus, this organ resembles the other members of the pneumogastric series—the pharynx and larynx, the trachea and lungs, the heart, the stomach, the kidneys, etc.—and these are all supplied mainly on their right side by the right, and on their left by the left pneumogastric. It is well understood that branches are interchanged from side to side; but a symmetrical arrangement of the nerves corresponds, on the whole, to

the symmetrical form of the organs. Is it likely, I would ask, that the liver will be an exception to this rule? I find no reason to think that it will prove so to be, since it contains, in its complicated structure, like the other organs of the pneumogastric series, canals of mucous membrane—surfaces of impression, surrounded by walls of muscular fibre, for motor purposes, viz., in the ductis communis choledochus, the hepatic and cystic ducts, and the gall-bladder. Again, the blood-vessels, the portal veins, and hepatic arteries, the lymphatics and the hepatic ducts, are all so far symmetrically arranged as the differing size of the two great lobes will admit; and no doubt the nerves are subjected to the same arrangement.

Further, analogy as to disposition of parts, structure, and distribution of their nerves in the other members of the series, is in favour of the above conjecture, which receives strength also from the pathological observations of John Hunter, Sir Thos. Watson, and others, viz., that it is the right shoulder that is pained when the right lobe of the liver is diseased, and the left shoulder when the left lobe is affected. These observations clearly imply that the lobes and the nerves of the liver are symmetrically correspondent. There is a want of anatomical proof, I am aware, but how is this proof attainable? Observations and facts are wanting; and fresh investigations by competent anatomists are urgently called for in this very difficult field of labour.

From what has been adduced, the conclusion is drawn that the true path of sympathy from a diseased liver to a pained shoulder lies along the lines of the pneumogastric and the two divisions of the spinal accessory nerves.

In a case of hepatitis ending in abscess of the liver, the nerves, along with the other components of the organ, necessarily become irritated, inflamed, and in part destroyed. The result naturally to be expected will be, *inter alia*, pain in the liver, but, as we know, though we cannot account for the fact, the symptoms are often latent, or not observed; when, however, this latency does not exist, as the disease progresses the disturbance of the nerves tends to spread more or less intensely and rapidly to the hepatic plexuses and the nerves that supply them, whether sympathetic or pneumogastric; the great sympathetic ganglia behind the stomach will receive the influence and transmit it to their offsets, or some of them, and these to the viscera supplied by them, hence the epigastric and other abdominal symptoms. The splanchnic and other spinal nerves will carry the influence to the dorsal and lumbar part of the spine; hence the pains in the walls of the chest, the loin, hip, and thigh.

The diaphragm will suffer more or less by contact with the inflamed organ, and through the irritation carried to it along the phrenic twigs of the liver; and so the influence may pass up the trunk of the phrenic nerve to the brachial, and even the cervical plexus, and thus the subclavius nerve and others may be affected, which may account for pain about the clavicle, and partly for that in the side of the neck, and even in the arm. But it is not difficult to conceive that the inflammation or irritation will travel at least as readily along the nerves of the pneumogastric system as along those of the sympathetic or spinal systems, and that it will easily be propagated to the trunk of the vagus on the oesophagus from the gastro-hepatic branches, and pass up the chest; and if the hypothesis of the right vagus going to the right lobe of the liver be correct, then, in the case of the hepatitis and abscess being in the right lobe, the right vagus trunk will suffer more than the left, the nerve-irritation running up higher and higher, till the cardiac, pulmonary, laryngeal, and pharyngeal nerves are reached, and eventually the base of the skull and the side of the medulla oblongata and spinal cord, whence the par vagum and spinal accessory take their origin. Hence, we might expect, and do actually find, pain running up the inside of the chest, dyspnoea, and cough, palpitation of the heart, throat-affections and thirst, cephalalgia, vertigo, etc.

Again, we know that the internal division of the spinal accessory forms a part of the trunk of the vagus in the chest and in the neck, and that under the base of the skull it has intimate connections with the external division, and this again with the pneumogastric. The supposed inflammation, therefore, or irritation, is propagated along this lateral communication also, as far as the terminations of the external division of the spinal accessory in the sterno-cleido-mastoid and in the trapezius muscles, where, particularly in the latter situation, it is felt as active pain or merely as tenderness on pressure. It is worthy of reiteration, that the pains and other disturbances in the organs and parts named are precisely those which we meet with in liver-diseases that are not latent.

The shoulder-pain varies with the affection of the liver in intensity; as the latter increases, the pain corresponds; as it diminishes, the pain lessens or subsides. After the pus of an abscess has been evacuated, and tension is removed, the shoulder-pain disappears.

The pain has been noticed by authors in the following liver-diseases,

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

viz.:—Congestion; acute and chronic inflammation (hyperæmia), whether of the upper or under parts; hepatitis, with abscess; cancer; hydatids, producing great hepatic disturbance; gall-stones, impacted and detained in the ducts; occlusion of the ductus communis choledochus, with dilatation above from cancer of the head of the pancreas; and in a case of abdominal aneurism compressing the liver.

As to the nature of the sympathy, it has, of late, generally been called nervous irritation, a term difficult to be understood.

Dr. Copland, in his *Dictionary*, tells us that Baglivi attributed the sympathies of organs to membranous connection; Bordeu to the cellular tissue; Willis and Vieussens to the agency of the nerves; and Whytt and Broussais chiefly to the brain; Prochaska to the sensorium commune, to which he believed all the nerves to be continued. Dr. Klein Grant defines sympathy as "that relation of the organs and parts of a living body to each other, whereby an action excited in one part induces a corresponding action in another part."

The doctrine of sympathy held in the seventeenth century, and which arose out of the then prevalent theory of magnetism, was thus defined by Dr. Walter Charleton, Doctor in Physic, and Physician to the late King, in his *Ternary of Paradoxes*, 1650:—"The secret power of natural actives, working on analogous and determinate passives, by invisible emanations, or an influential energy transmissive to remote distances."

I believe, from the pain and tenderness of the nerves, and from the state of the hepatic organs, that the sympathetic state subsisting between the shoulder-tip and the liver is a real hyperæmic or inflammatory condition of the nerves concerned, and of their sheaths. To this it may be objected that it is not likely that a long nerve like the par vagum should be inflamed and continue to be so from end to end without the inflammation being communicated to the tissues in contact with the nerve along its course; but it may be cited in answer that the sciatic and other nerves are, for example in rheumatism, so affected, and may for months continue to be so, and yet the inflammation does not spread much or at all to adjacent parts. It has been suggested that, as the pain intermits, it may not be of an inflammatory nature; but we know that sciatic and other rheumatic pains of indisputably inflammatory nature, are most commonly of an intermittent or remittent character.

There is no *post mortem* evidence adducible that would imply the presence of inflammation in the par vagum during life; and if there be any peculiar state of a nerve which, without being inflammatory, will produce pain, I confess my ignorance of its nature, though I cannot deny that such a state may exist.

If the sympathy of the shoulder with the liver in its diseases consist in an inflammatory state of the nerves connecting these parts, as I believe it does, then the mystery which has so long hung over morbid sympathies is dissolved and disappears, and we get rid of an ancient incubus.

With regard to the *diagnostic value* of the shoulder-tip pain in liver-diseases, it has only attracted attention in cases in which it has been severe, but as has been previously remarked, it often exists when it does not amount to a prominent symptom, and may be detected when the patient is questioned, and the shoulder and neck are examined by pressure; and, as patients are unacquainted with the knowledge of the track of the nerves, it is not easy for the observer to be deceived.

It is a symptom corroborative of the others, and must be taken into account with them. In proportion to its severity in hepatic disease, it indicates the amount of inflammatory action going on in the liver, and the extent of damage done to the structure of the organ; it may, however, occur in disease of the corresponding lung, or of the corresponding wall of the stomach. We must then attend to and estimate the other symptoms present in the case before us.

Full credit, however, appears due to Hunter, Sir Thomas Watson, and others, who say that a right shoulder-tip pain indicates disease in the right lobe of the liver, and that a left shoulder-tip pain points to mischief in the left lobe; whilst, if the pain be in both shoulder-tips, both liver lobes are involved.

The observations of some authors quoted, as Dr. Copland and Professor Andral, show that no faith can be placed in the assertion of Roche and others, that pain of the right shoulder-tip is clear evidence that the upper and not the lower surface of the liver is the exact seat of disease, for in affections of the lower surface the very sign is recorded. (See Copland and Andral, *loc. citat.*)

It is highly probable, from what has been previously stated, that the nerves are distributed symmetrically according to the lobes, rather than according to the surfaces of the organ.

In cases of calculi impacted in the gall-ducts, the shoulder-tip pain recorded has been that of the right side; but closer observation may show that upon the actual position of the impacted calculus may depend the right or left situation of the shoulder-pain.

Lastly, there arise the questions:—What is the use of this sympathetic pain? Why should it be present in some cases only, and absent in the majority? To the latter of these questions, I do not pretend to answer further than this, that persons are differently constituted, their nervous symptoms may be differently arranged, and their susceptibilities diverse. To the former question, I would say that one can scarcely be satisfied with John Hunter's reason that, the liver-pain being depressing, nature sets up a rousing pain in the shoulder to continue life; for the shoulder-pain is at times so severe as to be worse than that in the liver itself, and such pain can only, and of necessity, exist at a great expenditure of material and of nerve-power, and therefore of vitality. Other authors mention the pain merely as a symptom, without assigning any use to it.

A more satisfactory answer, it is submitted, than that of Hunter, is that the shoulder-pain has, in proportion to its severity, the effect of paralysing, more or less, the sterno-cleido-mastoid and trapezius muscles, and thus these agents of voluntary inspiration are thrown out of gear, so to speak, and the side of the chest is kept to a certain extent inactive and quiet, a condition necessary and congenial to a diseased liver. The pains in and around the chest will similarly limit the action of the diaphragm and of the intercostal muscles, and thus the quiet of the diseased organ is materially provided for. In the same way, it is believed, the pain of the knee in hip-joint disease does good service, by greatly impeding the action of the muscles of the leg.

On some other occasion, I propose to show that this same shoulder-pain occurs in the same way on one side or on the other, in various diseases of the other organs of the pneumogastric series.

RECOLLECTIONS OF WORK IN AN AMBULANCE.

By WILLIAM MAC CORMAC, F.R.C.S., Surgeon to the General Hospital, Belfast.

II.

ON the afternoon of the 30th of August, we were installed in medical charge of the caserne d'Asfeld, and awaiting the arrival of the wounded. Nor had we long to wait; the fact of there being an English ambulance in occupation of the barrack must have been speedily made known, as wounded men almost immediately began to arrive. Severe fighting had been going on all day in the direction of Pont Maugis and Bazeilles, about three miles distant, which we were able to see very distinctly from our elevated position. We had scarcely unpacked our waggons and brought our stores inside, when bearers arrived with stretchers, carrying a number of severely injured soldiers. Others came on foot as best they could, having in many instances marched long distances with wounds in different parts of the body.

Dr. Webb, with two assistants, remained in charge of the door, examining the wounds of those who arrived, a large proportion of which had received attention on the field, and were enveloped in temporary dressings. All who were lightly wounded had their wounds redressed and were then at once sent away, a biscuit or two being given to each of them. Those who appeared to demand further care were passed into the house. Dr. Webb's was no easy task, for everyone who applied was desirous of admission, often in the inverse ratio of the gravity of his injury. However, he was most firm and judicious, and exercised in every instance a wise discretion. About one hundred and thirty-two poor fellows passed through our hands that afternoon.

About six o'clock, when we were getting our affairs into somewhat of order, a gentleman rode up in hot haste to inform us that at the village of Balan, where there had been fighting all day, there were upwards of one hundred wounded, with no one to look after them. He told us the place was about two kilometres, or a little over a mile, distant. Dr. Sims had our ambulance-cart got ready, into which we put surgical instruments, dressings of all kinds, chloroform, carbolic acid, and some provisions, such as Liebig's extract of meat, and biscuits; and he, Dr. Frank, and myself, with Messrs. Blewitt, Wyman, and Hewitt, started for Balan. Just at the entrance to the village we found a number of wounded in the village and houses, and also two carts, each containing three or four wounded soldiers, standing in the roadway. I stopped with a portion of our supplies, and, with the aid of Mr. Hewitt, we set about attending the poor fellows as well as we could. Dr. Wyman, who also stayed with us for a time, was taken away to see another set of wounded, and did not return again to me that night. The rest went on, and spent several hours upon the battlefield, giving all the succour they could to some hundred poor soldiers lying there untended.

I found about thirty cases to look after. In the first place, I took possession of an exceedingly nice empty house; and, with the aid of

the neighbouring people of the village, arranged some beds upon the floor, and extemporised an operating-table in one of the rooms. All this took some time, and it was now quite dark. The first poor fellow whom I examined had his left tibia smashed by a bullet. It was too plainly a case for amputation. He was a soldier of the marines. Mr. Hewitt administered chloroform, and then compressed the artery for me. One volunteer held a candle, whilst another held a basin and sponge, and, under these difficult circumstances, I removed the leg in the upper third. The next was an artilleryman, whose left leg was very extensively shattered by a shell explosion. Both bone and soft parts were much injured. There was great muscular development of the calf. I amputated this leg as the other, by oval skin-flaps and circular division of the muscles. For some days these men received very little attention, but both recovered admirably under the care more particularly of Mr. Blewitt, who remained with Dr. Frank at Balan that night, and subsequently remained there permanently as one of our Balan division. I often saw these two men when I rode out to visit Frank. They got on without a single drawback.

There were several other important cases; for instance, a soldier of the marines, who was shot through the middle of the left deltoid muscle, and the ball passed directly into the chest through the head of the humerus. There was no wound of exit, and a probe passed in an indefinite distance. There were short cough, difficult respiration, and bloody expectoration. It was clearly a case of penetrating wound of the chest with lodged bullet.

Schylter, another marine, was lying insensible with extensive fracture of the skull from a shell. The brain was a good deal lacerated and exposed. For neither of these poor fellows could anything be done.

In another artilleryman, an immense fragment of shell had become wedged between the tibia and fibula, penetrating the calf. It was very difficult to remove. These and the other cases having been attended to, we prepared to return to Sedan, as it was very late, and we were all tired. Amongst us, we must have attended to two hundred and fifty wounded men that afternoon and night.

In spite of our fatigue, we were awakened very early the next day (September 1st) by the sound of heavy cannonading. Towards five o'clock, when it became light, we perceived that everything was enveloped in a dense fog. The troops could not have seen each other, yet the firing commenced between three and four in the morning. It went on *crescendo*, and after the fog lifted, extended all along the lines, which were some four miles in extent. At each end—Floing and Domchery on the north-west, and Bazeilles and Balan on the south-east—the infantry and cavalry came into collision, while on the rising ground in front of us, about a mile and a half distant, we had a fine view of the Prussian batteries of artillery, which, from ten o'clock in the morning until four in the afternoon, literally rained shells upon the French positions just in the rear of the hospital. The French, of course, replied, and there was in consequence a storm of projectiles flying close over our heads in both directions all this time. The heavy guns of the citadel just alongside of us were also firing; and all these, together with the incessant burr-r-r of the mitrailleuse and the musketry fusillade, made us feel as if our quarters were exceedingly hot. Several times the Prussian shells struck the building, and some of them burst in the enclosure and killed and wounded several persons—amongst the rest, two of our male nurses or infirmers, and several soldiers. About four in the afternoon, the German fire was turned in another direction, and the feeling of relief which we all experienced was as agreeable as it was great. At six o'clock, the cannonading and fighting stopped altogether.

During the entire day the wounded were arriving, some hobbling along on foot, some carried upon stretchers. Our guards at the door had no easy task, for, besides the wounded, numbers of demoralised soldiers demanded admission, seeking shelter and protection. In the barrack square not less than 4,000 men of all arms had accumulated, and, as night came on, they lay stretched side by side upon the ground so close as to render it almost impossible even to pick one's way amongst them without trampling on somebody. During all that day I was busy examining the wounded carried into the hospital, and performing operations on those who needed them. These last were done at one of the ward windows, and we were unable wholly to divest ourselves of the unpleasant conviction that at any moment a shell might burst in our midst, dealing destruction to all around. I suppose one would perhaps be accustomed to it in time, but, at first, operating in the direct line of fire, as we were, with the shells continually whizzing in our ears, has a somewhat disquieting influence. I did not succeed in keeping a record of all the work that was done that day; indeed, I wonder I kept any record at all. I find, however, that I performed several amputations of the leg, the thigh, the forearm, and the arm; that I excised the shoulder and the elbow joints; and also performed partial resections of the upper and lower maxillæ, and of nearly the whole ulna. The

number of bullets and pieces of shell that were extracted from various parts of the body are too numerous to reckon. Thus came to an end our second day's work.

As closely as I have been able to calculate, we received, during the course of that day, 274 patients into the hospital, and dressed and otherwise attended to, at the door, 250 more, at the very lowest calculation. It was very hard to turn these wretched hungry men away, but we could not help it—we would otherwise have been overrun; but towards the end of the day our discipline relaxed, and we allowed some of them to get a night's rest and food, which they took lying about on the staircases and in the passages of the hospital.

We were all pretty well exhausted; and, although there were many whose cases demanded interference, we felt it necessary to take some hours' rest. All within had been attended to more or less, temporary dressings had been applied to the wounds, opiates administered to those suffering pain, and some food given to the hungry, and nearly all were tired. Outside, all was quiet. The soldiers in the barrack square lay stretched in profound sleep by their expiring camp-fires. Looking over the town and country, we saw the flames of burning houses in several places, and a loud hum of thousands of voices rose in the night air from the caged soldiers in the town. We went to bed all uncertain as to what might happen on the morrow, and wondering if the bombardment would recommence. Rumours of the most varying kinds reached us, but the prevailing opinion was that all had been lost; that regiments had given themselves up *en masse*; that even generals had fled. A colonel who had been at Weissenburg, Wörth, and Forbach, whose eagles had been decorated, told how, when he could fight no longer, he had burnt his colours, and buried the eagles along with his decorations, that they might not fall into the enemy's hands. He and other officers declared, with tears in their eyes, that their country had been dishonoured, betrayed, and lost by incompetence of the grossest kind.

Next morning, the 2nd of September, the sun shone out bright and beautiful over the wreck and ruin of the previous day. We rose early. From the ramparts, we saw strewn about the dead soldiers; a little further off we saw Prussian burying parties busily engaged interring the killed, an office which was not wholly completed for nearly a week. Our own dead, and these were a good many, were interred in a trench some little distance from the hospital. After the town became again somewhat more *en règle*, the civil authorities took charge of the burials, and relieved us from further trouble. We commenced early in the day to attend to those cases which had not been thoroughly examined the day before. I may here repeat what has been insisted on elsewhere, and by none better or more forcibly than Professor Longmore, that it is of the very last importance to make a complete examination of gunshot wounds during the primary stage, that is, as soon as possible after the receipt of injury, and before inflammation sets in; and that no probes and no apparatus will subserve the uses of the finger. If necessary, the wound may be somewhat enlarged. It is but of small consequence to do so in comparison with having the extent of comminution in an injured bone undiscovered, or a lodged bullet unextracted.

The mortality consequent upon primary amputations is so very much smaller than that attendant upon those called secondary, that this point cannot too strongly be insisted upon. Quite a large number of poor fellows were sent to us from other ambulances, ten days or more after the battle, whose limbs should have been removed in the first field-hospital they reached. We were obliged to amputate, but the mortality was distressingly great. Again, it may not perhaps be of vital importance to remove a lodged bullet; but were it only for the mental solace afforded to a soldier by the extraction of the ball, that would be a sufficient reason to do so if possible. A soldier seems generally to imagine that his life almost depends on the extraction of the missile that has injured him, and his joy is proportionately great when it is successfully removed, while he never appears to be happy, in either mind or body, so long as it remains in the wound. Of course the great difficulty consists in their being neither hands nor time sufficient after a great battle to make these examinations as fully and as completely as the occasion demands.

Meanwhile, the day wore on, and the fighting did not recommence; the batteries on the hill-slopes opposite did not re-open their deadly fire. We saw heavy columns of Prussian infantry posted inactive in the fields. First came to us the report of an armistice of forty-eight hours, to bury the dead; then the stupendous news that an army of 100,000 men, 400 pieces of artillery, 70 mitrailleuses, and an Emperor to boot, had capitulated without being able to strike another blow for their country or their liberty. Once in Sedan, there was no way out of it; the French army had been transformed into a disorganised mob; the officers knew not where their men were, the men knew nothing of their regiments or their officers. Men of all arms were mixed up together. Some were cooking horseflesh, some were eating it even raw; many were lying

about the streets in the deep sleep of fatigue; everything and everybody looked utterly wretched and miserable. At every corner were the bloody skeletons and entrails of horses, off which every scrap of flesh had been cut; but bread was not to be had for love or money. In the hospital *enceinte* the same thing was going on. Four thousand men had collected there, and the *débris* they left behind required the hard work of relays of men, during several days, to remove. All the 2nd September, like the 1st, we were engaged in performing amputations, excisions, and in removing balls and pieces of shell deeply lodged, only interrupted, from time to time, by calls to see some fresh arrival.

In the evening, after a hard day's work, we got a summons to say that in the town were large numbers of wounded untended. A party of us went down. In every second house, almost, there were wounded men; the theatre was full of them; the church was full of them; other public buildings were full of them. Some of these we had transported to our own hospital; to others we administered what comfort we could. Subsequently, aid arrived from other ambulances, and from the military medical officers; but for the first few days the *encombrement des malades*, as the French call it, was almost enough to make one give up in despair. That evening, to my great relief, I heard from Dr. Frank, and that he was safe. When I saw the village in which he was in flames, and knew it had been the scene of a desperate fight, I feared we might never again see him alive. Indeed, at one time, and with too much reason, he had given himself up for lost. All by himself, he tied the carotid artery for a wound of the face, and performed other operations, but he had not sufficient help. There were two cases, he afterwards said, where amputation should have been performed at the hip-joint, but had to be left undone.

ON THE CLIMATE OF ALGERIA.*

By J. HENRY BENNET, M.D.,

Late Physician-Accoucheur to the Royal Free Hospital.

A RESIDENCE of eleven successive winters on the north shore of the Mediterranean, and an attentive study of meteorological phenomena during that period, have enabled me to arrive at tolerably precise and clear conclusions respecting the winter climate of this region of the Mediterranean area. At the close of the winter before last, however, I was still uncertain as to the real nature of the climate of the south western or Algerine shore of the Mediterranean, so conflicting are the statements respecting it. According to some, it is a dry tonic climate, owing to the vicinity of the great desert of Sahara; according to others, it is hot, moist, and relaxing, owing to the combined influence of the desert, of the Mediterranean Sea, and of the Atlantic Ocean.

Wishing to judge for myself, after reading all I could find on Algeria, I started from Marseilles on the 13th of April; arrived at Algeria on the 15th; made three exploratory journeys, east to Fort-Napoleon, south to Tenet-el-Had, and west to Oran, where I arrived on the 30th. From thence I passed over to Cartagena in Spain. By bringing what I knew already of Mediterranean meteorology to bear on what I saw in Algeria, botanically, meteorologically, and geologically, during these journeys, I was able to arrive at certain definite conclusions. By comparing these conclusions with the evidence of impartial observers, and especially with that of Dr. Armand, a military surgeon, who has written an exhaustive work on the climate and diseases of Algeria, I have attained a clear idea of the Algerine climate, which I will endeavour to convey to my hearers as briefly as possible. I would remark that in choosing this subject for a paper I have been influenced by the fact that, during last winter and spring, I saw in the south several persons who had been sent to spend the winter in Algeria, from Newcastle and its neighbourhood; and, therefore, I presume that the question of its climate possesses some interest for the medical practitioners of the northern capital of England.

Under the name of Algeria is now comprised the greater part of the south-western shore of the Mediterranean, occupied by the Atlas mountains. These mountains extend from Tunis eastward, to Morocco and the Atlantic westwards. To the north it is limited by the Mediterranean, and to the south by the great desert of Sahara. The width of this region, from east to west, is about four hundred miles. The depth from north to south, from the Mediterranean to the desert, is about one hundred and twenty miles. The Atlas chain is not constituted by one range of mountains extending from east to west, as is generally supposed, but by three parallel ridges, the lesser, the middle, and the greater Atlas, with connecting spurs and buttresses, and with intervening valleys

and elevated plains. Thus the whole region is a kind of Switzerland, a mountain country, which would be the seat of glaciers, lakes, and large rivers, were the mountains high enough to reach the line of perpetual snow, as in Switzerland. But they are not; none attaining an elevation greater than seven thousand feet. There are, consequently, no perpetual snow, no glaciers, and the large rivers which are fed by such an origin do not exist. The rivers are small, and mere torrents in summer. Still the mountain-ridges and summits, being from one to seven thousand feet in elevation, are high enough and cold enough to precipitate water in abundance out of moisture-laden clouds in winter, and to be covered with snow and ice in their higher regions for several months every year.

The meteorology of Algeria is very peculiar, but is easily understood on reference to the map, and on the consideration of the cosmical elements which northern and central Africa present. North of the belt of mountain land which constitutes Algeria, is the Mediterranean Sea, a thousand miles in width, and from three to four hundred in breadth. South, we have the great sandy desert of Sahara, the hottest region on the earth, which occupies a considerable portion of the continent of Africa. As a necessary result of the constant heating, rarefaction, and rising into the higher atmospheric regions of the superincumbent air, there is always a vacuum forming on the desert of Sahara, which the atmosphere of the surrounding regions rushes in to fill. This rushing of air is necessarily greater from the cool regions of the north than from the warm regions of the south. Thus, during nearly the entire year, winter and summer, moist north-east, north, and north-west winds are rushing over mountainous Algeria towards the desert. It is stated that the wind at Algeria only blows directly from the desert thirty days in the year. If it be so for 334 days in each year, the wind that passes over Algiers and Algeria is a moist sea-wind. The same phenomenon, in a modified way, occurs from the same causes in Egypt. I am told that the wind blows from the north up the Nile, thereby much facilitating navigation nine months in the year.

The atmosphere at Algiers and in Algeria must therefore be moist, winter and summer, except during the few days that it blows, as a dry hot wind, from the desert. That it is moist is proved by the large quantity of rain that falls during the six winter months, and by the very heavy night dews that reign all through the summer.

According to Dr. Armand, the mean rain-fall at Algiers from 1839 to 1865 was 36 inches, 31 of which, or six-sevenths, fell in winter, and only 5, or one-seventh, in summer. Dr. Scoresby Jackson gives the same mean rainfall. The distribution was as follows. November, 5 in.; December, 8 in.; January, 6 in.; February, 5 in.; March, 3 in.; April, 4 in.; May, 1½ in.; June, ½ in.; July, 0 in.; August, ¼ in.; September, 1 in.; October, 2½ in. Rain fell on ninety days or nights; on seventy-eight days in the six winter months; on twelve days in the six summer months.

In some winters, the rainfall has been even more, amounting to 40 or 45 inches. The large amount of rain which falls will be best understood when we compare it with that of southern England, where it varies from 16 inches to 22, and with that of Nice, where it is 25. On the east coast of Spain, the rainfall is even much less, not amounting, probably, to more than 12 or 14 inches, and often not to that.

Even in summer, when the Atlas mountains, scorched by an African sun, have become so hot that they no longer precipitate moisture from the winds that rush over them, hurrying towards the great desert, and when little or no rain falls, the air is still saturated with water pumped up from the broad Atlantic, and from the Mediterranean. At night, as soon as the temperature falls a few degrees, such heavy dews form that a double tent is saturated, according to Dr. Armand, in the hottest and finest weather.

The influence of the copious and frequent winter rains, and of the heavy summer dews, is evident in the luxuriant vegetation of Algeria. I expected to find a sunburnt arid region, the portal of the barren desert of Sahara; instead of which, I found a garden of Eden. The valleys were knee-deep with natural herbage and flowers, or with grain crops where sown, and the mountains were clothed with grasses, brush-wood, and timber from base to summit. The verdure, when I was there in April, extended far into the desert. The valleys and mountains of Algeria, indeed, were nearly as verdant and luxuriant as are those of Switzerland.

In the interior mountain-land, even at an elevation of 1,500 or 2,000 feet, in winter the fall of snow is often great, and the frosts severe. During the retreat from Constantine in 1845, more than five hundred soldiers lost their lives from cold and frost, as in the retreat from Moscow. The porter of the garden of acclimatisation at Algiers is a living illustration of this disaster. He walks about on two wooden legs, having lost both his own from frost during this retreat.

At Algiers proper, the climate is much milder and more equable,

* Read in the Public Medicine Section at the Annual Meeting of the Association in Newcastle-on-Tyne, August 1870.

owing to the latitude, which is five degrees more south than Marseilles, to the proximity of the sea, and to the shelter of the Sahel hills, which rise behind the town. Even at Algiers, however, sharp frosts occasionally occur. Thus Colonel Playfair, the English Consul, wrote last January to the *Gardener's Chronicle* that, on the last two nights of the year 1869, a severe and exceptional frost occurred which killed most of the tender plants in his greenhouse.

From the above data, it will be seen that, speaking in a general sense, the winter climate of Algiers is mild and moist—mild from latitude and proximity to the sea, and moist owing to the all but constant prevalence of sea winds. The average monthly temperature is higher than on the Genoese Riviera, or the sheltered region of the north Mediterranean shore, not so much, perhaps, from greater heat in the day, although the day heat is rather greater, as from a higher temperature at night.

These facts being accepted, and they cannot be controverted or denied, their application to the treatment of disease depends on medical doctrines. If it is held that a mild moist climate is required for chronic chest-disease, for which a southern residence in winter is principally in request, then Algiers answers the indication, as do Pau and Madeira. But Algiers is much warmer than Pau, and not so warm as Madeira. If, on the contrary, the doctrine entertained is the one that I myself support, viz., that in chronic chest-diseases, and especially in pulmonary consumption, constitutional treatment is principally to be considered, and that a bracing tonifying treatment is indicated, then Algiers is not the right place. A dry cool climate, such as that of the east coast of Spain, or of the Genoese Riviera, better fulfil the indications.

Practically, my own limited experience respecting Algiers accords with these latter views. I have seen many consumptive people who have wintered at Algiers, and can scarcely call to mind one thoroughly satisfactory case, such as I constantly meet with in the drier and more bracing climate of the Riviera. On the other hand, I should presume that in some exceptional forms of consumption, in which there is great nervous irritability, with constant tendency to pulmonary hæmorrhage, the softer moister climate of Algiers may be more favourable than that of eastern Spain or of the north shore of the Mediterranean. But then these are generally the unfavourable cases, the cases that do well nowhere.

In some forms of nervous disease, of neuralgia, of idiopathic asthma, and again when a mere mild winter climate with change of scene is required to recruit a tired mind and body, I think a winter at Algiers might be safely tried. To such as merely require rest and change, a residence at Algiers during the winter months offers many charms.

ON THE ADVANTAGES TO BE DERIVED FROM CURVING THE HANDLES OF MIDWIFERY FORCEPS.*

By J. H. AVELING, M.D., Rochester.

CURVING the handles of midwifery forceps is a practice of no recent date. In fact, the first pair of forceps used for midwifery purposes had one of the handles curved. Chapman and Levret curved the ends of the handles of their forceps, in the one case inwards and in the other outwards, so as to form hooks. Du Bois, the handles of whose forceps were of wood, also curved their extremities outwards; and Dr. Bedford of New York curves the ends of his forceps handles backwards. Besides these, there are several other forms of midwifery forceps, the handles of which are curved in various forms; but those now referred to illustrate the whole of the kinds I have been able to meet with.

There are a great many points essential in a good pair of forceps; but over all others two dominate, viz., ease of application and power of traction. To attain these two important ends, I propose to curve the handles of midwifery forceps backwards throughout their whole length. By this simple modification, ease of application is attained by removing the handles well out of the way of the operator when passing the blades and locking the instrument; and most efficient traction power is insured by the handles being placed at an angle instead of parallel to the line of traction. Another advantage from this backward curving of the handles is, that they become less in the way of the patient's legs when the child's head sweeps forward over the perineum.

There can be no advantage in having the handles of forceps straight, except for the purpose of compression; and we know that the amount of power required of this kind is very small. The forceps of the late Sir James Simpson and of Dr. Inglis demonstrate this. Any lateral

motion required can be as easily effected by the curved handles, and any rotatory action can be better produced by them.

From the construction of all sorts of midwifery forceps, we can detect that the failure in the straight-handled form is the want of traction-power which they afford. We therefore find upon them hooks, wings, grooves, rings, openings for the fingers between the blades, and many other ingenious contrivances to prevent the hand from losing its hold. By simply curving the handles backwards, all these are dispensed with. No new forceps are required. You have only to send your forceps to the instrument-maker and request him to curve their handles, and he will do it without in the least altering the form of any other parts of the instruments.



The pair which I now show you have been so altered, and I have used them several times myself, and my friends have used them also. This other pair have been made in imitation of them by Messrs. Weiss, 62, Strand.

POISONING BY STRYCHINE IN THE DOG: A NOVEL METHOD OF TREATMENT.

By JAMES A. EAMES, M.D.,

Resident Medical Superintendent of the Donegal District Lunatic Asylum, Letterkenny.

A REMARKABLE case of successful treatment in poisoning by strychnine having lately come under my observation, a statement of the particulars may not be devoid of interest to members of the Association—the more so, as strychnine has been recently used to destroy some valuable hounds belonging to the Kilkenny pack.

I may premise by saying that, some years ago, while walking in a remote part of the country, I happened to see a dog suspended by the hind legs and hanging to a tree. On my asking the owner his reason for placing the animal in this position, he informed me that it had taken poison on the mountain, and that this was the means which he was adopting for its cure, having previously made it swallow a quantity of butter. He added that on a former occasion he had saved the same dog's life in a similar way and under similar circumstances.

About three months since, a terrier bitch of my own took some strychnine which had been laid for rats; and when I saw her she was almost moribund, being blue at the lips, frothing, unable to stand, and on being touched, however lightly, suffering from the most violent tetanic spasms. I immediately poured about half a pint of sweet oil down her throat, and had her tied up to a beam by the hind legs for about six hours. During this time I visited her frequently, and had her taken down once or twice for a few minutes; but the spasms continued to recur until she had been suspended for the period above mentioned, after which symptoms of recovery gradually showed themselves. Next day she was quite well. Strange to say, she was with pup at the time, and shortly afterwards gave birth to three puppies, all of which were alive.

The great success which in this case attended the carrying out of the measures which I have just described encourages me, even in the absence of an extended experience of their efficacy, to place these details on record.

The explanation of the *modus operandi* of the treatment may perhaps be regarded as a physiological one, and as depending on the fact that the congestion of the vessels of the brain produced by the prolonged suspension counteracted the effects of the poison on the nervous system. The oil, of course, acts only mechanically in preventing, probably, both the corrosive action of the poison on the mucous membrane of the stomach and its further absorption into the organism at large.

In the case of the human subject, there seems to me to be no reason why there should not be a mode of treatment based on similar principles; and it is a question whether, in poisoning by strychnine, the fixing of the body on an inclined plane, with the head partially downwards and the back applied to the plane, might not be attended with good results.

* Read in the Midwifery Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

HISTORICAL NOTES.

COD-LIVER OIL: HOSPITALISM: USE OF THE THERMOMETER.

It may not be generally known that cod-liver oil was first brought into notice and administered by Dr. Percival of Manchester, at the close of last century, in the hospital of which town nearly a hogshcad was annually consumed. It was given by the foregoing physician in chronic rheumatism, in sciatica of long standing, and in cases of premature decrepitude, originating from immoderate labour, repeated strains, or exposure to continual dampness and cold. It is also of interest to remark that the same physician anticipated and drew attention to the evils of hospitalism, based on statistical information of the relative mortality in the Hôtel Dieu, St. Thomas's and St. Bartholomew's Hospitals, the Northampton and Manchester Infirmarys, and in private practice. Thus, of all patients admitted into the Hôtel Dieu, he found that two out of every nine died; into St. Thomas's and St. Bartholomew's, one out of thirteen; into the Northampton Infirmary, one out of nineteen; and into the Manchester Infirmary, one out of twenty-two, which he ascribed to the fact of the latter being built in an airy situation, and well ventilated.

The employment of the thermometer in disease must date further back than the time of Wunderlich, as it was resorted to by Dr. Fordyce, who directed it to be placed under the tongue to register the temperature, as appears in his scheme for improving the evidence of medicine.

W. BOYD MUIHET, M.B., M.R.C.P.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

KING'S COLLEGE HOSPITAL.

OPERATIONS, NOVEMBER 5TH.

Mr. HENRY SMITH removed a Fatty Tumour from the posterior region of the Shoulder of a young woman. He first made a puncture into the centre for the purpose of diagnosis, as he stated that the girl had first noticed the existence of the tumour only about six weeks previously; and this fact, coupled with the girl's unhealthy appearance, made him suspect that possibly the swelling might be simply a chronic abscess. When a doubt of this kind exists, it is always prudent to make a preliminary puncture before making the incision freely over the tumour.

Mr. Smith then operated upon a severe case of Hæmorrhoids by means of the clamp and cautery. The patient was a man aged about 35, who had been suffering severely from a protuberance composed of two tumours. The largest was nearly as big as an egg, composed of a solid mass of tissue, covered by mucous membrane and skin. The other was an internal hæmorrhoid, as large as a damson. The larger one was removed first, traction being made upon it by means of a hooked forceps. A semicircular incision was made through the skin at the base by a pair of scissors; the blades of the clamp were then made to fit into this incision, and then screwed up; the tumour was then cut off, and the raw surface well cauterised. The smaller tumour was next clamped, removed, and cauterised. The operation was completed in a few minutes. Chloroform was not used; and, as the clamp employed was covered with ivory, the patient did not show any evidence of feeling much pain.

In making some remarks, Mr. Smith said he was very glad of the opportunity to show the pupils this operation, as it was a case of severity, and particularly well adapted for it. Moreover, he was especially anxious to correct a statement which had been made lately in reference to the operation which they had been in the habit of seeing him perform there for some years. Mr. Ashton, in a work recently published, had made some severe criticisms upon the operation, and amongst other assertions had stated, as one of the objections, that "the operation lasted considerably upwards of an hour in its performance." Now, the students had been in the habit of seeing him operate in this way for years, and they would at once see what an erroneous statement this was. In a great number of instances, as in the one they had just witnessed, the proceeding lasted only a few minutes; and even in the

cases where he had to remove four or five large tumours, a quarter of an hour was ample time for its performance. He did not object to fair criticism of any proceeding which he chose to adopt; but those now hearing him, and numbers of medical men, knew well how incorrect was the statement to which he referred. He thought it due both to himself and to his pupils to reply to the statement in this public manner; and it was a great pleasure to him, after noticing the criticism in question, to refer to the manner in which Sir William Fergusson—who had had plenty of opportunities of seeing this operation—thought of it. He would refer them to page 57 of the edition of his *Practical Surgery* just published, and there they would see that he spoke in the highest terms of this operation.

MIDDLESEX HOSPITAL.

ORBITAL ABSCESS.

(Under the care of Mr. HULKE.)

THE notes of the subjoined case have been supplied by Mr. E. R. Davis.

Acute abscess of the lacrymal sac is often mistaken for erysipelas; and orbital abscess, before it breaks, is still more frequently confounded with it. This is, no doubt, due to the greater degree and extent of the swelling of the eyelids and cheek attending the latter. The absence of blebs, and the restriction of the swelling to one side of the face, together with the greater intensity of the pain and tenderness at some one part of the contour of the orbit, generally suffice for a correct diagnosis, even before fluctuation can be felt; and if the eyelids can be opened enough for the position of the eyeball to be ascertained, the direction in which this is displaced furnishes a safe clue to the exact situation of the abscess.

A healthy constable, aged 23, was admitted into Pepys Ward Feb. 26th, 1870, with an inflammatory swelling of the face, which had been regarded as erysipelas. Both the left eyelids and cheeks were very swollen, dull, red, and brawny. The lower eyelid was more swollen than the upper one. All the inflamed parts were very painful and tender; but the greatest pain and tenderness were referred to the lower border of the orbit, but no fluctuation was perceptible. There were not any blebs, and the inflammatory swelling was restricted to one side of the face. On slightly separating the eyelids, the ball was found to be pushed upwards and forwards, while its mobility was scarcely impaired. This made it plain that there was an abscess on the floor of the orbit, outside the cone of the ocular muscles, probably under the periosteum. The pain and swelling had begun five days previously; and three months before this he had had a heavy blow on this part of the face. An incision through the lower lid let out much thick yellow pus. The lower border of the orbit was found bare of periosteum, and rough. A drainage-tube was worn for several days, and the abscess was syringed with a solution of carbolic acid. By the middle of March, the incision closed without any exfoliation of the bared bone having taken place. Three months later, the man returned with an indolent thickening about the scar, which yielded to iodine ointment, and iodide of potassium given internally.

GENERAL INFIRMARY, LEEDS.

THE following operations have lately taken place at this Infirmary.

Oct. 25th.—A boy, aged 16, was brought in with both his hands chopped off by a machine for making paper-bags. Mr. Jessop amputated on the left side just above the wrist, and on the right side through the wrist-joint. The wounds were washed over with a solution of chloride of zinc, the arteries were secured by a carbolic cat-gut ligature, and the carbolic lac-plaster was applied as a dressing.

Oct. 26th.—At 1.40 A.M., a man, aged 34, was run over on the North Western Railway. He was brought to the Infirmary at 2.30. He was suffering from the following injuries: the right leg was taken off about the middle, the calf being crushed up to the knee; the inner half of the right hand was crushed, and there was a wound a foot long extending from above the elbow, half-way down the forearm, detaching the skin from half the circumference of the arm. Mr. Jessop dressed the wound in the arm, amputated the inner half of the hand, and also amputated just above the condyles of the femur, a rectangular flap being taken from the upper part of the anterior surface of the leg. All the wounds were washed out with chloride of zinc solution (thirty grains to the ounce), and treated like the preceding case.

Oct. 27th (*Operation Day*).—The first patient was a man, aged 50, whom Mr. Jessop cut for Stone by the usual lateral operation. Eight small calculi were removed, varying in weight from fifty grains to two drachms, the aggregate weight being ten drachms. It was remarked

as peculiar that the stones did not exhibit the facets which are usual in similar cases.

Mr. Wheelhouse then performed Amussat's operation of Colotomy upon a woman whose bowels had not been opened for three weeks, owing to the pressure of an uterine tumour upon the rectum. A transverse incision about five inches long was made half-way between the last rib and the crest of the ilium; a careful dissection was made till the edge of the quadratus was reached; this was divided, when the lower border of the kidney could be seen behind, and the descending colon in front. Two silk ligatures were inserted into the gut, which was divided between them; the intestine was then fastened by five sutures to the edge of the wound. A large quantity of fecal matter was evacuated.

The third case was one of Perineal Section performed by Mr. Jessop. The patient, aged 32, was the subject of a tight stricture, caused by laceration of the urethra twelve months before by the pummel of a saddle in hunting. The operation which Mr. Jessop performed was the one described by Mr. Wheelhouse at the annual Association meeting last year in Leeds. A grooved staff having been passed down to the stricture, the urethra was laid open near the stricture, and the staff turned out through the wound. The urethra was then held open by two pairs of artery-forceps, and the opening through the stricture sought for by means of a fine probe. The incision was then extended through the stricture to the sound urethra beyond, and a conical blunt gorget having been passed into the bladder as a guide, a catheter was introduced and retained.

A woman was next brought in with a large Malignant Tumour of the ham, extending half-way up the thigh. A year ago, a tumour had been removed from the popliteal space; six months afterwards, the disease had returned, and since then had grown to its present size. As the popliteal vessels and nerves were involved, it was determined to amputate; this Mr. Wheelhouse did by the rectangular operation just below the trochanters. The arteries were secured by the ordinary hemp ligature; no dressing was applied.

Mr. Jessop then removed a large Fibro-cystic Tumour of the Breast. The antiseptic treatment was in this case adopted in the fullest manner. The skin over the breast, the hands of the operator, and the instruments to be used, were first covered with carbolic oil; two assistants, one with a spray-apparatus, similar to those used for local anæsthesia, stood on each side and kept up a continual stream of carbolic lotion during the operation. Two incisions were made, removing an elliptical piece of skin; the tumour, of the size of a child's head, was then pulled out by the fingers, very little dissection being needed. The vessels were secured by carbolic cat-gut, the wound washed out with chloride of zinc solution, and stitched up with carbolic silk sutures.

The same operator then treated a case of Malignant Disease below the lower jaw by Maisonneuve's method. The tumour was of the size of an orange externally, but extended too deeply to be removed by the knife. Six incisions about three and three-quarter inches long were made through the skin round the base of the tumour; into each of these was inserted a caustic arrow, made of chloride of zinc and flour (one to three), about an inch and a half long, and a quarter of an inch broad at the base, and tapering to a point. Each of these arrows was made on a needle, so that the point was sharp. They were kept from slipping out by pads of lint and a bandage.

NEW BOOKS AND NEW EDITIONS.

THE *Atlas of Ophthalmoscopy*, of Dr. R. LIEBREICH (2nd edition, enlarged and revised, Churchill, 1870), might claim a notice of whatever length our space could afford, but its own already world-wide reputation almost precludes the necessity for anything more than announcement. This splendid chromolithographic atlas has afforded the first basis of the knowledge of most ophthalmologists of the day; they have learned from it commonly what to look for. In our own clinical room we have always hung Liebreich's plates to afford the student data for comparison. They have never been equalled, and can never be surpassed for beauty and accuracy. With these plates before him, the student of the ophthalmoscope knows what he ought to look for, so exact and so truthful are they; and until he has seen most of the typical conditions here drawn, he may be sure he has not yet learned to use his eyes aright. In this second edition there is one noticeable improvement. The typical normal fundus is drawn in colour, but with matchless fidelity. In the human eye the retinal vessels are arranged with singular regularity; and this drawing will occupy a student profitably a month, in comparing and identifying the ramification of the vessels so as to be able to hereafter identify in his mind and in his descriptions the parts of the field in which he discerns pathological change. Of the

new drawings, No. 2, in Table VI, is to our mind the finest pathological ophthalmoscopic drawing yet produced, as the first plate in the work is by far the finest, indeed the only correct view yet drawn of the healthy fundus. We call attention to the sensible plan of drawing faithfully a part of the field on a large scale, showing the characteristic pathological changes, instead of drawing, partly from imagination and necessarily on a small scale, the whole schematic circle of the fundus to show changes in a part—the usual proceeding. This edition is at once richer in examples, more convenient in shape, and reduced to one-half the former price. It can but be acceptable to all who use the ophthalmoscope. It is indispensable to all who teach its use; and no higher compliment could be paid to any work.

THE flow of Hospital Reports continues. *St. Thomas's Hospital Reports* open a new and long-suspended series in splendid form (*St. Thomas's Hospital Reports*, vol. i, new series, London, Churchill). The contributions of Dr. Peacock, on the Different Forms of Pulmonary Consumption; of Dr. Bristowe, on the Mechanism of Speech and on Parasitic Skin-Diseases; of Rainey, Barnes, Allingham, and Sydney Jones, are of a high order, and the volume is one which manifests great scientific vigour and activity.—*The Liverpool Medical and Surgical Reports*, vol. iv (Churchill and Holder), are carried on with spirit, and will be read with interest. Besides a good deal of sound clinical matter, the volume includes compiled and critical reports on the progress of medicine, surgery, midwifery, etc., and abstracts of the proceedings of the Liverpool medical societies. The most notable papers seem to be those of Dr. Waters on Pneumonia, Dr. Wallace on Thoracentesis, Mr. Bickersteth and Mr. Harrison on Operative Surgery, and Mr. Rogers on Fractured Ribs in the Insane.

MR. GEORGE GASKOIN, one of our few students of Spanish literature, has translated from the sole copy in England a very rare book, *El Sumario de la Medicina* of Lopez de Villalobos, Salamanca, 1498. It includes a poem on the Bubas, which Mr. Gaskoin has translated into dislocated rhymes, in which "he has never once sacrificed sense to harmony, or refined upon the meaning of Villalobos." The bubas "are nothing but that which hath been known all along as the French pockes. We now consent to call it syphilis—a term unmeaning and trivial enough, little likely to give offence to any." This book will count among literary diversions of the graver sort. The retrospect of the opinions of the disciple of Avicenna will occupy a profitable hour in the period of digestion—it is a book to be taken *post cibum*. The dialogue on natural heat and on the tertian fever is well annotated and curious. If the one copy which exists in England had failed to fall "inadvertently under Mr. Gaskoin's notice", we should have missed some curious reading and he would have been spared a great deal of trouble, which, as it is, we thank him for taking.

To the names of medical men who have found flirtation with the Muses compatible with serious and solid studies, must be added that of Dr. A. MERCER ADAM. His contributions are among the best to *Flowers from Fatherland*, transplanted into English soil by himself, J. P. Trotter, and George Coltman (Blackwood). This is a spirited, graceful, and characteristic collection of metrical translations of the ballads of Burger, Schiller, Körner, Uhland, and Heine. The joint authors had before them the example of Aytoun and Martin, and have followed it *hand longo intervallo*.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

FOX'S PALATABLE COD-LIVER OIL AND CASTOR-OIL.

WE have been slow to give an opinion of Fox's Palatable Cod-liver Oil and Castor-Oil, because we had received, in the first instance, two conflicting verdicts from physicians on whose judgment we should have been disposed almost equally to rely. A tolerably extensive series of experiments has, however, ended favourably. In one instance, fourteen healthy people of unvitiated tastes have taken a couple of doses each of the cod-liver oil, and have agreed in reporting it to us as tasteless, if not palatable. We get, too, very favourable reports as to the castor-oil. Relying, then, on this vicarious judgment, we may pronounce the title claimed by Messrs. Fox to be justified by fact. On the other hand, the chemical trials to which the samples have been subjected have led to equally favourable results. In losing a large part of their unpalatableness, the products of these manufacturers retain their full therapeutic value.

JAKINS' INVALID LIFT.

WE ought before this to have noticed a very ingenious and simple invalid lift which has been exhibited by Mr. Stump for some weeks at the National Aid Society's rooms, for the inventor, Mr. Jakins of Osnaburgh Street. Jakins' Invalid Lift consists of a couple of tall upright pillars on a firm base, moving on castors, which can be moved from bed to bed; so that one lift will be sufficient for a whole ward, and can be applied to any bed. From the horizontal cross-piece extending between the summits of the pillars, is suspended a sacking-chair, or bed, or stretcher, for it can be converted into either; and this is elevated by a winch. The patient can thus easily be shifted, wholly or partly; he can be raised or taken away while the bed is being made, or for the purpose of cleanliness. The arrangement is simple and effective: we should judge it very practical, and for hospitals, whether military or civil, a desirable apparatus. There are in private practice many cases of injury or of paralysis where it could be applied with advantage.

IRISH SCHOOLS OF MEDICINE.

ROYAL COLLEGE OF SURGEONS, IRELAND.

ON Monday, the 31st ultimo, the Session of 1870-71 was inaugurated by the delivery of an admirable address by Mr. Morgan before the President, Dr. Walsh; the Vice-President, Dr. Wharton; Sir Wm. Carroll, M.D.; Mr. Adams; Mr. Porter, Surgeon to the Queen; etc.

Having alluded to the immense field open to surgeons as a consequence of the disastrous war now raging on the Continent, Mr. Morgan spoke of the zeal and devotion with which the Irish surgeon discharged his duties; and impressed upon the undergraduate members of his audience the necessity for a painstaking study of every branch of their profession. He illustrated the extent to which the population of a country was dependent on the efforts and talents of medical officers by a reference to the parliamentary returns of mortality in the three kingdoms. From those for 1868, it appeared that, whereas the annual death-rate in England amounted to 22,000 out of every million inhabitants, in Ireland it was as low as 15,000. Small-pox had almost been stamped out of the latter country by the efforts of the Poor-law medical officers; for, while 854 deaths occurred from that disease in 1864, only 23 fatal cases were met with in 1868. Mr. Morgan then dwelt on the various branches of study that should engage the student's attention; and concluded his address by congratulating the profession on the unanimity which now characterised the working of the Dublin schools of medicine.

Dr. Mapother afterwards delivered the first of the public course of lectures on comparative anatomy, his subject being "The Varieties of Man".

STEEVENS'S HOSPITAL AND MEDICAL COLLEGE.

THE distribution of prizes, with which the session of medical lectures annually commences in this school, took place in the Anatomical Theatre on the 31st of October. The Right Hon. Lord O'Hagan, Lord Chancellor of Ireland, presided.

After the reading of the Report, and the distribution of prizes, the Lord Chancellor delivered an eloquent address to the assembled visitors, the staff, and the students. Allusion was made to the antiquity of the Hospital, which for 150 years had afforded relief to the poor of all religions without distinction, and in which the "purchase" system found no place. The man who came thither, came relying on his own personal merit, and for that personal merit alone was he advanced. Here, too—his lordship went on to say—the *moral* qualities of the man are regarded as well as his *intellectual* prowess. His attention, his devotion, his success amongst the patients, constitute a most important element in the determination of his place as a person competing for honours; and I cannot, for my own part, conceive any improvement in the foundation more valuable than that which gives to the young men of this great profession an inducement to cultivate the moral qualities as well as the intellectual. The moral qualities ought to be cultivated as well as the intellectual. Do not imagine I intend for one moment to suggest the neglect of the intellectual faculties—the neglect of scientific endowments. On the contrary, I would urge young men to remember that they have a profession in which, at some period of their lives, any knowledge which they may by any possibility garner up will be of the greatest consequence. You have not merely to deal with sick bodies—you have often to "minister to the mind diseased"—you have to deal with all forms of humanity, in all stages of suffering. And, believe me, there is no sort of knowledge, however apart and distant from your particular profession, which once and again you will not in the course

of your lives find valuable to heal the bodies and the minds of those who depend on you. Therefore, cultivate your intellects, gather knowledge as far as knowledge is within your reach, but do not, while you do this, devote yourselves solely to scientific acquirements. Do not forget you have moral feelings. I have faith in some branches of your profession, and in some very little. I confess I believe that, while there has been great progress in some things, yet in others, since the days of Hippocrates, the wisest men stand much where they were; and I should not be surprised if, for generation after generation, the same state of things should continue to exist. But this I know, at all events, that the physician who comes to the patient, and by his calm and prompt decision gives that patient confidence, and by his buoyant demeanour lifts up a sinking heart—that physician is sure to do good wherever he goes; and it is of the last consequence, independently of your scientific acquirements—independently of your intellectual development—that you should cultivate those moral qualities which enable you to operate on the moral nature of your fellow-being. While your diagnosis may be erroneous (and I suppose it sometimes is); while the medicines which you exhibit may fail in the result hoped for; while you are tormented by doubts and difficulties as to the nature of the disease with which you are called on to deal, you never will be at a loss when you come with patience, with gentleness, with long-suffering kindness, to the homes of sorrow which you are asked to visit. Believe me, these qualities will always and ever be useful; and believe me, also, that while they bless those homes of sorrow, they will re-act with blessings on yourselves. I am most proud of the honour done me in asking me to appear here to day, and I thank you very much for your great kindness. His lordship resumed his seat amid warm applause.

A vote of thanks to the Lord Chancellor was then proposed, and carried by acclamation; after which, the proceedings terminated.

CITY OF DUBLIN HOSPITAL.

ON Tuesday, the 1st instant, Mr. Samuel Hewitt, Physician to the Hospital, delivered an address prior to the commencement of the clinical course of 1870-71. The lecturer suggested to his pupils the great necessity which existed for devoting themselves to the earnest study of their profession. He pointed out to them the beauties of medical science, and the progress which it had made, and was at present making. In alluding to the late Professor Geoghegan, one of the surgical staff of the Hospital, he paid a most graceful tribute to that gentleman's professional and personal worth. In concluding, Mr. Hewitt gave an outline of the arrangements which had been made for the coming medical session in the hospital.

THE LEDWICH SCHOOL OF MEDICINE.

THE opening address in this Institution was given by Dr. James Little on the afternoon of November the 1st. The subject chosen was a twofold one, having reference in the first place to the proposed legislative changes in the existing system of medical education; and, secondly, treating of the way in which students of this session and in future years should conduct their studies so as to keep pace with impending changes, and so as to acquit themselves creditably at the several examinations, and in the more trying ordeal to which they would be exposed in after life. The learned gentleman alluded to the necessity which existed for an accurate knowledge of practical anatomy, and for a painstaking cultivation of the powers of observation and sense of touch in the clinical wards of a hospital. Dr. Little concluded amid loud applause.

CATHOLIC UNIVERSITY MEDICAL SCHOOL.

ON Thursday the 3rd instant, the winter session was inaugurated in this School by the delivery of an address by Mr. Tyrrell, Professor of Surgery. There was a large attendance of visitors and students.

MATER MISERICORDIÆ HOSPITAL.

Mr. HAYES, one of the Surgeons to the Hospital, gave a lecture introductory to the session on Thursday week (the 3rd instant). There was a large auditory present. The lecturer thanked the friends of this noble institution, not only for their presence, but for the liberal support they had ever accorded the Hospital. He then drew the attention of the students to the many opportunities they had of learning their profession in that Hospital. Fever wards had recently been opened; and they were ample as well as isolated. After a word of warning to the senior pupils against publishing crude theories, or vague speculations, Mr. Hayes concluded by saying that a medical student who had neglected his opportunities should never venture to tamper with human life.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 12TH, 1870.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

III.

On the desirability of making Examinations more definite in their requirements, and more practical.

OF all things to be avoided in the matter of diploma-examinations, the chief is perhaps the element of uncertainty, whether as regards the subjects of examination or the standard of excellence demanded of the candidates. Both student and teacher suffer much by this uncertainty, and in many different ways. Take the case of the student who is fairly well informed, but not altogether justified, on his merits, in presenting himself before a board of examiners, and is rejected—a common case—what is the result? Fellow-students are warned by the misfortune to make a high standard theirs; teachers are more careful in advising men to risk the dread ordeal. So far as it goes, all is well, and the sacrifice of the unlucky victim has at least done good to the survivors. But in a day all is changed: a candidate presenting himself against all persuasion, and quite unfit, passes, and his success entirely removes the good effect of his predecessor's fall. The young, ever hopeful, retain the impression of good luck better than of bad; and the effect of the success of an idle or stupid comrade at an examination spreads far and wide, like small-pox among the unvaccinated; and many are the fatalities in consequence. Teachers are disheartened, and their counsels discredited.

Cases like these are too common, and are supplemented by others scarcely less to be regretted; cases, for example, of the passing and the rejection, by the same examining board, of equally good men, and, it may be, of equally bad men; cases of apparently capricious variations in the standard of excellence required at different times, the caprice belonging to the examinations as a whole, or to the requirements of the individual examiner. It is, moreover, not right that a candidate's chances of success should vary—say twenty-five per cent.—according to the examiner to whose lot he falls; but that such is the case, often, there cannot be a doubt.

It is, however, a very narrow view of the matter to assume that any of the unpleasing occurrences referred to above are due only to the faults of examiners. Looked at carefully, they seem rather the natural results of the system, which is passively carried out in its details by the examiners. One would be disposed to deny that intentional unfairness or injustice ever occurs. Suppose a board of examiners, whose duty collectively is to test the knowledge of students in certain subjects, but to the members of which, individually, is given much latitude in details, of such a board how can the members avoid taking for guidance different standards of excellence? Why, with different minds, should they be assumed to think as if all had the same? As well might one expect them all to have the same temper.

The only remedy for the evils to which reference has been made consists in making examination-requirements more definite; and it is impossible to do this so long as the details of an examination are left to the individual discretion of each of several examiners. Examiners should be under a superior discretionary power, and this tolerably strict. Everybody who has been an examiner, in whatever capacity, must know how apt he is to question concerning subjects with which he happens himself to be most familiar. And if this be the case, the standard required

of the examined cannot be always a fair one, although the examiner may honestly believe it to be so. Moreover, knowledge most familiar to an examiner may be quite different from that to be reasonably required from the examined, not in extent only, but in kind. It is quite true that an examiner, conscious of this, is usually far from strict in his demands. A lack of knowledge on the part of the candidate is met by a courteous exposition of the examiner's own views of the subject in hand; and, as the student at least is not likely to be argumentative, he passes both the time and the examination very pleasantly. Indeed, it is doubtless infinitely more common, under the present system, for bad men to "pass" than for good men to be rejected. But this evil—that ignorant men should pass examinations supposed to test their knowledge—requires, it will be allowed, a remedy; and the direction in which this should be looked for appears to be, as just said, in the laying down a well-defined plan for the conduct of examinations—one in which the subjects to be demanded shall be more clearly marked out, for both candidate and examiner, than is now commonly supposed necessary.

The whole question, "What should be demanded at examinations for diplomas?" requires reconsideration; and especially because this question practically involves the other, "What subjects shall be included in the prescribed curriculum of study?" The present method of examination has sprung up so gradually and imperceptibly, and taken such deep root, that a mental effort is necessary for believing it to be ill-adapted for its purpose—that of securing the possession, on the part of candidates, of the knowledge useful or necessary in the practice of their profession. But is it not so? How wide is the difference between what in theory and what in practice is required of a student of medicine at his examination! And, granted this, how can exact knowledge be expected of the examined? Is it at all likely to be demanded by the examiner?

At present, the case is surrounded by difficulties. An examiner is supposed to test a man's knowledge, say of surgery. He knows that it is quite impossible for a student, even of more than average ability (unless with advantages which can only fall to a few), to know very much—to know it, that is to say, really and truly from experience, and as part of himself, to make use of it effectively when required; but, nevertheless, the student must be supposed to know it. Accordingly, the examiner questions him about pathological details which must of necessity have been learnt from books only; about the symptoms of diseases which he has never seen; about what he would do under circumstances which may never happen to him. It would be very wrong to imply that knowledge of the kind which such an examination is supposed to test is valueless; it is the contrary. But it seems unwise to attempt to test a student's acquirements in such matters as these to the exclusion of those which should belong to him from actual observation by means of his own senses. The proper method undoubtedly is to examine thoroughly in both kinds of knowledge, theoretical and practical; but, if the time be far too short for even one of them, it surely cannot be doubted which should be taken to the exclusion of the other. Necessary knowledge should go before accomplishments. It is very important, however, that the practical knowledge demanded should be of a serviceable kind. It is not of much good to question a candidate aged about twenty-one concerning points of practice which the examiner may have had occasion to observe in an experience of many years. What is referred to here as the practical knowledge proper for examination purposes, is such knowledge derived from actual experience as a student may be justly expected to have gained in the term of study allotted to him. But that the requirement be just, it is necessary that students should be informed explicitly beforehand of what will be required of them; and, this having been done, proof of the proper knowledge should be demanded remorselessly of them at the time of examination; and all the better men of a school would be delighted with the bargain.

By the subjects for examination being made known beforehand, there would be great gain every way, to all parties concerned. Instead

of losing himself in the wilderness of details of particular subjects, and knowing nothing thoroughly (he cannot learn all, and he knows not which to choose), the student, for his part, would take good care to become acquainted with what was prescribed for him, while his examiner would be freed from the feeling of the absurdity of expecting proof of knowledge which could have been acquired only from mere reading on the one hand, or from the experience of many years on the other; in the former case the knowledge being comparatively worthless, in the latter impossible to be got.

If it be true that for all, even the very best men, the knowledge of disease and of its treatment comes in so great a proportion after passing their examinations in the experience of "practice", it would seem to be of greater moment, speaking broadly, to test at the examinations the possession of the *power of getting* knowledge than of the knowledge itself—of course excepting such knowledge as the student may obtain for himself in his student career. For instance, suppose a man under examination in ophthalmic surgery, and the special subject of inquiry to be a diseased condition of the optic disc—such a condition as the candidate may possibly have rarely seen, or not seen at all—which would be the better method of trying him—(a) to ask him concerning the symptoms and treatment of the disease in question, or (b) to give him an ophthalmoscope and try whether he can find and describe with facility the optic disc in a healthy eye? Surely nobody will doubt that, in the necessity of choosing one or other of these alternatives, the latter is, without any doubt, the one to be taken. For, apart altogether from the fact that the knowledge of the nature and treatment of a disease is valueless to him who has not the means of discovering it when presented to him in actual practice, the one is a piece of knowledge which may as readily be sought for in a book after the examination as before it (supposing in both cases the information to be taken from a book), while the knowledge of practical details, as of the use of an ophthalmoscope, is learnt early, as a rule, or not at all. Moreover, while there is every excuse for a student's not knowing much about a rare ophthalmic disease—and if he knew nothing at all about it an examiner could not honestly reject him—there would be absolutely no excuse for his not knowing how to use an ophthalmoscope profitably; and if he knew it not (having had notice that it might be demanded of him), he might be justly rejected. Moreover, supposing a man to have as accurate a notion as possible of a disease, from the descriptions of others, at the time of passing the examination, the knowledge, whatever might be its worth, will fast melt away and leave scarcely a trace behind. But actual and real knowledge, derived from experience, is never lost altogether. A good swimmer at twenty could swim more or less at forty, with no practice between. It is, of course, a very false as well as foolish procedure to underrate the importance of knowledge derived from books; and it is especially dangerous to the young to hear such knowledge decried by their elders, the result not unfrequently to the student being very different from that intended, often leading him to disregard one means of improvement without helping him in the least to another. But the examination of students is at present so inadequate a test of their knowledge of what is necessary in the emergencies of ordinary practice, that there is really no time to search them for knowledge of that which must of necessity be learnt from books only, whether it be learnt before or after the examination. It will surely be granted that it is absurd to ask a man about pneumonia, and certify him fit to treat it, when it would have been found, had he been tested, that his knowledge of percussion and auscultation was nothing, and that he could scarcely hear, much less understand, an ordinary pulmonary or cardiac murmur. What can be the good of asking a youth how he would test urine for albumen or sugar, when, if the not difficult chemical manipulation were demanded of him to be performed, he might perhaps be found able only to burn his fingers? Of what service can it be to make a man say by word of mouth the tests for lead, when, even if he were told beforehand that it was present in any substance presented to him for analysis, he would be unable to prove the statement? Why spend invaluable time in trying whether a candidate

is aware that such or such a vegetable belongs to the natural order Simarubaceæ, when, if asked, he could not tell what a natural order meant, and would be as unable to dissect and name correctly the different parts of a daisy or dandelion as to decipher an Assyrian inscription?

It is a feeble defence of the present system to say that it is impossible to examine all candidates practically on living cases of disease. This is not really required. In the instances given above of the ophthalmoscope and stethoscope, the first thing to be done is to test the capability of using the instrument on any case at all; the ability to use it with profit in cases of disease is the second. In the same way the ability of a candidate to name correctly what he is shown under a microscope—a piece of bone, a muscular fibre, or the like—is a secondary consideration. The primary object, it is presumed, of testing a man's knowledge of microscopic anatomy, is to find out whether, if called upon in actual practice, he could use the microscope with profit. And nobody, probably, will deny that his being able deftly to dissect any object whatsoever, and describe the specimen correctly which he has himself prepared and put under the microscope, would be a much more reliable guarantee of his using the instrument profitably in after-practice than the power of naming correctly every tissue in the body prepared by others. It is of course very improbable that, without some practical knowledge, a student would be able to pass a strict examination in even ready-made specimens; but with proper "coaching" much may be done.

EXAMINERS AT THE COLLEGE OF SURGEONS.

SOME very erroneous statements of facts and still more erroneous conclusions have been made by way of comment upon the recent elections of Messrs. Hancock, Le Gros Clark, and Savory to the offices of Examiners at the College of Surgeons. It is desirable to re-establish the facts. It is entirely incorrect to state from the results of this ballot that "all the Council, with the exception of five members, were determined to adhere to the old system, and to keep the examinerships as the property of the Councillors." The whole Council, on one occasion, voted that it was expedient and desirable that the Examiners in Anatomy and Physiology should be separated from those in Surgery; and the whole Council fairly and honestly lent itself to the foundation of a conjoint Board of Examiners which would have carried that resolution into practical effect. But this was not an occasion on which they could give practical effect to that resolution, inasmuch as the vote on the 27th involved the appointment of Examiners in Surgery as well as in Anatomy. The vote then was not an indication of a determination to adhere to the old system and to keep the Examinerships as the property of the Councillors, but a necessary one of self-respect as old teachers of surgery. When the question comes as to appointing Examiners in Anatomy and Physiology as distinct from Surgery, the Council, we are assured, will not flinch from its duty, though its members have to stand aside for awhile.

Mr. Curling's letter, which we have published, was interesting and candid, but, as many of his friends think, this was not the occasion for it. If, however, he was right in his course of action, what is meant by those who praise him for withdrawing, and then accuse his friends on the Council of giving him the cold shoulder? He would certainly have been elected but for his letter; and, in spite of his letter, one of his friends, as the analysis of the votes shows, voted for him on the last two ballots. Mr. Paget had, a long time previously, announced that he did not desire to become an Examiner.

To "put aside the question of separating the Examiners in Anatomy and Physiology from those of Surgery," is to put aside the whole of the question at issue on Thursday, October 27th. It can only serve to befog the question, to bring upon the arena the subject of a vote passed in August by a small majority which caught the Council in a maze of difficulty and confusion as to how it should deal with conflicting amendments to an original proposition (always a perplexing position to chairmen); the result being that, so soon as the Council found what was the result of its act, it became, and is still, ready to retract it; and for the

simple reason that, in dividing Anatomy and Physiology from Surgery, it had done enough for the present.

When Mr. Quain and Sir William Fergusson declared their intentions with respect to their seats in the Court of Examiners, it was reasonably hoped that the conjoint Board of Examiners was within view, and certainly attainable. When the election of the 27th arrived, the College of Surgeons and the prospects of the conjoint Board were precisely *in statu quo antea*. *Hinc illæ lachrymæ!*

The question as to how Mr. Quain voted is a personal matter for him to settle. But at the end of these comments is repeated what we are assured is a wholly unfounded insinuation, that there was a secret understanding in the Council to support certain persons for Examiners on this occasion. It is said also, in another paragraph of the same article, that "all the Council, with the exception of five, *agreed amongst themselves* to elect Mr. Hancock and Mr. Clark." There never was such an understanding, or any understanding whatever, on the subject. We can say positively that this statement is without foundation and opposed to the fact. Had there been any such an understanding, it could not have failed to come within our cognisance.

The attack upon Mr. Hancock and Mr. Le Gros Clark seems to us equally without foundation. How they have injured Mr. Curling we cannot see. He took his own course for reasons which he stated. If he be injured at all, he has injured himself. It is beyond all doubt that the majority of the Council would have voted for him but for his letter. Mr. Clark was by no means bound to follow Mr. Curling's lead in the matter; and we think him wise not to have done so. Mr. Paget's action had nothing to do with the matter; we disposed of that above. The writer ignores the fact that a number of surgeons of metropolitan hospitals were engaged in the duty of appointing an Examiner, or three Examiners, who were to examine in anatomy, physiology, and surgery. Is it to be supposed that they (varying in age from fifty to sixty) would write themselves down incapable? Mr. Clark, for instance, has been specially selected as Examiner at the London University—an office which he is now filling—and at the College of Physicians; he has been a lecturer on surgery and anatomy for many years; and it is difficult to see why his own College should ignore his capabilities when the time came for recognising them.

THE AMALGAMATION SCHEME.

THE scheme for the amalgamation of the London Medical Societies by the formation of a Royal Society of Medicine has fallen through. It has had the good wishes of almost every one, and has been slowly stifled amidst general expressions of friendship, and with every demonstration of respect. For once the Obstetrical Society has deserted its function, and has sternly refused to assist in bringing into the world a bantling which, there was reason to fear, might not sufficiently respect the obstetric function. The ceremony, however, resembled one of those interments of an Indian fakir, who is warranted to revive, if exhumed with proper ceremonies, after a lengthened period of suspended animation: and it is difficult to suppose that a measure which has found so many friends, and is so much approved in principle, should not again be heard of. Had the terms offered to the Obstetrical Society proved acceptable, the scheme would have been carried. As they were unacceptable, the defection of the obstetrical members afforded ground for objection to those who felt that, without such a section, the new Society would be imperfect, while it strengthened the adverse opinions of those leading members of other societies, such as the Presidents of the Pathological and Clinical Societies, who held that the sacrifice of the initial energy of individuality was hardly compensated by the promised power to arise from consolidation. The very equal nature of the division at the Royal Medical and Chirurgical Society showed that, even under these unfavourable circumstances, the party of union is still strong enough not to despair. Instead of overwhelming the officials of the Obstetrical Society with contumely, it will be found to be a wiser policy to investigate and come to an understanding as to the claims of the representa-

tives of that important class of medical and surgical practitioners, as Mr. Paget and Dr. Quain propose to do. That way lies success. The scheme for amalgamation has met with a more disastrous check than perhaps appears on the surface; for the mildest modes of extinction are not always the least effectual; yet its advocates need not despair.

THE Princess Louise's knee continues to improve; but a continuance of rest for some time longer is necessarily enjoined.

WE are authorised to state that Dr. Heath is not in any way responsible for the foolish observations of a non-medical reviewer in a local paper on his address at the Newcastle meeting.

THE unpublished manuscripts of the late Sir James Simpson on the important subject of Hospitalism, with which he was engaged when he died, have been confided to the care of Mr. Lawson Tait of Birmingham, for completion and editing.

It is stated that the intention of the German medical authorities to transport a portion of the French sick and wounded from Metz to Germany cannot be carried out, owing to the prevalence among them of typhus fever, small-pox, hospital fever, and other contagious diseases.

THE Prussian medical staff at Metz, according to the correspondent of the *Daily News*, complain that, do what they will, they cannot break the French convalescents of their craving for horseflesh. They will eat it, notwithstanding that they are receiving abundant rations of mutton. The doctors oppose their eating horseflesh, because they think that the entire change of diet will operate as much as anything in effecting a cure.

INQUEST ON A MATERNITY CASE.

DR. LANKESTER held this week an inquiry concerning the alleged maltreatment of a lying-in woman by a student of the maternity department at University College Hospital. The evidence disproved the charge, and the jury returned a verdict of "Natural Death". They wished the coroner to insert a rider that the jury recommended that in all such cases, in future, a second and more experienced gentleman should accompany young medical students. Dr. Lankester declined acceding to their wishes.

PREVENTION OF BABY-FARMING.

A DEPUTATION from the Association for the Protection of Infants waited on the Home Secretary yesterday to lay before him a draft Bill for the prevention of baby-farming. Mr. Charley, M.P., having briefly introduced the deputation, explained to the right hon. gentleman that the object of the legislation they proposed was to require all persons who farmed children to be licensed for the purpose, and to make the registration of births, and of all places where nurse-children were tended, compulsory. After some remarks by Mr. Ernest Hart, Mr. Curgenven, and the Rev. Oscar Thorpe, Mr. Bruce said that the Bill appeared to have been carefully drawn, and the whole subject should receive his most careful attention.

APOTHECARIES' HALL: PRIZES IN MATERIA MEDICA.

AT the recent examination for the prizes in Materia Medica and Pharmaceutical Chemistry annually given to medical students, the successful candidates were: 1, Joseph Henry Philpots, King's College, London—a gold medal; 2, Charles James Hislop Warden, St. George's Hospital—a silver medal and a book.

THE HOSPITAL FOR WOMEN, SOHO SQUARE.

THE medical officers of this institution intend giving a course of evening lectures during the months of January, February, and March. They will be free to the profession. The first lecture will be given on Thursday, January 12th, 1871, at 8.30 P.M. Dr. Protheroe Smith will lecture on Flexions, Torsions, and Displacements of the Uterus; Dr. Alfred Meadows, on Uterine Hyperæmia; Mr. Christopher Heath, on Diseases of the Breast.

THE SANITARY LAWS.

DR. CORNER, the Medical Officer of Health of Mile End, referring to the means prescribed by medical science for controlling and suppressing epidemics, observes justly that there are many difficulties to be overcome in carrying such necessary measures into effect. Next to the absence of proper places and accommodation for the reception of infectious diseases, there is, in the majority of cases, a great objection on the part of patients to removal from their homes, however miserable these may be, and however great the risk to their own lives and others incurred by remaining therein. But, with the present confused and impractical sanitary laws, it is impossible to arrive at anything approaching sanitary perfection or complete suppression of infectious preventable diseases.

INTERMITTENT FEVER IN MAURITIUS DURING 1866-7-8.

THE following abstract of a paper read at the General Meeting at Newcastle, on this subject, by Dr. Tessier, has been received by us only this week.

The epidemic of intermittent fever which commenced in Mauritius in 1866 was remarkable in that it was a first appearance of this disease in an island whose position and circumstances seem to have been always favourable for its development and maintenance. At the time of the outbreak, the colony was in an exceptionally bad condition; floods had been followed by drought and hot weather; much earth, saturated with organic remains, had been disturbed; large quantities of foetid mud had been removed; the debilitating effect of a recent epidemic of remittent fever had not been overcome; bad sugar-crops for years had caused poverty and want; a famine in India had rendered the staple food, rice, very dear;—these are some of the pre-existent and exciting causes. The course of the fever is traced around the island—a journey which occupied two and a half years. Mention is made of its successful treatment by hypodermic injections of carbolic acid.

DEFECTS IN THE REGISTRATION OF BIRTHS.

THE letter of a "Taxpayer", which appeared in the *Times* last week, shows how great is the need for such an amendment of the Registration Act as will make it compulsory, instead of optional, on the part of parents, to inform the registrars whenever births occur in their families. As it is, persons of the "Taxpayer" stamp, who entertain peculiar notions about their obligations to their children, and who think that they are not called upon to take the least trouble to comply with the *spirit* of the law, so long as they are not compelled to do so by its *letter*, are at liberty to evade the registrar of births, if they can do so. The "Taxpayer" has had five children born since 1857; and holding, as he says, "wisely or unwisely, that it was the registrar's business to come to me, not mine to go to him, I never sent to that functionary to register the births." Will it be credited that this "Taxpayer" is a guardian of the union in which he lives—being, therefore, officially concerned in the administration of the Registration and Vaccination Acts—and yet avows himself so ignorant of the law, and so careless about its behests, as to have thought it possible that the births and subsequent vaccinations might have been entered on the registers "without his knowledge"? Still further exposing his own ignorance, he asks if the registrar is not "a functionary paid out of the people's taxes", and if it is reasonable that "those taxed to pay his salary should also do his work for him"? The registrars are paid, out of the local rates, so much for every birth or death registered by them: hence it is entirely to their interest to register as many as possible. But, so long as the registrars are left to their own resources in finding out the occurrence of births, without any but voluntary co-operation on the part of parents, it cannot be otherwise expected than that in a large town of 30,000 inhabitants, such as the "Taxpayer" lived in, some births will escape the registrar's observation. How many these amount to, cannot of course be more than guessed at; but, as the largest estimate we have ever seen would only affect the general birth-rate of the country to the extent of less than 1 per 1,000, we need not waste time in discussing that part of the "Ratepayer's" letter. Had this individual lived in Scotland, he would only have been able to indulge his whim at the

cost of a penalty for each of the five births as to which he did not within twenty-one days *attend personally and give information to the registrar* of their occurrence. In Ireland, the case would be similar. But in England he is only bound to register upon the registrar's application to him. That such an anomaly as this should have been tolerated so long, is to us inexplicable. In his evidence before the Sanitary Commission, the Registrar-General, Major Graham, has expressed his opinion that it should be rendered imperative for parents in England to give notice of birth, it having been at his suggestion that the compulsory principle was introduced into the Scotch and Irish Registration Acts. So authoritative an opinion as this will hardly fail to have great weight with the Government in legislating upon the recommendations of the Royal Sanitary Commission.

THE FUNGOID THEORY OF CHOLERA.

MR. T. R. LEWIS, M.B., of the Army Medical Service, who was specially attached to the Sanitary Commissioner with the Government of India, in order to prosecute inquiries into the theory of the fungoid origin of cholera, supported by Hallier, and the alleged connexion between cholera and soil characters promulgated by Pettenkofer, has presented a very interesting and profusely illustrated report, which has been printed at the expense of the Government of India. It is a document of permanent scientific interest, creditable to the author and to the service to which he belongs; and we commend it to the attention of pathologists. The inference drawn by Hallier from his experiments, detailed in his essay *Das Cholera-Contagium*, published in Leipsic in 1867, was, that cholera is produced by a species of fungus belonging to the *ustilagines* or smut group. This fungus is a polycystis, similar to that attacking the rye only in Europe, but which, the Professor believes, attacks the rice-plant in India; grounding his belief on the fact that, in the tissue of growing rice plants watered with choleraic discharges, bodies were detected which he considered identical with the cysts found in the evacuations, thus accounting for the belief frequently expressed by the older writers, that cholera was generated by the consumption of rice in a diseased condition. The author has since modified his views as to the species of fungus in question, but retains the opinion that, whatever the fungus may be called, it closely corresponds with the fungus observed to develop in soil contaminated with choleraic discharges. It will now be seen that Professor Hallier believes that he has established an organic connexion between the two kinds of "cysts," "spores," and "micrococcus." The questions to be investigated by Mr. Lewis were: (1) Are there such bodies in the choleraic discharge examined in India? (2) What are they? and (3) are they found under similar circumstances elsewhere? Dr. Hallier had been preceded by our associates Drs. Brittan, Swayne, and Budd, of Bristol, who had described cyst-like bodies, which were called "cholera-cells" or "cholera-fungi," in 1849. These cholera bodies were dismissed by Baly, Gull, Busk, and Robin, as species of bunt (*uredo segetum*), starch-particles, and other various and differing substances. Hallier, however, revived the observations of our Bristol colleagues, and reproves Robin especially for the summary manner in which he disposes of them in this *Histoire Naturelle des Végétaux Parasites*, Atlas, Pl. XII, Figs. 4. 5. Mr. Lewis reviews the whole subject; and, after carefully analysing the results of all these authors, proceeds to describe the results of a large number of original experiments which he has carried out to determine all the moot questions. We cannot now follow him through all the highly interesting details of his investigation; but we can heartily recommend his beautifully illustrated and clearly written report to all interested and competent to profit by it, while we may state his conclusions in his own words, as follows.

1. No "cysts" exist in choleraic discharges which are not found under other conditions.
2. Cysts or "sporangia" of fungi are but very rarely found under any circumstances in alvine discharges.
3. No special fungus has been developed in cholera stools, the fungus described by Hallier being certainly not confined to such stools.
4. The still and active conditions of the observed animalcula are not peculiar to this disease, but may be developed in nitrogenous material even out-

side the body. 5. The flakes and corpuscles in rice-water stools do not consist of epithelium, nor of its *débris*: but their formation appears to depend upon the effusion of blood-plasma; and the "peculiar bodies" of Parkes found therewith correspond very closely in their microscopic and chemical characters, as well as in their manifestations of vitality, to the corpuscles which are known to form in such fluid; these are generally, to a greater or less degree, associated with blood-cells, even when the presence of such is not suspected, especially as the disease tends towards a fatal termination, when the latter have been frequently seen to replace the former altogether. 6. No sufficient evidence exists for considering that vibriones and such-like organisms prevail to a greater extent in the discharges from persons affected with cholera, than in the discharges of other persons, diseased or healthy; but that the vibriones, bacteria, and monads (*micrococcus*) may not be *peculiar in their nature*, for these *do* vary, may not be the product of a peculiar combination of circumstances, and able to give origin to peculiar phenomena in a predisposed person, is "not proven".

THE LATE S. W. FEARN, ESQ.

AT the recent anniversary meeting of the Governors of the Derbyshire General Infirmary, it was moved by Dr. Ogle, seconded by Dr. Taylor, and carried unanimously, "That this meeting desires to record its deep sense of the loss which the institution has sustained in the death of Mr. Fearn, the senior surgeon; and to express its heartfelt sympathy with his widow."

UNIVERSITY COLLEGE STUDENTS' CHRISTIAN ASSOCIATION.

THE annual meeting of this Association was held on the evening of Thursday, November 3rd. About forty students were present. The chair was taken by Dr. F. T. Roberts, assistant-physician to the hospital, who gave an interesting and earnest address to the students. The President, Mr. H. J. Benham, who has lately taken the highest honours in Anatomy both at the College and at the University of London, then briefly explained the objects of the Association; after which the Rev. Dr. Stebbing, F.R.S., Dr. Gowers, and Messrs. Smith, Read, Barlow, and Maxwell, spoke. The proceedings were concluded with prayer by Dr. Stebbing.

SOCIAL ESSAYISTS.

PESSIMISTS are not wanting on either side of the Atlantic; and the function which they fulfil is one so useful to others, and generally so productive of gloomy satisfaction to themselves, that we are accustomed to think of them as a very enviable and desirable class of persons—not half so miserable as they would have their neighbours suppose, and finding very tolerable the life which they fail to make unendurable to others. We have been reading lately a series of papers on British and foreign populations—English, French, German, and American—in which the various writers have proved, entirely to their own satisfaction, that the respective populations are undergoing a slow but perfectly certain process of physical degeneration. In England, the chief sources of this miserable condition are stated to be, a want of early marriages, excessive reproduction of the species, with deficient provision for their welfare and deficient facilities for divorce, excessive display of wealth, and the use of tobacco. In France, the same evil is apparent; and physical degeneracy of the population—if we can believe some very voluminous authors who have written some very unpleasant books—is rapidly progressive. It is ascribed there to luxury, limitation of births, urban agglomeration, and corruption of manners. In America, we have again a deplorable physical degeneracy, if we can trust quite a numerous band of writers, including the author of an interesting essay in the October number of Dr. Hammond's *Psychological Journal*. Here, again, the enemies are, mostly, artificial limitation of families and tobacco. The picture drawn is terrible—the mortality of the women, the rapid premature decay of the men, the puny character of the children. The general result, however, of a circular review of this class of literature is ultimately encouraging. Each writer ascribes the particular fact of degeneracy to an opposite cause. Unrestrained reproduction and the limitation of families; strictness of the marriage law and facility of divorce; absence of enterprise and the race for money; are

alike capable of producing the direful effects described. The universal enemy, however, is tobacco. On the whole, we are inclined to doubt the facts. The reasonings may be left to destroy each other. The fact of physical degeneracy is nowhere made out; and the weight of evidence is in favour of a general physical improvement of race-characters throughout the civilised world. This is abundantly proved by the most reliable vital statistics; and we do not think that the valuable lessons which many of the essayists wish to inculcate will be a whit less weighty or acceptable from their acknowledging that fact at the outset. We are progressing, and not retrograding.

PROMOTIONS IN THE AUSTRIAN ARMY.

IN consequence of some new regulations lately adopted in the Austrian Army, a large number of medical officers received promotion on the 1st instant. Five upper staff-surgeons of the second class were promoted to the first class, and two to the rank of chiefs of the sanitary department; five staff-surgeons were promoted to the rank of upper staff-surgeon of the second class; twenty-five regimental surgeons of the first class, to the rank of staff-surgeon; eighty-five regimental surgeons of the second class, to the first class; and one hundred and forty-six surgeons, to the rank of regimental surgeon of the second class.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE first meeting of the Royal Medical and Chirurgical Society for the session was held on Tuesday evening; the President, Dr. Burrows, F.R.S., in the chair. Dr. Hilton Fagge and Mr. Durham conjointly contributed an interesting paper on the Treatment of Hydatid Tumours of the Liver by Electrolysis. They described nine cases in which this treatment had been adopted, in all with success; and made some remarks on the plan. The electrolytic method was in no case attended by suppuration, which sometimes followed tapping in the ordinary way. It was a question, however, whether the electrolytic method did more than could be effected by simple acupuncture—namely, the formation of an opening of sufficient size to allow the fluid of the cyst to drain off without allowing the *scolices* to escape. This question, the authors stated in an appendix, was engaging their attention. The authors explained that, in applying the electrolytic method of the treatment of hydatids, they had followed out a suggestion made some time ago by Dr. Althaus. After the discussion of the paper, the meeting was made special for the consideration of the resolution passed at the meeting held on October 25th, regarding the amalgamation of societies. A report of the proceedings will be found on another page.

HOW AND WHY SCARLET FEVER IS PROPAGATED.

THAT scarlet fever is propagated through the laundry, is a fact which has already been authoritatively proved on more than one occasion; and an additional evidence is being furnished from Birmingham. The necessary means for disinfecting the clothing of fever-patients are provided for by the twenty-third section of the Sanitary Act, which has, we believe, been entirely ignored by the local authorities in and out of the metropolis. Other means by which scarlet fever is propagated are by the retention of the sick in crowded rooms. No sufficient hospital accommodation is provided for the purpose; nor are there arrangements at hospitals for the disinfection of the person and clothing of the patient on his discharge. It should be a punishable offence to send a child to any day-school, public or private, from a house or family in which fever exists. This is done every day; and the out-patient rooms of hospitals and dispensaries are even more dangerous than schools. Scarlet fever is propagated by the clothing, bedding, and rooms in which patients have been lying; and by the carriages in which they are conveyed. Sections 23, 24, and 38 of the Sanitary Acts provide for the compulsory disinfection of all these; but the clauses are permissive, and the local authorities will not apply them. When it is necessary, as it often is, to destroy articles of bedding, clothing, etc., the Diseases Prevention Act provides a machinery for replacing them among the very poor; but this invaluable Act is only

put in operation when some particularly severe outbreak occurs. The general result is, that every one of us knows exactly what ought to be done to prevent scarlatina from spreading; no one is doing it; and we are beginning to despair of seeing it done till a majority of the "local authorities" are affected with zymotic fevers.

SCOTLAND.

THE LATE SIR JAMES Y. SIMPSON.

At a meeting of a Committee held in Edinburgh on Monday, the Earl of Dalhousie presiding, it was stated that the form of the national memorial to the late Sir James Y. Simpson had been agreed upon as follows: 1st, a monument and statue in Edinburgh; 2nd, a marble bust in Westminster Abbey; 3rd, a hospital in Edinburgh for the diseases of women, constructed on those principles which Sir James so often and so clearly enforced; 4th, similar hospitals in London and Dublin, should sufficient funds be obtained. It was also stated that a sum of £1,950 had already been subscribed.

OPENING OF THE NEW UNIVERSITY BUILDINGS, GLASGOW.

THE new buildings of the Glasgow University were formally opened this week, the inaugural proceedings being held in the Hunterian Museum. The Duke of Montrose, Chancellor of the University, presided; and amongst those present were the Marquis of Bute, the Lord Justice General, Mr. Gordon, M.P., Sir Edward Colebrooke, M.P., and Mr. A. Orr Ewing, M.P. Lord Derby, as Lord Rector, was expected to be present, but was unable to attend. In his opening address, the Chairman congratulated the Principal and Professors upon the success which had attended their efforts. It was creditable to the talents of the Glasgow merchants that they had made princely fortunes, and still more creditable to them that they had made such use of their riches as to enable the new noble building to be erected for the education of the rising generation. After an address from Professor Lushington, Mr. A. Orr Ewing, M.P., stated that, from subscriptions and from Government, £254,000 had been obtained, and £117,000 had been received for the ground upon which the old College stood; the result of which was, that they entered upon the new buildings without any encumbrance. Of the £150,000 in public subscriptions, Glasgow had given nearly all. The University was then declared open; and the various classes will meet to-day. Mr. Gilbert Scott of London, who is the architect, was absent through serious illness. A banquet took place in the evening.

FEMALE STUDENTS IN EDINBURGH.

OUR Edinburgh correspondent writes: The lady-students are working their way against great difficulties and disappointments with marvellous perseverance. They are dissecting vigorously with Dr. Handyside, and attending his lectures on anatomy side by side with the men. They are also attending Dr. Heron Watson's lectures on the Principles and Practice of Surgery along with the other students. An unexpected, and, if permanent, absolutely fatal obstacle, was this week placed in their way. On applying for tickets to allow them to attend the wards of the Infirmary, the managers refused to grant them. On Monday last the ladies presented a petition, drawn up with much skill, to the managers, in which they strongly advocated their rights to attend the wards as ordinary students, on payment of the ordinary fee, on various grounds, among which were the following; that nurses were present during the ward visits, hence other females might also be present; and that women were subscribers to the Infirmary as well as men. Three of the medical officers of the Infirmary—Dr. Hughes Bennett, Dr. G. W. Balfour, and Dr. P. H. Watson—appended their names to the petition, and expressed their willingness to teach the ladies in mixed classes at the ordinary visit. Two of the staff—Dr. Matthews Duncan and Dr. Joseph Bell—sent in a note expressing their readiness, if suitable arrangements could be made, to teach the female students in the wards separately. The question came up on Monday last, but has, we be-

lieve, been postponed till Saturday, when it will be taken up at a special meeting. Some of the most distinguished and respected members of the Board are known to be against the introduction of the female element into the school. A meeting of lecturers in the Extra Academical School was held on Wednesday evening to consider the question, and specially the refusal of the managers to admit the ladies to the Infirmary. At this meeting, a motion was passed by nine to five that the lecturers petition the managers of the Infirmary not to throw obstacles in the way of female students obtaining tickets of admission to the Hospital. The male students intend to protest.

THE EXTRA ACADEMICAL SCHOOL.

THE classes in the Extra Academical School are very large this year, and the teaching staff is now fully equipped. The lectureship on general pathology, which was vacant last year, is now held by Dr. John Wyllie; and both Drs. Matthews Duncan and Keiller are giving winter courses of midwifery.

NEW UNIVERSITY HOSPITAL AT GLASGOW.

It was stated at the opening ceremony of the University on Monday, that the plans had already been issued, and the offers of the tradesmen accepted; so that we hope to see before long a definite commencement to this most necessary adjunct to the medical school. Meanwhile, we observe an announcement that students will be carried from the Infirmary to the University every morning at 10.30, the visit-hour at the Infirmary being 9 A.M.

FEVER-ACCOMMODATION IN GLASGOW.

A FORTNIGHT ago we expressed a hope that the authorities had at last awakened to a knowledge of the position of the city in respect to fever-accommodation; but we are sorry to observe, from the report of the last meeting of the Police Board, that the old policy of waiting has again become the order of the day. The facts of the case appear to be, so far as we can ascertain, as follows. In the various hospitals throughout the city and neighbourhood there are about six hundred cases of fever, the immense majority suffering from relapsing fever. In addition to this, there are, as the Lord Provost announced, one hundred and twenty-five cases under treatment in private houses, for whom no hospital accommodation exists. Now, it is apparent to every one that these cases, in the midst of a dense population, must act as the foci by which the disease will spread; and that the only way to check its ravages is to provide instant hospital accommodation. In the face of these facts, and in the face of an offer, which has been before them for more than a fortnight, of a piece of ground at a moderate price, and which every one agrees to be suitable for the erection of a fever-hospital, the Lord Provost intimated that "he hoped that within a very short time, perhaps at the next meeting [a fortnight hence], or possibly a special meeting called for the purpose, they would have acquired ground upon which temporary accommodation could be made, and at the same time to lay it out for a permanent hospital." It thus seems that, though the eyes of the Police Board (in this case the local authority) have been opened, they still persist in playing with the disease; and we suspect that, before they can be thoroughly roused to action, the strong stimulus of an order in Privy Council will be required to be administered.

OPENING OF THE MEDICAL SESSION AT GLASGOW UNIVERSITY.

THE medical session was opened as usual this year by an address from Dr. Young, the Professor of Natural History. The address was principally taken up with the consideration of recent legislation in connexion with medical graduation. He very strongly condemned the principle of the Bill recently before Parliament, which was, as he thinks, fortunately defeated. This principle of putting a State licence in competition with the other licences throughout the country he considered objectionable in several aspects. For instance, he supposed that the State licence would be given after examination in the minimum number of subjects, and in this respect would be inferior to that of many of our

universities, so that it would rather tend to depreciate medical education at the universities. He advocated, in opposition to this scheme, one which is considerably modified from that in practice in Germany. He thinks that, as there, the State alone should give the licence to practise, and that all the powers which the different bodies possess of granting such licence after examination should be bought up. At the same time, the State should not examine any candidate, with a view to licence, till he could present a certificate or degree from some recognised teaching body. In this way, while all merely examining boards would be supplanted by the State, on the other hand, the universities and other schools would devote themselves to teaching, their degree or certificate not being a licence to practise, but merely a certificate of having completed a given course of study to the satisfaction of the teachers. Professor Young also advocated a higher standard of medical education. The difficulty has been raised that there are many parts where the remuneration of practice is too low ever to induce men of sufficient education to enter the profession. To meet this, a system of increasing the income of such practitioners by a State grant was advocated; and it was suggested that this might well be done by the State adding to the subsidy which it at present gives towards supplying parochial medical relief.

NOTES OF THE WAR.

THE SICK AND WOUNDED AT METZ.

OUR Berlin correspondent writes as follows, under date Nov. 8th.

The special trains for sick and wounded are now going more regularly and in greater number. Some are arranged by the commissaries of evacuation at Weissenburg, and are to go between that place and Chalons and Paris. The first train of this kind, which was fitted out and sent by the "Berlin Hilfsverein", has now gone for the third time to fetch wounded from Metz. On its second course, this train brought home ninety-eight severely wounded, mostly belonging to the first and tenth army corps: two carriages of it stayed at Courcelles, and were destined to pass through Metz for Novéant to fetch some of the wounded there. I am sorry to say that some of the young volunteer nurses who accompanied the train caught fever during their expedition to the field-hospitals. It is known through the newspapers what a large number of sick are among the garrison and the inhabitants of Metz—cases of fever, hospital gangrene, and small-pox, so frequent these last months among the French, are very numerous. To prevent the spreading of these diseases, the army medical department sent an order immediately after the capitulation, that the patients in Metz were not to be sent to Germany, but that other measures were to be taken in behalf of them. For this purpose, a commission is nominated to inspect the hospitals and to consider the circumstances; as a member of this commission, Professor Frerichs left Berlin last week.

The Medical Schools.—From the absence of our principal medical teachers and of the majority of the students, very few of the medical classes have been opened at the regular term. The Charité, in other years crowded by students in this month, is nearly as lonely as in the hot weather; and among those who go to the few lectures really opened up to the present time, the majority are foreigners. The course of war and politics will decide whether we shall have a regular medical "semester" this winter at all.

War-Museum.—Among the measures for the advantage of science arising out of the war, I may mention the medical and surgical war-museum, established in the "Friedrich Wilhelms-Institut", our medical school for the army. It is expected that every surgeon occupied with the troops will collect interesting anatomical preparations, as far as time and circumstances allow, and send them with notes to this museum. Even now, among the *post mortem* examinations in the "Barracken" near Berlin, a good number of fine specimens are collected; and I am informed that the last hospital-train brought also a series from the hospitals near Metz.

Abuse of the Red Cross.—The following is the text of an order issued by the King: "The red cross of the Convention of Geneva is to be worn by no one otherwise than on the arm-band (*e.g.*, not on the cap). Wearing the white arm-band with the red cross, even when it is stamped, does not give the right of travelling freely in those parts of France which are occupied by the army. When a free intercourse of the public is not desirable, particularly among the outposts, on the Etappen-roads, railways, etc., the military authorities and

the gendarmes have to control the legitimization of the wearers of the red cross, in order to prevent the intercourse of the occupied territory with the enemy, and to disburden the streets of useless transports. The legitimization of wearing the red cross band, and the legitimization as a member of the voluntary aid, will be granted in the German armies by the royal commissary and military inspector of the voluntary aid, Prince Pless; by the royal military commissary of Bavaria, Count Castell; and by the Württemberg Aid Society. Free travelling by rail and requisition of carriages will be allowed to legitimated persons only, if they have a written permission for travelling, signed by one of the above-named authorities, or by one of their delegates. In case of doubt on this point, the royal Etappen-commander will communicate with the respective local delegates of the aid-societies. The military authorities are specially instructed to pay attention to persons who are not German subjects wearing the red cross. Persons of this kind travelling without legitimization by the above-named authorities will be arrested as suspicious." Considering the numerous cases of abuse of the red cross, and the crowd of battle-loafers, it seems to be in the interest of those who really wish to help that there will be a more strict control in future; and we are sure that the members of British aid-societies will not complain of this formality, necessary for the advantage of the wounded and of themselves.

HOSPITAL AT DARMSTADT.

THE *Main Zeitung*, a Hesse paper, speaks very highly of the Alice Hospital at Darmstadt, devoted to the treatment of soldiers suffering from internal diseases. It is under the protection of the Princess Alice, "whom", says the *Zeitung*, "we are accustomed to see at the head of so many philanthropic undertakings", and has been established by the English Society for the Sick and Wounded in the War. The Hessian Government granted the necessary accommodation; and there are usually about eighty patients, mostly suffering from typhus and dysentery. The Crown Princess recently visited the hospital on the 21st ultimo, and inspected the wards and the whole of the domestic arrangements, as also one of Dr. Mayo's new sick transport cars. The staff consists of Dr. Mayo, Fellow of New College, Oxford; Mr. J. C. Galton, Lecturer on Comparative Anatomy at the Charing Cross Hospital; Mr. H. Rundle, formerly House-Surgeon at Winchester Hospital; and Mr. Atthill, Dresser at St. George's Hospital, London. Some ladies belonging to the Hilfsverein manage the household arrangement, and the nurses of that Society attend on the patients.

THE ENGLISH AMBULANCES AT VERSAILLES.

THE English ambulance, writes Dr. Russell, is to remain at St. Germain, where it will not have much to do unless there is another sortie. There is one case—a man with an injured finger. But the time of the surgeons will not be lost. Some have set about learning French; others, I believe, go round and look at the hospitals. There are thirty wounded Prussians in the palace close by—very close to the collection of antiquities made by the Emperor, who has left there something to France. The waggons—horribly ugly and heavy, and contrasting very unfavourably with the French ambulances—are parked in the court and parade-ground, flanked by the bronze battery of the Guard Landwehr. The determination to send all or part to Corbeil has been resisted effectually.

THE BERLIN CENTRAL SOCIETY FOR THE AID OF THE SICK AND WOUNDED.

THE managers of the German society at Berlin for the aid of the sick and wounded in war have issued a statement of their operations up to Oct. 23rd, of which we have received a copy. The station is in connection with chief depôts at Coblenz, Mayence, Mannheim, and Nancy; and with branch depôts at Saarlouis, Saarbrücken, Weissenburg, Hagenau, Jouy aux Asches, Courcelles, Remilly, Pont à Mousson, Novéant, Ars sur Moselle, Gorze, Ligny, Gravelotte, St. Marie aux Chênes, Libramont, Sedan, Donchery, Mouzon, Chalons, Rheims, Epernay, Meaux, Château Thierry, Corbeil, and Versailles. During the three months from July 23rd to October 23rd, there were sent from the central depôt to the other depôts, 132 consignments; to the lazareths, 429; to the army in the field, 33; in all, 594 consignments. The cost of furnishing the consignments has amounted to about 1,380,000 thalers (£201,250); inclusive of the rich contributions of material made by the aid-societies of the free towns and placed at the disposal of the central committee. The sum does not include the gifts in kind made by societies and private individuals: an estimate of their value in money will be made on another occasion. The committee thank the German railway companies for the aid afforded them in promptly forwarding their consignments; especially the directors of the Berlin and Anhalt railway, the Berlin, Potsdam, and Magdeburg railway, and the Hanover railway. The

forwarding by direct transport of woollen and warm clothing to the armies in the field has been essentially limited, inasmuch as the supply has been furnished by the military organisation, and thus the hurtful operation of the wet and cold weather has been obviated. Until this was done, the central committee believed it to be a part of its duty to make provision of this kind, in order to prevent serious disease, notwithstanding that it would have involved an outlay of about 500,000 thalers (about £64,000). For the evacuation of the lazareths before Metz, a transport carriage has been fitted out under the superintendence of Herr von Hönicka, and has already proved of service. Moveable detachments, provided with supplies of all kinds—materials for dressing, necessaries for the lazareths, woollen clothing, medicines, and refreshments, have followed the army before Paris, and have endeavoured to afford the most practical help to the adjoining lazareths; several new detachments have been sent out for the same purpose. New dépôts have been established at Chalons, Rheims, Meaux, Château Thierry, and Versailles; and new ice-dépôts at Meaux and Nancy. A large number of properly qualified persons, provided with the necessary disinfectants, have been sent to the various stations. A table of the various articles supplied by the society is given, among which are enumerated, beds, 1,632; straw-pillows, 18,395; straw-mattresses, 26,540; sets of bed-clothes, 26,377; bandages, 978,364; charpie, 63,829 lbs.; compresses, 213,422; woollen stockings, 279,955 pair; woollen drawers, 106,254 pair; woollen waistcoats, 151,801; waterproof sheeting, 47,711 ells; splints of various kinds, about 4,200; plaster of Paris, 45,870 lbs.; chloroform, 2,454 lbs.; permanganate of potash, 1,526 lbs.; carbolic acid, 9,309 lbs.; 50,300 morphia powders; 58,310 packets of Dover's powder; 55,550 packets of quinine; 7,628 bottles of chloral hydrate, and 318 bottles of the same crystallised; 405,761 bottles of Bordeaux wine; 7,581,050 cigars; 600,000 lbs. of ice; besides numerous amputating instruments, materials for dressing, medicines, and other necessaries of all kinds, including lamps, lanterns, materials for making and giving light, wines, spirits, porter, condensed milk, extract of meat, various articles of food both animal and vegetable, etc.

AMBULANCES IN FRANCE.

THE formation of committees for the aid of the sick and wounded has made progress in various parts of France, such as Lyons, Rouen, Havre, etc. The evangelical aid-committee of Paris has proceeded to Tours, and has established ambulances in Tours, Orleans, and Chalons-sur-Marne. In the department of the Arne, several landed proprietors have established ambulances from their own means.

THE SICK AND WOUNDED IN DRESDEN.

MOST of the cases of disease among the French prisoners lately brought to Dresden were of typhus; there were also several cases of small-pox. In the three hospitals of the town there are about 1,580 sick and wounded, of whom more than 700 are French.

THE PROPOSED ROYAL SOCIETY OF MEDICINE.

AFTER the conclusion of the ordinary business of the meeting of the Royal Medical and Chirurgical Society on Tuesday evening, the meeting was made special for the purpose of confirming, or rejecting, the following resolution, proposed by Mr. Paget, seconded by Dr. Quain, and passed at a special meeting of the Society on October 25th:—

“That the Council be requested to consider whether, while maintaining the charter and constitution of the Royal Medical and Chirurgical Society, it may be possible to obtain a more complete co-operation with the Pathological, Obstetrical, Clinical, and Epidemiological, or other Societies for the promotion of Medical science.”

The minutes of the previous meeting having been read and confirmed as to their accuracy,

The PRESIDENT (Dr. BURROWS) read the bye-law of the Society referring to the business of special meetings, and pointed out that no question could be discussed of which notice had not been given.

Dr. ROBERT LEE moved, and Dr. MURCHISON seconded, the confirmation of the resolution.

Dr. GREENHOW asked whether he would be in order in proposing an amendment.

The PRESIDENT decided that he would not.

Dr. GREENHOW said that he would have given notice had he been aware that it was necessary. He would at once submit, however to the President's decision. With regard to the motion before the meeting, if he were convinced that it really expressed the wish of the Society, he would not oppose it. Taking a retrospective view of the scheme,

tracing it through all its stages, and pointing out how important a part the Royal Medical and Chirurgical Society had taken in promoting it, he could not help thinking that the resolution did not represent the feeling of the members of the Society. He believed it probable that many of the members present at the last meeting voted rather from personal respect to the proposer than from regard to the merits of the question. [No, no.] He would ask whether it was desirable that the amalgamation scheme should be strangled by those who had given birth to it.

Dr. JOHN WEBSTER remarked that the assent of two-thirds of the Fellows of the Society present at a general meeting was necessary in order to make any change in the laws or constitution of the Society.

Dr. BARCLAY hoped that the resolution would not be confirmed. He would inform the Fellows present that Mr. Paget had been asked, after the last meeting, whether he was aware that a plan similar to that proposed by him had already been discussed, and that the Pathological Society had refused its assent unless there were such a change in the name and style of the Royal Medical and Chirurgical Society as would place all the Societies on an equal footing. He regretted that the Council of the Society had presented a mere report without offering any advice as to the course which should be followed. At the last discussion, the opponents of the amalgamation scheme had admitted the great advantages to the profession which would arise from it. They had used even stronger language in its favour than he would employ; and he could not understand why they voted against it. It was a great pity that, if the scheme was to fall through, it should be in consequence of the Royal Medical and Chirurgical Society declining to go on with it. The Society had shown more self-abnegation, and had more readily laid aside considerations of self-interest and self-regard, than any other Society. It would then be a pity that the Royal Medical and Chirurgical Society should be the first to retreat. It was true that there was a strong minority, among whom were men whose opinions were to be respected; and, perhaps, it would be well not to press on the scheme too fast. If the meeting refused to confirm the resolution, the result would be to send the matter back to the Council, and leave it to them to proceed with the scheme in such manner and at such a time as they might think advisable.

Dr. MOXON thought that the amalgamation scheme was in reality not in favour with the Pathological Society—that is to say, with those members of that Society who ordinarily attended its meetings.

Dr. PITMAN said that the question must be looked at from a practical point of view. In order to carry out a scheme of amalgamation, there must be great unanimity. The proposal was, not to merely change the name of the Royal Medical and Chirurgical Society, but to extinguish it and form a new Society. This could not be done without a new charter. Was it possible to get one? A number of members were opposed to this; and, therefore, he thought it would not be possible. He thought that the Society would be wasting labour if it pushed the scheme further at present.

After some remarks from Mr. BROOKE and Dr. WYNN WILLIAMS, a vote was taken, when there appeared—

For confirming Mr. Paget's resolution.....41.

Against.....36.

The resolution was therefore confirmed.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH.

THE introductory lecture in the Edinburgh Extraacademical School was delivered on November 1st by Dr. Joseph Bell; Dr. Gillespie, a President of the Royal College of Surgeons, was in the Chair. There were also present Dr. Halliday Douglas, President of the Royal College of Physicians, and a large number of members of the medical profession and of students.

Dr. Joseph Bell congratulated the students on their choice of a school of medicine. Edinburgh had for centuries been a noted centre of education, and for nearly two hundred years unrivalled in the world as a medical school. The explanation of this undoubted fact might possibly be, that the proverbial industry and perseverance of Scotchmen had given Edinburgh many hard working and accomplished professors; but he believed the main reason was because it consisted of two rival or apparently rival, but really co-operating schools, which were so near each other as practically to be under the same roof. Another reason was its concentration. He was thankful to be able to tell only of gains to the school this year. The vacant lectureship had fallen into the hands of Mr. John Wyllie, who, after a brilliant student career

in Edinburgh, had perfected his knowledge and gained vast experience by Continental study and in the wide field of observation afforded by the Birmingham General Hospital. The lectureship on *Materia Medica*, vacated by Dr. Angus Macdonald, for the, to him, more congenial task of midwifery, was now held by Dr. Thomas R. Fraser, and it could not have fallen into more deserving hands. Already recognised, not in Britain alone, but throughout the civilised globe, as one of the very ablest inquirers and experimenters in scientific therapeutics, a laureate in the French Academy, and prizeman in their own Royal Society, Dr. Fraser's name alone would be a strong recommendation to any school. Dr. Keiller had had his hands strengthened in the clinique of the Maternity Hospital by the addition of the large experience and energy of Dr. Charles Bell; and Dr. John Chiene, who had already made a reputation in the University as a painstaking and intelligent teacher of anatomy, had reinforced the practical summer instruction, already so thorough, in operative surgery. Although they could hardly call Dr. Pettigrew one of their number, they had the advantage of his most valuable instruction and assistance in pathological investigation. But while they had only to tell of reinforcements, the University had been sorely tried. To have lost Syme, Henderson, and Playfair in one year from their staff was a blow unexampled in severity; but when in this spring Simpson died in harness, and six weeks afterwards Syme followed him to the grave, and now Professor Allman's health necessitated his resignation, they could hardly realise the change. Of the two who had died, history would speak. The medical annals of the nineteenth century could not be written without their names being met in every page, but this was not the fit place nor was the lecturer the fit person to write their biographies. Simpson was described as the versatile, many-sided, many-counselled, man, whose never resting, inexhaustible brain found relaxation in change of labour. Full of expedients, eminently helpful, loveable, and winning; inventive almost to a fault, yet still eminently practical; one who could not only use his own brains, but show others how to use theirs—the difficulty with him was to believe that he was one, not legion. He was Ulysses in his travels and his plans; Marquis of Worcester in his century of inventions; Captain Grose in his love for antiquities; a voluminous author, the best of nurses, a noted pamphleteer, besides in the intervals conducting probably the largest practice ever attempted by one man in Scotland. It would be many years before Edinburgh, Scotland, and the world even recognised what a loss it was when Simpson died. How could he trust himself to speak of Syme, the grave, honest, manly gentleman—the man who had done more for surgery, had been favoured to make more actual improvements, than any other man who ever lived?—the teacher who somehow or other taught his pupils what they wanted to know, not by fluent oratory or eloquence, but by a sledge-hammer directness, brevity, and pith; the faithful friend, the fearless foe—his death was not only a public misfortune, but to many of those present a personal affliction. Dr. Bell then referred to the profession which the students had chosen; and, in the first place, said he believed that many of them were unfit to begin the study of medicine as they ought, owing to the previous misdirection of their studies. He did not disparage properly directed classical studies, but he did think the devotion of the student's whole energies from the age of 10 to 17, to wading through Latin poets or Greek prose, with making nonsense verses and getting up the loves of the gods and the murders of heroes, did not train the mind for medical studies. Anatomy they must know, and also the first principles of chemistry, if they wished to escape the accusation of pouring drugs, of which they knew little, into a body of which they knew less. The importance of a knowledge of physiology could not be over-estimated, but he was unable to see that botany and natural history were "necessary" parts of a medical curriculum. Medicine and surgery must be taught in the lecture-room, but learned at the bedside. The pathology they read and heard of, and watched in the sick man's sufferings, must be followed to the *post mortem* theatre and verified or corrected there. They must study therapeutics, the actions and uses of remedies, and they must thoroughly master dietetics. The kitchen-range was a far more important agent than the druggist's shop; the cookery-book quite as worthy of study as the pharmacopœia. He could not see the use of stuffing students' heads with such pernicious absurdities as the colour, taste, smell, and appearance of drugs, the tests of their purity, their habitat, origin, price, and adulterations. The student must learn the use of his hands, and also of his tools; also a little optics and acoustics. In a word, a well-educated medical man must emulate the versatility of the Admirable Crichton, the observation of Aristotle, and the inductive powers of a Bacon. Dr. Bell concluded by referring to the manner in which medical gentlemen should conduct themselves in their relations with their patients and others.

At the conclusion of the lecture, votes of thanks were awarded to Dr. Bell and the Chairman, and this terminated the proceedings.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 28TH.

JAMES PAGET, Esq., F.R.S., President, in the Chair.

Dr. SUTTON read particulars of two cases of Acute Scurvy, which were fatal, the one in twenty-eight, the other in fourteen days. Both had originated in this country. Both patients were females, and in each instance vaginal hæmorrhage ushered in the disease. One, aged 20, had tramped from the North, and been much exposed to cold and fatigue. Three weeks before admission into the London Hospital, she had suffered from pain in the back and febrile symptoms, which were followed by a condition of the throat which suggested diphtheria, except that the grey-looking membrane in the tonsils, when peeled off, was not renewed. The gums then became swollen, bleeding, and sloughing, the bowels much relaxed, and death took place by collapse. At the necropsy, sanguineous extravasations were found in the pleura, pericardium, kidney, stomach, and intestines, beneath the pia mater, and in the mucous membrane of the cheek. The second patient was 32 years of age, and had lived at Bromley. Her illness had commenced fourteen days before admission, with pain in the abdomen, and loss of appetite, headache, nausea, and thirst, followed by swelling of face and sanguineous spots in the skin over the chest and extremities. At the necropsy, the gums were found sloughing; there were extravasations of blood in various parts of the body, and very characteristic scorbutic ulcers of the large intestine. Unfortunately, it had been impossible to ascertain the diet upon which the patients had been living.—Mr. H. LEACH asked what diet and treatment were used. In true scurvy there was no albumen in the urine.—Mr. BRUDENELL CARTER thought that some cases depended on a want of power to take in the true pabulum of the food. In the country, he had seen a boy ill with scurvy; he was well fed, but diet had no influence on the disease.—Dr. BUZZARD said that these were the first cases within his knowledge which had proved so rapidly fatal in England. The absence of bruises would depend on the rapidity with which death had followed. In the first case, the albumen in the urine might have been derived from the vaginal discharge. In Turkey, the most fatal cases were notable for having few external symptoms; but the patient had much ulceration of the nostrils and lips, or chemosis. Sometimes the gums were not affected.—Dr. BROADBENT had seen a case similar to Dr. Sutton's six years ago, in a young, well-nourished woman, who had had fairly good diet. There were febrile symptoms, vaginal discharge, etc., and she died in three weeks. He had seen several acute cases. One patient, in the Fever Hospital, had been exposed to wet. Another, a butcher, also suffered in consequence of exposure.—Dr. WILTSHIRE had seen a man in Newcastle Infirmary, who had been earning good wages. He was very ill, with contracted hamstrings and other symptoms.—Dr. HEADLAM GREENHOW thought there was great force in Mr. Leach's query. Scurvy was always associated with depraved diet. He had met with two cases where the disease arose entirely from dietetic errors. One patient had lived on meat, bread, and rice, and the other on something of the same kind. They soon recovered with proper diet.—Mr. COOPER FORSTER thought that certain well-known symptoms were wanting. In the *Dreadnought*, they used always to look for contractions and pain in the popliteal space. These they used to consider pathognomonic.—Mr. LEACH said that latterly there had been a few cases without this symptom.—Mr. PAGET was also doubtful whether the cases described should be classed under true food-scurvy. He had produced scurvy in himself in a fortnight by eating no vegetables. He then had several blotches on his limbs. He remarked on the singular antiscorbutic powers of milk, as evidenced in the case of a man who suffered intense pain after eating meat. For ten years this man had lived and worked hard on arrowroot-water and milk, yet with no signs of scurvy up to the time when he came to Mr. Paget, when he had blotches, œdema, etc. He soon recovered with proper food.—Dr. SUTTON said all he knew was, that one patient had been badly supplied with food. There was no contraction, because there was no effusion.

Mr. R. B. CARTER described three cases of Optic Neuritis that had come under his notice at the Royal South London Ophthalmic Hospital. In the first case, the patient was a young woman, apparently in good health, and the right eye only was affected. Its vision was reduced to qualitative perception of light; and an active mercurial treatment was employed, under the suspicion, which could not be substantiated, that the disease was syphilitic. Speedy recovery took place, and normal central vision was restored; but in one direction there was

remaining effusion, and a corresponding blind spot in the field, at the date of the paper. The second case was that of a woman, aged 38, who became blind in a few days when in the eighth month of her eighth pregnancy. After delivery her sight began to return; and three weeks after, when she came to the hospital, she could read No. 20 of Jaeger with the left, and No. 16 with the right. At that time there was well-marked optic neuritis in both, with scattered patches of effusion in the choroid. Iron and iodide of potassium were given, and the right eye slowly improved, so that it could now read No. 2, the left remaining almost stationary. Both in the optic discs and in the choroid, extensive atrophic changes had taken place. The subject of the third case was a boy aged 8, who fell from the roof of a shed to the ground. Shortly afterwards, his left eye began to protrude, and became perfectly blind, while he suffered from severe pain in the head and from sleeplessness. The ophthalmoscope discovered optic neuritis. Under treatment by iodide of potassium and iron, with chloral hydrate at night, the pain disappeared, and the eye returned to its natural position in the orbit; but the neuritis passed into total atrophy, and not even perception of light returned, the other eye remaining unaffected. The author referred to the fact, first noticed by Dr. Hughlings Jackson, that a considerable degree of optic neuritis might be present in certain cerebral affections without impairment of vision. The cases related seemed to show that, besides a traumatic neuritis and a well-known form produced by intracranial tumours, there was probably some constitutional state or diathesis with which optic neuritis was associated, as iritis was associated with rheumatism and with syphilis. The discovery of such an association, if it existed, would be greatly promoted by the study of those slighter cases that might be found if looked for, but that did not come to ophthalmic surgeons because they did not, in the first instance, affect vision. The author urged physicians generally to lend their aid in investigating the causes of the affection, in the hope that they might thus afford a clue to the successful treatment of its more serious forms.

—Dr. HUGHLINGS JACKSON, as a physician, was glad that an ophthalmic surgeon had drawn attention to the important clinical fact that extremely abnormal ophthalmoscopic appearances might exist when the patient could read the smallest type (*e.g.*, brilliant), and when he considered his sight to be quite good. It was most desirable that ophthalmoscopic examinations should be made in cases of disease of the nervous system, whether the patient complained of his sight or not. At all events, the ophthalmoscope should be used when there was severe pain in the head, perhaps urgent vomiting as well, and especially if there were also epileptiform seizures. The cases which Mr. Carter related were, Dr. Jackson thought, of great interest, and especially those of unocular optic neuritis. In physicians' practice, optic neuritis was almost invariably double. Dr. Jackson thought it a fact of significance that double optic neuritis might occur from disease of but *one* cerebral hemisphere. This occurrence was of equal, but not of similar, significance to that of the occurrence of total speechlessness from disease in but *one* cerebral hemisphere. With regard to Mr. Carter's remarks on the necessity of medical practitioners joining ophthalmic surgeons in the investigation of the various pathological conditions of the optic nerves in cerebral and other diseases, Dr. Jackson suggested that a most fruitful field of work would be found in the observation of cases of double optic neuritis complicated with certain epileptiform seizures—those beginning unilaterally. In these cases it was possible to roughly localise the disease which produced both the amaurosis and the convulsions. In most of these cases there was evidence of syphilis. Referring to a drawing of the fundus of the eye of a patient, the subject of optic neuritis, Dr. Jackson said the case of this patient was the only one which he could call to mind of double optic neuritis, complicated with convulsion beginning in *the foot*; he had often seen double optic neuritis, with convulsions beginning in *the hand*. —Dr. LIEBREICH, having been invited to address the meeting, did so in French. He had nothing important to communicate with regard to optic neuritis; but he exhibited by means of his ophthalmoscope the fundus of a healthy eye. This, he said, was of the utmost importance, for different eyes varied much; the normal was constantly being taken for the abnormal, there being so many varieties of form and colour compatible with health. Especially this was the case with regard to the optic papilla and fundus; many details had to be mastered, as the colour varied with complexion. The venous pulse was sometimes natural, sometimes elevated by pressure; but an arterial pulse was of grave import, as indicating great intraocular tension. It might be produced, however, by heavy pressure on both eyes till fire seemed darting from them. —Mr. CALLENDER could not let Dr. Hughlings Jackson's ideas with regard to the brain pass unnoticed. There was a great want of accurate knowledge of brain-development. He thought that the optic nerves and their attachments were cerebral outgrowths, like the olfactory. They had no relations with the hemispheres or thalami.

SPECIAL CORRESPONDENCE.

EDINBURGH.

[FROM AN OCCASIONAL CORRESPONDENT.]

THE managers of the Infirmary are to meet on an early day to reconsider their decision of admitting female medical students to clinical instruction. After the matter had been disposed of at the meeting already noticed in the JOURNAL, it was brought up again a few days later in the shape of a petition from the ladies in question, supported by certain of the medical teachers of Edinburgh and members of the staff, and they actually had a considerable majority of those present in their favour. As, however, the meeting was a small one, the subject was adjourned till next meeting. Eight ladies are now attending Dr. Handyside's ordinary course of lectures and demonstrations on anatomy, and Dr. Watson's ordinary course on surgery. I am informed that Dr. Simpson, the new Professor of Midwifery, has a class, roughly estimated, of about seventy. Dr. Matthews Duncan's class-room in Minto House is full. Considerable dissatisfaction has arisen amongst the pupils attending his class, in consequence of the presence at the lectures of five females not regular medical students; four of them are, I believe, nurses from the Maternity Hospital, the other the wife of a missionary. The objection rests on the inferior social status of the midwives, and has nothing to do with the general question of female medical education. Dr. Duncan's class has since dwindled down to one half, in consequence of the presence of these females. The number of first year's medical students who have entered at the University up to this date, Wednesday, November 9th, is 161, as compared with 146 at the corresponding time last year. Professor Lister's opening lecture was very numerously attended.

THE POOR-LAW MEDICAL SERVICE OF GREAT BRITAIN AND IRELAND.

AUCKLAND BOARD OF GUARDIANS: THE POOR-LAW AND THE PUBLIC HEALTH.

At the last meeting, the following letter was read.

"Byers Green Hall, Willington, October 20, 1870.

"Gentlemen,—I have to report that scarlet fever and allied diseases still prevail in the village of Byers Green and neighbourhood. I would suggest that a more systematic examination be made by the inspector and his staff; also that the medical officers of the districts should be remunerated for the trouble and annoyance to which they are subjected by the parties whose premises they consider a nuisance. Unless this is conceded, I am afraid your medical officers will hardly consider themselves 'medical officers of health'. Personally, I object to the principle that they should be called upon to give an opinion upon certain cases without receiving the remuneration allowed in other Unions.

"(Signed) HENRY GEORGE HARDY,
Medical Officer, Byers Green District."

The services which could be rendered by the medical officers of Poor-law districts in investigating and suggesting preventive sanitary measures for the arrest of epidemics might be of the most extensive and important character, and would lead to a great saving of life and economy of rates; but, of course, it is absurd to expect that they shall perform these dangerous, unpleasant, and onerous labours without adequate remuneration.

MEDICAL REPORTS AND MEDICAL PUPILS.

THE Portsea Island Board of Guardians have hitherto borne the reputation of intelligence and public spirit; and their workhouse infirmary, under the particularly able charge of Dr. Page, has been several times quoted as an institution which rendered great services to the sick, and was generally well managed. We see with pain, however, that an influence to be regretted has recently gained an ascendancy over the minds of some of the members. One of them—a Mr. Howell—has attempted to cut down the miserable salary of the chaplain, and to attempt to enforce a resolution that Dr. Page should attend the weekly meetings personally, and give a *verbal* statement as to the condition of the patients of the hospital. It is very well known that a verbal statement

is useless for the purpose of record or of real scientific work; and the regulations of the Poor-law Board direct specific written reports, and not verbal statements. A number of the Board of Guardians were apparently forgetful of this fact and of the inferiority of their knowledge to that of their "servant"; and were struck with horror when he refused to "make an apology" after their own pattern. We hope, however, that there are still more than enough of sensible and public-minded gentlemen in the Portsea Island Board of Guardians to control and disarm the proceedings of such ill-judging persons. Every well-informed person knows that it is an advantage to the patients of a workhouse infirmary, as of every other infirmary, that the surgeon should have pupils to assist him. The Portsea Guardians—or rather those to whom we have referred—wish to prohibit the medical officer from taking pupils.

ASSOCIATION INTELLIGENCE.

GLOUCESTERSHIRE BRANCH.

THE third annual meeting of this Branch will take place on Thursday, November 17th, at 3 o'clock; and, by the courtesy of the Governors of the Gloucester General Infirmary, it will be held therein.

The following may be taken as the probable business of the meeting, which, however, may be added to by members wishing to bring before the Branch any matter of professional interest, communicating with the Secretary prior to the meeting.

1. Report of the Council for 1870.—2. Election of Officers and Council.—3. Election of Representatives of the Branch in the General Council.—4. Mr. Fleischmann will propose the following resolution: "That the Gloucestershire Branch of the British Medical Association is of opinion that the direct representation by the profession in the Medical Council is necessary for the well-being of the profession, and should be an essential clause in any Medical Reform Bill."—5. The President will read a short Address.—6. John Bubb, Esq., will read a paper on a few interesting Surgical Cases.—7. Dr. Wilson will show Professor Beale's new Ophthalmoscope.—The Council have undertaken to furnish microscopes; and it is hoped members will bring with them illustrative specimens.

A dinner will be provided at the Spread Eagle Hotel, at the cost of 4s. per head, to be ready at six.

ALFRED FLEISCHMANN, *Honorary Secretary.*

Cheltenham, November 8th, 1870.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

THE NATURAL SCIENCE DEMYSHIP of £75 per annum for five years, at Magdalen College, Oxford, which was not awarded at the last examination, is announced for open competition in March next. Further particulars will be sent on application to the College.

THE PHYSICAL LABORATORY, lately built at Oxford, is opened this term for practical instruction in physics, under the superintendence of Professor R. B. Clifton, F.R.S., assisted by two demonstrators.

UNIVERSITY OF CAMBRIDGE.

PROFESSORSHIP OF PHYSICAL SCIENCE.—The difficulty of providing funds for the establishment of a Professorship of Physical Science in the University has been overcome by the Colleges, at a meeting of their heads, taking upon themselves a quota of the rates for improvements and other purposes in the town of Cambridge, which was formerly charged upon the University funds. This sum amounts roughly to more than £1200 per annum; so that the University will speedily be able to avail itself of the munificent offer of the Duke of Devonshire, and will doubtless proceed at once to establish a Professorship of Physical Science, and obtain the other aids in the way of laboratory, apparatus, and assistants that the Professor may require.

PHYSICAL AND BIOLOGICAL SCIENCE.—The following notices of lectures this term show that there is great increase of activity in teaching the various branches of Natural Science in the University. Professor Liveing gives a course of lectures on the "Experimental Laws of Heat," and also gives instruction in practical chemistry in the University Laboratory three days in the week. Professor Humphry gives a course on "Practical Anatomy," also a course on "Anatomy and Physiology," and connects with these a "Microscopical Demonstration" once a fortnight, and instruction in "Practical Histology" once

a week. Professor Newton gives a course on "Zoology and Comparative Anatomy." Professor Sedgwick gives a course on "Geology." In Downing College, Dr. Bradbury lectures on "Comparative Anatomy," and Mr. Danby on "Geology." In Trinity, Mr. Trotter lectures on "Electricity," Dr. Michael Foster on "Physiology," and Mr. Trotter on "Elementary Botany." In St. John's, Mr. Main lectures on "Chemistry," and gives practical instruction in the College Laboratory. Most of these College Lectures are open to the students of the University.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology, at a meeting of the Court of Examiners, on Nov. 8th; and, when eligible, will be admitted to the pass examination.

Messrs. William Rendall, William Williams, William Dryland, and T. D. Ransford (Students of Guy's Hospital); E. L. Archer, A. T. Corrie, and R. W. Stewart (St. Bartholomew's); A. J. M. Bentley, J. H. Webster, and Robert Jolly (Edinburgh); R. J. Carey and F. G. R. Tooze (University College); W. J. Foster and J. J. Hues (Birmingham); C. De M. Palmer (Dublin); James Perrigo (McGill, Montreal); J. A. Hendry (Liverpool); A. J. Johnson (Toronto and St. Thomas's); W. McN. Whistler (Pennsylvania); Daniel Murdoch (Cork and Guy's); G. H. Heald (Leeds); C. Oldman, B.A. Cantab. (Cambridge and Guy's); Charles Raines (Hull); W. T. Hawthorn (London); Edward Fretwell (Sheffield); and E. K. Corbin (Paris and St. Thomas's).

Thirteen other candidates were examined, but failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their anatomical and physiological studies for three months.

At this meeting of the Court, the recently elected examiners, Messrs. Henry Hancock, Vice-president of the College, Surgeon to the Charing Cross Hospital; Frederick Le Gros Clark, Surgeon to St. Thomas's Hospital; and William Scovell Savory, F.R.S., Surgeon to St. Bartholomew's Hospital; late Professors in the College, took their seats as members of the Court of Examiners.

The next pass examination for the diploma of membership of the College, will commence this day (Friday).

New Fellows.—At the last meeting of the Council, the following gentlemen of the College were elected Fellows.

Marshall, Peter, Bedford Square: diploma of membership dated March 28, 1828
Mayer, John Emilius, H.M. Indian Army: January 18, 1833
King, M. Kelburne, M.D., F.R.C.S. Edin., Hull

The latter was elected an *ad eundem* fellow of the College, being the first occasion on which this honour has been conferred since the charter empowering the College to do so was granted.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen passed their first professional examinations during the October sittings of the examiners.

William Handzel Griffiths, Dublin; John Wilson, Essex; Thomas Kearney, Dumanway; Finlay M'Nab, Perthshire; Samuel Lane Wallace, Londonderry; Robert M. G. Anderson, Perthshire; Alfred Hill, Yorkshire.

The following gentlemen passed their final examinations, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh.

Robert Rose Brown, Parramatta, Australia; Wm. Alexander Wannan, Arbroath; Thomas Carruthers, Lancashire; Francis Edward Image, Bury St. Edmunds; Charles Henry Gibson, Dublin; Thomas Archer, Nassau, W.I.; Thomas Valentine Kay, Chesterfield; John Mackenzie, Morayshire; Isaac Stephenson Jones, County Cork; John Settle, Ulverston; Samuel Ange Rostange Monty, Mauritius; Samuel Mitchell, County Dublin; Wm. Brown, Dublin; Martin Henry Gomes Pereira, Demerara.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their final examinations, and were admitted Licentiates of the College during the October sittings of the Examiners.

Thomas William M'Dowall, Edinburgh; William Lewis, Paisley; Herbert Sidney Leigh, Ashton-under-Lyne; Henry James Madden, County Mayo; Joseph Patrick Pye, County Galway; Henry Harvey, Gravesend; William Hanson, Felstead, Essex; Alexander Faithfull Mancor, Dublin.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, November 3rd, 1870.

Clarke, Joseph Hirst, Sheffield
Hale, Edmund Thomas, Abertillery, Monmouthshire
Marshall, John, Old Kent Road
Willan, George Thomas, Melton Mowbray

The following gentlemen also on the same day passed their first professional examination.

Maybury, Horace Mansell, St. Thomas's Hospital
Morgan, Edward Rice, King's College

MEDICAL VACANCIES.

THE following vacancies are announced:—

- ARDWICK AND ANCOATS DISPENSARY, Manchester—Senior House-Surgeon.
- BRISTOL ROYAL INFIRMARY—Assistant House-Surgeon: applications, 12th.
- CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN, Manchester—House-Surgeon: applications, 12th.
- COVENTRY AND WARWICKSHIRE HOSPITAL—House-Surgeon: applications, 10th; vacancy, Dec. 31st.
- DENTAL HOSPITAL OF LONDON—Dental Surgeon: applications, 8th. Dental House-Surgeon: applications, 12th. Secretary: applications, 12th.
- DONCASTER GENERAL INFIRMARY—House-Surgeon: applications, Dec. 1st.
- DONEGAL UNION—Medical Officer for the Workhouse and Fever Hospital, and Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Donegal Dispensary District: 10th.
- DUNDEE ROYAL INFIRMARY—Medical Officer for the West Dispensary District.
- DURSLEY UNION, Gloucestershire—Medical Officer and Public Vaccinator for the Uley or No. 3 District: applications, 23rd; election, 24th.
- GENERAL HOSPITAL, Birmingham—Physician: applications, 17th; appointment, 25th. Surgeon: applications, 17th; appointment, 25th. Resident Medical Registrar and Pathologist: applications, 24th; election, Dec. 2nd.
- GENERAL HOSPITAL AND DISPENSARY FOR SICK CHILDREN, Bridge Street, Manchester—Assistant Medical Officer: applications, 20th.
- HOMERTON FEVER HOSPITAL—Resident Medical Officer: applications, 16th.
- HOMERTON SMALL-POX HOSPITAL—Resident Medical Officer: applications, 16th.
- KILLALA UNION, co. Mayo—Medical Officer for the Workhouse, and Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Killala Dispensary District: 10th.
- LIVERPOOL SOUTHERN HOSPITAL—Honorary Physician: applications, Nov. 15th.
- MANCHESTER, Township of—Assistant Medical Officer at new Workhouse at Crumpsall: 17th.
- MIDDLESEX HOSPITAL—Assistant-Physician: applications, 15th; election, 24th.
- MORPETH DISPENSARY—House-Surgeon: applications, 25th; election, Dec. 9th.
- NORTH WITCHFORD UNION, Cambridgeshire—Medical Officer and Public Vaccinator for District No. 4: applications, 15th; election, 16th.
- POOLE UNION, Dorset—Medical Officer for St. James's Parish: 17th.
- REETH UNION, Yorkshire—Medical Officer for Muker District: applications before Dec. 2nd.
- STAFFORDSHIRE GENERAL INFIRMARY, Stafford—Surgeon.
- STOCKWELL FEVER AND SMALL-POX HOSPITALS—Resident Medical Officer: applications, Nov. 17th.
- UNIVERSITY OF LONDON—Examiner in Chemistry: applications, 15th.
- WEST SUSSEX AND CHICHESTER INFIRMARY AND DISPENSARY—Surgeon: 17th.
- YORK COUNTY HOSPITAL—Surgeon.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- EASTES, George, M.B., appointed Surgeon-Accoucheur to the Western General Dispensary, *vice* *A. Wynn Williams, M.D. (Physician-Accoucheur), resigned.
- HOLLIS, Alfred, M.B., elected House-Surgeon to the Dorset County Hospital, *vice* F. W. Young, Esq., resigned.
- *SAMPSON, G. G., Esq., Surgeon to the East Suffolk Hospital, elected Mayor of Ipswich for the ensuing year.

BIRTHS.

- HARDESTY.—On November 8th, at Lochee, Dundee, the wife of J. Jeffery Hardesty, L.R.C.P.Ed., of a son.
- HUMPHRY.—On October 30th, at Brighton, the wife of *Frederick A. Humphry, Esq., Surgeon, of a son.
- JEFFERY.—On November 2nd, at Eastbourne, Sussex, the wife of G. A. Jeffery, M.D., of a daughter.

MARRIAGE.

- *BURTON, Thomas Beard, Esq., Surgeon, of Richmond Road, West Brompton, to Rosa Anne, third daughter of *R. Gardiner HILL, L.R.C.P.Ed., of Earl's Court House, Old Brompton, at St. Philip's, Kensington, on November 3rd.

DEATHS.

- CROWFOOT.—On October 31st, at Beccles, aged 64, Ellen, wife of *William E. Crowfoot, Esq., Surgeon.
- *GABRIEL, William, Esq., Surgeon, at Cullompton, Devon, aged 82, on Oct. 23rd.
- HARRISON.—On October 29th, aged 18, Edith Gertrude, youngest daughter of *John Harrison, Esq., Surgeon, of Nicholas Street, Chester.

BOOKS, ETC., RECEIVED.

- The Mortality of Childbed and Maternity Hospitals. By J. Matthews Duncan, A.M., M.D. Edinburgh: 1870.
- The Manchester Medical and Surgical Reports, October 1870.
- Statistics of Cholera. By E. Balfour. Madras: 1870.
- A Guide to the Physical Diagnosis of the Diseases of the Lungs and Heart: together with an Introduction to the Examination of the Urine. By J. Sawyer, M.B. London: 1870.
- A Sketch of the Life and Writings of Robert Knox, the Anatomist. By Henry Lonsdale. London: 1870.
- The Roman Climate: its Influence on Health and Disease. By G. Taussig, M.D.
- On a New Method of effectually remedying the Defect of Harc-Lip. By W. Stokes, jun., M.D. Dublin: 1870.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
- TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
- WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
- THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
- FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
- SATURDAY...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.—Medical Society of London, 8 P.M. Dr. Althaus will show "a case of Paralysis, and some new forms of Galvanic Apparatus"; Mr. Teevan, "a case of Calculus in the Ischio-rectal Fossa"; Mr. John Daniel Hill, "an Analysis of one hundred and forty cases of Organic Urethral Stricture, of which one hundred and twenty cases were submitted to Holt's operation, and twenty to Syme's operation"; Mr. Gay, "on Henbane in Orchitis".
- TUESDAY.—Pathological Society of London, 8 P.M. Mr. Maunder, "a Tumour"; Mr. J. E. Adams, "Dislocation of Wrist"; Dr. Quain (for Dr. Silver), "Diseased Suprarenal Capsules"; Dr. Douglas Powell, "Cases of Hæmoptysis"; Mr. Richard Davy, "Hip-joints showing Destructive and Conservative Processes"; Dr. Whipman, "Diseases of Tricuspid Valve"; Dr. Kelly, "Heart in a case of Cyanosis"; "Malformed Heart"; "Necrosis of Patella."—Anthropological Society.
- THURSDAY.—Harveian Society of London, 8 P.M.—Linnæan Society.—Chemical Society.—Royal Society.
- FRIDAY.—Medical Teachers' Association.
- SATURDAY.—Association of Medical Officers of Health, 7.30 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

Dr. M. W. TAYLOR, Penrith.—The paper has not yet been received. We have made inquiries regarding it.

Dr. LAYCOCK, Edinburgh.—The last number of Hammond's *Quarterly Psychological Journal*.

WE observe that Dr. Lankester, who has been lecturing on the laws of health at Liverpool, has paid a visit to the works of Walker and Campbell, and expresses a high opinion of the new lead-encased block-tin pipes to which we have recently favourably referred.

THE LIST OF MEMBERS.—In our annual list of members, after the name of Dr. George H. Porter, Dublin, read "Surgeon in Ordinary to the Queen in Ireland; and after that of Mr. Lister, Edinburgh, "Surgeon to the Queen in Scotland."

H. M. S. (Pembroke) is reminded that the privilege on which he lays stress is shared by four thousand others, who are members equally with himself, and whose communications have an equal claim upon our space. The first question to be considered in all scientific communications is their intrinsic value and the interest with which they will be read; their source is a secondary question. The decision to which he refers seems to us well founded. We shall be happy to hear from him on other occasions, and, if possible, in a much more condensed form than the essay which he forwards.

OUR Berlin correspondent's letters continue, as usual, to give the latest news as to the disposal of the sick and wounded at the seat of war. Our Edinburgh correspondent's letters are of more than usual interest of late, in consequence of the exciting topics under discussion at the University and in the Infirmary. We fear that the balloon-letters of our correspondent in Paris must have been among those recently captured, as we have not heard from him for the last ten days. The pressure on our space has prevented our inserting an interesting communication from a young Scotch surgeon with the ambulances at Sedan, and the continuation of Mr. Hart's notes of a surgical visit to the seat of war. Dr. W. MacCormac of Belfast has had the largest surgical experience of any surgeon at the seat of war, and we have reserved for him the place of honour.

THE COST OF EPIDEMICS.—If ever any town had reason to be earnest in desiring powers to deal promptly and effectively with epidemic disease, it is Liverpool. In the reports which have appeared in our pages during the last two months have been noted the full details of an epidemic of relapsing fever which has imposed on the town the necessity of fitting and maintaining at the public expense 1,400 extra beds for the sick. To this cost may be added the relief necessary for the families of those among the families who were bread-winners for others besides themselves, and the loss of their productive labour. The epidemic is one which spreads by contagion, and its extension is a proof of the inefficiency of sanitary legislation and defective isolation. To this is now added a threatened epidemic of scarlatina; and here, again, unless the policy of isolation be carried out, an enormous loss of life and of money may be looked for. The paid authorities, however, have hastened to provide special hospital accommodation, and will, it is thought, enforce removal under the provisions of the Sanitary Act, 1866. But there are not in Liverpool, any more than elsewhere, proper refuges, means of disinfection, or system of inspection by which the first beginnings of disease are made known. Hence it will not be possible, we fear, to save the town from scarlet fever any more than it has been from relapsing fever.

PREVENTION OF SCARLET FEVER.

The following bill is being circulated through the parish of St. Marylebone by Dr. Whitmore. It may, we think, with advantage be used in other parishes.

In the Autumn of last year, hand-bills were distributed throughout the poorer districts of the parish, giving plain direction for preventing the spread of Scarlet Fever. These directions, it is to be regretted, have not been generally attended to, and, as a probable consequence of such neglect, the disease has not abated; on the contrary, it shows at the present time a marked tendency to increase. The number of persons in the parish (chiefly children) attacked with Scarlet Fever, during the last twelve months, may be approximately estimated at 1770, of whom 309 died. But of those cases in which there is not a fatal termination, many do not entirely recover. Long protracted illness follows, and very often permanent injury to health: hence it will be seen that, from the number of deaths alone, no adequate idea can be formed of the wide-spread sorrow and misery produced by this terrible epidemic. Scarlet Fever, although one of the most contagious of all diseases, can nevertheless be controlled and the spread of it arrested by easy and inexpensive means; it is therefore earnestly hoped that the painful experience of past neglect will operate as a present warning, and that, in every family where the disease should unfortunately occur, the subjoined precautions will, as far as possible, be adopted.

Directions. 1.—On the first appearance of the disease the patient should be placed in a separate apartment, as near the top of the house as possible, from which all curtains, carpets, bed-hangings, and other needless articles of furniture should be removed, and no person except the medical attendant and the nurse or mother permitted to enter the room. 2.—A basin containing a solution of chloride of lime or carbolic acid should be placed near the bed for the patient to spit in. 3.—A large vessel containing water, into which has been poured either Condyl's Fluid or the solution of chloride of soda or lime, should be kept in the room, and into this all the bed and body-linen, as soon as it is removed from the patient, and all soiled towels, etc., should be placed; having been kept there some time, the things may be removed and sent to the laundress. 4.—Pocket-handkerchiefs should not be used, but pieces of rag employed instead, for wiping the mouth and nose of the patient; each piece, after being once used, should be immediately burned. 5.—A plentiful supply of water and towels should be kept for the use of the nurse, whose hands of necessity will become soiled by the secretions of the patient; in one hand-basin the water should be impregnated with Condyl's Fluid or Chlorides, by which the taint on the hands may be at once removed. 6.—All glasses, cups, plates, or other vessels used in the sick room, should be scrupulously cleansed in boiling water, before being used by other persons. 7.—Outside the door of the sick chamber a sheet should be suspended so as to cover the entire doorway; this should be kept constantly wet with a solution of carbolic acid or chloride of lime. The effect of this will be to keep every other part of the house free from infection. 8.—The discharges from the bowels and kidneys of the patient should be received into vessels charged with disinfectants, such as the solution of carbolic acid or chloride of lime, and immediately removed. By these means, the poison thrown off from internal surfaces may be rendered inert and deprived of the power of propagating the disease. 9.—The thin skin or cuticle which peels off from the hands, face, and other parts of the body in convalescent patients is highly contagious. The plan recommended for preventing the poison from the skin being disseminated through the air is, to rub oil or lard all over the skin. This practice is to commence on the fourth day after the appearance of the eruption, and to be continued every day until the patient is well enough to take a warm bath. These baths should be administered every other day for four times, when the disinfection of the skin may be regarded as complete. This, however, should not be done without first consulting the medical attendant.—The foregoing directions will apply to all kinds of fever, small pox, and other contagious diseases.

It is to be deplored that there are in the parish a very large number of poor families who, for want of means to rent more than one room each, cannot possibly carry out all the above rules; but a strict attention to those which can be observed, will help materially to lessen the risk and danger to the other members of the family; and, whenever it is possible, the patient should be removed to a hospital.—Whenever fever of any kind or other contagious disease terminates in death in a house occupied by more than one family, it is absolutely necessary to the safety of all other inmates of the house that the body should, as soon as possible, be removed to the Mortuary House in the Paddington Street Burial Ground, where it will be properly taken care of until the time for interment, and where all fitting respect to the dead is observed. The friends and relatives of the deceased may visit the building at all reasonable hours.

Mode of Disinfecting a Sick Room.—The patient having been removed, all linen articles, such as sheets, towels, pillow-cases, and body-linen, are to be disinfected as by direction No. 3. This done, the blankets, counterpanes, and woollen articles of clothing are to be suspended on lines, and the mattresses and beds placed over the backs of chairs; the furniture also is to be removed from the walls, the windows closed, and paper pasted over the crevices; the chimney-opening of the fireplace is also to be effectually stopped up. An old saucen-lid or other open iron vessel is next to be placed in the middle of the room, into which a quarter of a pound of stone brimstone, broken into pieces, is to be put; the brimstone is then to be ignited, and the person who does it must immediately leave the apartment, close the door, and paste paper over the crevices. At the expiration of twenty-four hours, the room may be entered, and the door and windows thrown open to allow the fumes of sulphur to escape. By this process, the room and everything in it may be considered to have been thoroughly disinfected.

A QUESTION OF PARTNERSHIP.

SIR,—A letter appeared in to-day's (October 29th, 1870) JOURNAL, with the above heading. As I am mixed up in the matter, and, like W. M., wish to act in a strictly fair and honourable manner, will you kindly, in justice to both parties, state the case from the other side, and give your impartial opinion? You will see that B. has made amicable proposals, and as those are declined entirely by C., it compels B. either for the remainder of his life to work for C.'s family as well as his own, or to compel dissolution in accordance with a clause in the deed of partnership, which provides for such a contingency.

I enclose my card, and remain, etc.

B.

Case.—A. is an old practitioner; B. is a young practitioner, who becomes A.'s assistant, with an idea of future partnership with A. Some four or five months elapse, and the partnership of B. with A. is discussed, when a gentleman, possessing means, introduces his nephew C. to A. B. has already gained ground in the neighbourhood, and is deficient in funds. C. is backed up by his uncle, but finds it would be to his interests to get B. to join him in the purchase of A.'s practice. A deed of partnership for eighty years is drawn up by solicitors, carefully instructed by C.'s uncle.

This is the result. A. becomes for two years the nominal partner of B. and C., and receives cash down and an annuity during his life, paid equally by B. and C. Before the expiration of the two years, B. succeeds to the union appointment of A., the clubs held by A. being transferred to B. and C. jointly. B. is energetic and attentive, and gains the confidence of the patients, particularly of the wealthier class, who have been yearly increasing. C. is wanting in energy, though an agreeable man and of strictly moral character. He assists B. in the union appointment, and attends the greater part of the club patients; but gains very little ground in private practice.

The position of both parties just now is this. B. is doing nearly three-fourths of the private practice, and C. the bulk of the clubs, with an equal share of the union appointment. The practice is worth annually about £800 private, and £250 from public appointments, etc.

Some years since, C. advanced to B. £100, for which he has duly received £5 per cent. *per annum*. This year, C. (to use his own words) "throws down the gauntlet", and demands immediate payment of the £100, or interest at the rate of 7 per cent. *per annum*. B. decides upon paying the loan, and proposes dissolution of partnership on the following terms.

1. A mutual dissolution.
2. B. to retain his union appointment, worth £130.
3. C. to take the clubs, worth about £90.

4. B. agrees to bind himself to allow C. undisturbed possession of the clubs, as far as he is concerned, for five years, and to pay C. annually the sum of £40 for the same period.

C. declines to listen to the proposal, nor will he make any himself. B. sees the impracticability of continuing the partnership, and has then only one alternative; namely, to proceed according to a clause in the deed, and give notice of dissolution at the expiration of three months from the date of notice. This will give C. the opportunity of purchasing B.'s share; and should he, after one month's consideration, decline to purchase, B. may then purchase C.'s share.

** The elaborate statement made by B. introduces some new elements into the case, which must modify the opinion which we formerly expressed—an opinion, however, which we still hold to be correct so far as the very general statement submitted to us was concerned. It now appears, that the term of partnership is, for the medical profession, of extraordinary length: that the deed of partnership contains a clause specially providing for dissolution: and that B. has made overtures to C. for a dissolution of the partnership on, apparently, very fair terms. Without giving any opinion as to the legal obligations of B. and C., we think, in the circumstances now described to us, that the most fair and honourable course would be for C. to accept B.'s proposals, or, at least, to agree to the dissolution on such terms as might be just and satisfactory to B. and himself.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, Oct. 10th; The New York Medical Gazette, Oct. 22nd; The New York Medical Record, Oct. 27th; The Boston Medical and Surgical Journal, Oct. 27th; The Madras Mail, August 29th; The Shield, Nov. 5th; The Auckland Times and Herald, Nov. 4th; The Western Daily Mercury, Oct. 21st; The Hampshire Telegraph and Sussex Chronicle, Nov. 5th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Skinner, Liverpool; Mr. Worth, Nottingham; Dr. A. Mercer Adam, Boston; Mr. Henry Dodd, Rillington; Mr. John Woodman, Exeter; Dr. Campbell Black, Glasgow; Dr. Miller, Glasgow; Dr. W. T. Greene, London; Dr. Stevenson Macadam, Edinburgh; Mr. T. Watkin Williams, Birmingham; Dr. Charlton, Newcastle-upon-Tyne; Mr. H. Robertson, London; Dr. Lonsdale, Newcastle-upon-Tyne; Mr. J. C. Wilkinson, London; Dr. Gardiner Hill, Brompton; The Secretary of the Pathological Society; Mr. G. S. Elliston, Ipswich; Mr. J. J. Hardesty, Dundee; Mr. G. Eastes, London; Dr. Laycock, Edinburgh; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Drysdale, London; Mr. Ralfe, London; Dr. Maclaren, Carlisle; Dr. Westall, London; An Associate; Mr. G. Bullen, Ipswich; Dr. Ransome, Bowden; Dr. C. Kidd, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. Shettle, Reading; Dr. Arnison, Newcastle-upon-Tyne; Dr. Gwynne Harries, Pembroke Dock; Dr. A. W. Edis, London; Mr. W. Smith, London; Mr. J. K. Douglas, Bangor; Messrs. Cantrell and Harvey, Warksworth; Dr. Lionel Beale, London; Dr. Hughlings Jackson, London; Dr. Parr, Tring; Mr. Fleischmann, Cheltenham; Dr. Edmunds, London; Dr. Fairlie Clarke, London; Dr. Tessier, Tynemouth; Mr. T. Maxwell, London; Mr. J. Sampson Gamgee, Birmingham; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. W. MacCormac, Belfast; Dr. J. K. Spender, Bath; Our Dublin Correspondent; Dr. Gamgee, Edinburgh; Dr. Charlton, Newcastle-upon-Tyne; Mr. R. S. Hunt, Manchester; Our Edinburgh Correspondent; Dr. R. Gee, Liverpool; Our Glasgow Correspondent; etc.

A LECTURE ON SCARLET FEVER AND ITS PREVENTION.

By GEORGE JOHNSON, M.D., F.R.C.P.,

Professor of Medicine in King's College; Physician to King's College Hospital.

GENTLEMEN,—There are few diseases which at the present time cause greater anxiety, suffering, and mortality, than scarlet fever. We hear of it and we meet with it everywhere—in public institutions and in private dwellings; in large towns, in small villages, and in isolated country houses; in the cottage of the poor, in the parsonage and the palace—no class of life is exempt from the scourge. The immediate mortality from the disease, as shown by the returns of the Registrar-General, is alarmingly high; but the deaths which result directly from the fever are probably less numerous than those which are indirectly, but not less certainly, due to the malady and its numerous secondary complications.

Scarlet fever is a highly infectious disease. The symptoms are the result of a morbid poison, of whose nature we know nothing except what we learn by observing its operation upon the living body. During the progress of the disease the fever-poison is rapidly generated within the system and thrown off through various outlets into the surrounding air. This process of elimination, which, as regards the patient, is conservative, and, in fact, forms an essential part of the process of cure, is dangerous to his associates and attendants. The poison retained within the system is a source of danger and often a cause of death to the patient, while the poison thrown out of the body is injurious and destructive to others. The case of two brothers now under my care in the Hospital affords a good illustration of both these propositions.

A. C., aged 12, was living in a house where a girl had been suffering from scarlet fever. On the 28th September, he had shivering headache and sore throat. He got up each day, but was unable to continue his work. On the 1st October, he noticed that his skin was covered by a scarlet rash. Notwithstanding this, on the following day he went in a third-class carriage to Uxbridge, and shared the bed of his elder brother, who was a servant in a small farm-house. The day after A. C.'s arrival, his brother, B. C., complained of sore throat, and about the third day he had the scarlet eruption on his skin. Meanwhile, the first patient, A. C., was going out daily and doing some work on the farm, until on the 14th October, he noticed that his urine was high-coloured and scanty, and he had general dropsical swelling over the body. On the 20th October, he was admitted with the usual symptoms of acute renal dropsy, from which he is now rapidly recovering. His brother, who remained in bed during the first week of the fever, has had no renal or dropsical symptoms. When admitted on the 28th of October, he was suffering only from debility, and his skin was still freely scaling.

The case of these two brothers illustrates the double danger which results from a scarlet fever patient being allowed to go about. On the one hand, there is the danger of conveying the disease to others; and, on the other hand, there is the risk of renal and dropsical complications, consequent on the repression of the cutaneous rash by exposure to cold.

The main purpose which I have in view to-day is not to discuss the pathology or the treatment of scarlet fever, except so far as this may be necessary while I proceed to point out to you the chief circumstances which favour the spread of the disease, and the means of preventing its spread.

A sufferer from scarlet fever, for a period of about a month from the commencement of the disease, is continually throwing off from his body a material poison, which has the power of conveying the disease to others. The poison is chiefly contained in the discharges from the throat and nose, and in the scales which are thrown off from the skin. It is probable that a portion of the poison may pass off by the bowels, and another portion by the kidneys. That the inflammation of the kidneys, which not unfrequently complicates the disease, is the result of an effort to eliminate the poison and its products, can scarcely be doubted; the epithelial desquamation within the uriniferous tubes being exactly analogous to the epidermic desquamation on the surface of the skin.

Now, taking these facts as the basis for our practice, let us consider what we have to do when a case of scarlet fever occurs in a private house or in a public institution. Our object is twofold; first, to conduct

the patient safely through the disease; and, second, to prevent the extension of the disease to the other inmates. It is fortunate that these objects in no degree conflict with each other. We need not here discuss the expediency of removing some of the inmates from the infected house. I assume that the house is sufficiently capacious to allow of the complete seclusion of the patient. This is the first requisite. He should be placed in a room as remote as possible from other inhabited rooms—better at the upper part of the house. The room must have an open fireplace, in which a fire should be kept burning night and day. This, with a carefully regulated opening of doors and windows, insures free ventilation of the room, which is wholesome alike for the patient and his nurse. The room should be cleared of all needless carpets, curtains, draperies, and articles of dress, which may form a nidus for the poison. If the nurse has been protected by a previous attack of the disease, so much the better. A second attack in the same individual is quite exceptional. The nurse in attendance upon the patient should have the least possible communication with the other inmates. She should wear a glazed cotton dress, which can be readily washed and disinfected, or, if need be, burnt when the nursing is completed.

One of the main objects of preventive treatment is to disinfect the poisonous emanations from the body at the earliest possible period after their formation. A basin containing Condyl's fluid, or carbolic acid, or chloride of lime, should be kept by the bed-side for the patient to spit into. The mouth and throat should be frequently gargled with diluted Condyl's fluid. It is better, as Dr. William Budd suggests, that, in place of pocket-handkerchiefs, bits of clean rag should be used to wipe the mouth and nose, and that these when once used should be burnt. The discharges from the bowel and kidney are to be received on their very exit from the body into a vessel containing some disinfectant—carbolic acid, Condyl's fluid, or a solution of sulphate of iron. All glasses, cups, or other vessels, used by or about the patients are to be carefully cleansed before being used by others. The hands of the nurse and medical attendant may be disinfected by washing them in diluted Condyl's fluid, or more conveniently by the carbolic acid soap. The patient's bed and body-linen, immediately on its removal, should be immersed in boiling water, and subsequently in water containing carbolic acid. Even after this the laundress should be warned to take special precautions, and to wash this linen apart from the remainder of her week's wash. There is reason to believe that a neglect of these precautions has frequently led to the spread of the disease.

The main outlet for the scarlet fever poison is through the skin. The particles of epidermis which are thrown off more or less abundantly during the progress of the fever are most active agents in the spread of the disease. The skin-eruption and the subsequent scaling, which form an essential part of the process of cure, are also the chief means by which the disease is conveyed to others.

It is essential for the patient's welfare that the eruption should be encouraged and not repressed. A warm bath once or twice a day, when the patient is not too ill to bear the fatigue, keeps the rash well out, favours the exit of the poison, prevents renal complication, and is usually most soothing and agreeable to the patient. After the bath, the whole surface of the body, including the scalp, in accordance with Dr. W. Budd's directions, may be anointed with camphorated olive oil. It is doubtful whether, as Dr. Budd believes, the camphor have any disinfectant property; but the oil allays the troublesome itching of the skin, and it may have the yet greater advantage of entangling the poisonous particles of epidermis, and so preventing their ready diffusion into the air.

The warm baths may be repeated night and morning until the process of desquamation has ceased; and, while the patient is in the bath, the skin may be well cleansed and disinfected with carbolic acid soap. It is a good and safe rule to act upon, that, until the process of cutaneous desquamation has entirely ceased, the patient should neither expose himself to cold, nor associate with other members of his family. When, in the early stage of the disease, the patient is too ill and feeble to bear the bath, the outcoming of the rash may be promoted, and the favourable progress of the disease assisted, by a daily packing for an hour or more in a warm wet sheet covered by blankets.

Since the poisonous discharges and secretions find their way into the closets and drains, the emptying of slops from the sick-room should be followed by a liberal downpouring of carbolic acid or some other disinfectant. Care should be taken that there is no leakage from the drains, or escape of sewer-gases within the house. I heard lately of a school in which repeated outbreaks of scarlet fever were traced to an overflowing cesspool, which had probably become contaminated by the fever-poison. The removal of this nuisance put a final stop to the disease.

When the disease is over, the bedding and clothing of the patient and his attendants, the floors, the walls, and the ceiling of the room,

the surface of the furniture, and the interior of cupboards, drawers, and closets, must be thoroughly cleansed and disinfected. If the walls of the room be covered with paper, this should be entirely removed and burnt; the ceiling whitewashed; and the floor scrubbed with soap and water, and then with carbolic acid. After this, the room should be left for a time unoccupied, with a fire in the grate, and the doors and windows open.

The preventive measures which I have mentioned are effectual in arresting the spread of scarlet fever amongst those who have space, money, intelligence, and the desire to save life. It is far more difficult to deal with the disease as it occurs in the overcrowded dwellings of the poor, where the healthy, the sick, and even the dead, are often found occupying the same apartments. The Association of Medical Officers of Health have recently published some useful suggestions relating to measures of public hygiene. They recommend that information by means of public handbills should be diffused through every family, as to the contagiousness of scarlet fever and the mode of preventing it. Every case of the fever should be reported to the officer of health, who would then give the needful information and assistance. Public day and Sunday schools in an infected district should be authoritatively closed. It should be a punishable offence to send a child to any school, public or private, from a house or family in which fever exists. Sufferers from scarlet fever should not be permitted to visit the out-patient rooms of hospitals or dispensaries. Sufficient hospital accommodation should be provided for the poor, with arrangements at each hospital for the disinfection of the person and clothing of the patient on his discharge. The medical officer of health should, when necessary, have the power of enforcing the removal of patients from overcrowded houses. An appropriate carriage should be provided in every district for the removal of the sick to the hospital. At present, public cabs are largely used for this purpose; and the Sanitary Act, as it relates to the use and disinfection of public carriages for the conveyance of persons with infectious diseases, is not enforced as it ought to be.

There should be in every district one or more mortuary houses for the reception of the dead; and removal thereto should, when necessary, be compulsory.

The sanitary authorities should provide such a staff of assistants and appliances as may be necessary to disinfect houses, clothing, bedding, etc. The twenty-third section of the Sanitary Act, empowering local authorities to provide means of disinfection, has been almost ignored in the metropolis, not even a "proper place" being provided where disinfection may be carried out. There should be arrangements by which articles of clothing, bedding, etc., destroyed by order of the medical officers of health, may be either replaced or paid for. During the disinfection of a house or apartment, or when the sick cannot be removed, it is necessary to remove the healthy. For this, there should be one or more houses of refuge provided, in which poor families may be temporarily lodged, and with means of disinfecting the persons and clothing of those removed. A house of refuge is at the present time utterly unknown in the sanitary arrangements of the metropolis.

It is well to bear in mind that, although the poor are the chief, they are by no means the only, sufferers from the defective sanitary arrangements to which I have referred. When scarlet fever prevails extensively amongst the working classes, there are many channels through which the subtle contagion may reach their employers. To mention only a few amongst numerous sources of infection, it is certain that the tailor, the dressmaker, the upholsterer, the baker, the shop-assistant, male or female, the laundress, and even the milkwoman, may be the unsuspected agents by which the morbid poison is conveyed to the very highest classes. It is manifest that all classes are equally interested in arresting the progress of this truly formidable disease.

BEQUESTS, ETC.—The East London Hospital for Children has become entitled to £2,000, subject to the life interest of a gentleman aged 60; and to £20,000 contingent upon the death of a child aged five, before attaining 21, under the will of John Saunders, Esq.—Miss Eleanora Atherton has bequeathed £1,000 to St. Mary's Hospital, Quay Street, Manchester; £1,000 to the Manchester Royal Infirmary and Dispensary; and £500 to each of the following, viz.:—the Eye Infirmary; the Asylum for Idiots, Earlswood; the Royal Hospital for Incurables, Putney; and the British Home for Incurables, Clapham Rise; in addition to several munificent bequests to other charitable and religious institutions.—The Salop Infirmary has received £300 under the will of Richard Hodges Gwyn, Esq.; and £200 under the will of Henry Bayley Clive, Esq.—The Bristol Royal Infirmary has received £300 under the will of W. H. Edwards, Esq.—Capt. W. B. Phillimore has made a sixth donation of £25 to the National Hospital for Consumption, Ventnor.

THE PATHOLOGY OF GENERAL PARESIS.*

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FRENCH authors have for many years held that general paresis is a distinct morbid species. Some years ago, I examined this question from a symptomatological point of view; and at that period I was disposed to believe that the evidence was in the main favourable to their opinion. Subsequent experience and reading have confirmed my previous belief. I am now disposed to go still further, and to assert that, if we exclude certain cases usually found in our asylums of imperfect development, cases of climacteric decay, and cases of epileptic mania in which the mental symptoms are secondary, all the rest belong but to two species of disease—viz., Ordinary Insanity in its various stages, and General Paresis.

The diagnosis of one of these diseases thus affords, by a negative process, the diagnosis of the other. In other words, I believe that to ascertain that the symptoms of a case do not belong to one disease shows that they do belong to the other.

As my remarks must be necessarily brief, I will not here repeat the evidence from the symptoms for considering general paresis distinct in species from other forms of insanity; but I will state in few words my reasons for including all other cases of insanity under one species.

I hold that, for a disease to be considered a distinct morbid species, it should be shown to have a distinct origin, a distinct and peculiar course of progress and termination, with distinct anatomical characters; and until this can be proved, or even until a tolerable uniformity between a given set of cases can be shown, I do not think we should consider that we have a distinct disease. I do not know of any distinct characters in the so-called different kinds of insanity which satisfy these requirements. On the contrary, if we examine in any asylum a number of imbeciles giving no distinctive characteristic in their imbecility, we shall find among the cases some which were called formerly puerperal insanity, some homicidal insanity, some melancholia, suicidal mania, phthisical mania, hysterical mania, amomania, and so on. These cases at their outset have been probably attributed correctly to some peculiar cause; but the morbid process occasioned has run a given course, varying within certain limits only. They have terminated in a state of imbecility having a general resemblance, yet varying also possibly in some peculiarities.

My belief is, that the course of all these cases may be thus epitomised in general terms. With respect to the mental phenomena, the patients have first gone through a stage of depression of spirits; next, of morbid apprehension, alteration of the moral faculties, illusions going on to delusions, and disorder of intellect proper, imbecility, and dementia. With respect to the motor phenomena, they have shown either restlessness, agitation, and violence; or dulness, inaction, and stupor; but no form of paresis.

The above being the phenomena of insanity proper, by a process of exclusion, cases which have not gone through these stages should be cases of general paresis. There is, however, besides this negative mode of proceeding, in many cases, positive evidence, derivable from a totally different set of phenomena; and this long before any motor defect is present. These phenomena are such as great garrulity, wild and exuberant spirits, alteration of character, sexual impropriety, etc.; and more especially I would mention, in some cases certainly, an early exhibition of maniacal violence.

These two sets of phenomena must necessarily have each a different pathology and etiology. For brevity's sake, I will omit the steps by which I was led to my conclusions, but will state the solution at which I have arrived.

I believe that the difference in the phenomena is due to this. In ordinary insanity, the cerebrum is affected through its nutrition-processes—in other words, through the blood. In general paresis, the primary effect is produced *directly* on the nerve-tissue, by a mental shock or a severe physical shock, acting directly on the nervous centres.

The first symptoms of the one disease are connected, therefore, with the nutrition-processes; while the first symptoms of the other disease are connected with the nerve-functions.

In ordinary insanity we have, primarily, distinct evidence of disturbance of the digestive functions, such as loss of appetite, foul tongue, constipation, acidity, flatulence, præcordial pain, palpitation, etc.; and eventually diseases of the blood-making organs—diseases of the lungs, liver, kidneys, and heart—as shown on *post mortem* inspection. On the other hand, the early symptoms of general paresis are quite uncon-

* Read in the Psychological Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

nected with the chylopoietic organs. Neither appetite, digestion, nor nutrition is disturbed; and dyspeptic symptoms are not present. After death, the blood-forming viscera are, as a rule, normal. The first symptoms, on the contrary, are a decided alteration of character of the individual; while in insanity proper the natural character is simply modified by depression of spirits.

Further, that the primary cause of general paresis is an effect produced on the nerve-tissues direct, is corroborated by what is observed with respect to the smaller arteries and capillaries of the brain in the two diseases. I have found, in the examination of the coats of the smaller arteries in ordinary insanity of long standing, a decided hypertrophy of their walls. In several cases, the walls of the artery were three or four times as wide as the calibre of the vessel. In general paresis, such amount of thickening does not exist; but a very different and curious condition occurs: the small arteries are curiously contorted and varicosed. Their walls are delicate and transparent, as in health; and the varicosity involves even the capillaries themselves.

The explanation of these different conditions I take to be the following; and it is to Dr. George Johnson's paper that I am indebted for my solution of this point. In ordinary insanity, in which the blood-making organs are the starting-point of the disease, the hypertrophy of the muscular walls of small arteries takes place from overwork. The blood being in a state not suited for the cerebral supply, the small arteries would be constantly excited to close upon their contents; and by this constant work, according to the usual laws, would become hypertrophied. On the other hand, in general paresis, the primary defect or lesion being in the nerve-centres, and every part of the nerve-system being involved, there is paralysis of the nervous plexus of the vessels themselves: they do not, therefore, resist the influx; are not, therefore, hypertrophied; but, on any extra action of the circulation, are thrown into a condition of varicosity.

There is, therefore, evidence of the paresis extending to every division of the nervous system—the cerebro-spinal and sympathetic; and that this is the case, is corroborated by the subsequent course of the disease. The ideational, the emotional, and the excito-motory phenomena are become obtuse and dull; and death occurs usually through defect of nerve-action.

CLINICAL MEMORANDA.

JAUNDICE AFTER ANXIETY: ADMINISTRATION OF BROMIDE OF POTASSIUM: QUICK RECOVERY.*

IN October 1868, I attended a married lady aged 30, for jaundice following mental and physical fatigue. The ordinary remedies were used. The nitromuriatic acid was of the most service; but the discoloration persisted for some weeks. Six months after this, she had several visitors staying in the house, and, having little inclination for society, was somewhat disturbed by attending to them, and by the addition to the ordinary cares of her household. In the midst of this anxiety, one of her children, subject to asthma, had a severe attack one evening, and was in considerable distress all night. Next morning, at five o'clock, I found her sitting up in bed, rocking to and fro, and complaining of acute pain in the hepatic and gastric regions. Pulse 72; temperature 98.4 deg. She showed slight but unmistakable symptoms of hysteria—quivering eyelids, etc. Ten grains of the bromide of potassium were given, therefore, every four hours. The first dose cured her of all pain at once. On the following day, however, I found her completely jaundiced, and the urine of a dark brassy colour. The bromide was continued, but less frequently; and an aperient pill (podophyllin with colocynth and henbane) was given. On the next day, the jaundice was less intense; and three grains of the bromide with infusion of calumba were given three times daily. Two days afterwards, the yellowness had entirely gone, and the urine was of a natural colour.

I do not pretend that the aperient pill had nothing to do with this rapid recovery; but, on the other hand, we know how little purgatives often avail in such cases. Neither do I think they would have availed anything in this case, had not that condition of the nerve-centres upon which (no matter *how*) the jaundice ultimately depended been first, as it were, neutralised by the bromide. Nevertheless, I should have laid little stress on a single case, but that Mr. Jessop of Leeds, to whom I am indebted for the suggestion of this plan of treating nervous jaundice, tells me that he has several times used the bromide with equal success.

T. CHURTON, M.R.C.S., Erith.

* Read at a meeting of the West Kent District of the South Eastern Branch, at Rochester, September 1870.

NOTES ON THE EPIDEMIC OF RELAPSING FEVER IN LIVERPOOL.

By ROBERT GEE, M.D., M.R.C.P.,
Physician to the Liverpool Fever Hospital, etc.

V.

DURING the month of October the epidemic steadily increased up to the 20th, when it reached its maximum, there being on that day 1419 cases in the various hospitals. Since that date there has been a slight decrease, due rather to the large number of discharges than to a marked diminution in the number of admissions. The following report of the month renders this apparent:—

Week ending	Admitted.	Discharged.	Died.	Remaining.
Oct. 1 ...	326	237	14	1191
" 8 ...	369	307	18	1235
" 15 ...	433	320	9	1339
" 22 ...	405	354	22	1368
" 29 ...	289	250	18	1389
" Nov. 5 ...	388	411	27	1339
Total.....	2210	1879	108	

Two additional wooden hospitals or sheds were erected in the course of the month, so that provision is now made for 1500 cases.

Scarlatina has been rife in some districts of the town for some time, and during the month an unusual number of cases were sent to the Workhouse Hospital. This was embarrassing, as the wards for infectious cases were already occupied. Temporary arrangements were made for their reception, and the select vestry secured, without delay, a large house in the suburbs, to which all have been transferred. It now contains fourteen cases of scarlatina and one of variola. The establishment is placed under the medical charge of Dr. de Zouche.

It will be well to enumerate some of the difficulties with which we had to contend during the epidemic. Its spread was so rapid, and its range in the lower parts of the town so extensive, that great energy and labour were called forth to meet the requirements of the case.

The first difficulty was that of providing sufficient hospital accommodation of a suitable character. How this was surmounted has been already stated in previous notes, which renders it unnecessary to refer to it again.

Another difficulty was that of securing a sufficiently large and efficient staff of nurses and under nurses. It was impossible to obtain *trained* nurses, and we were under the necessity of selecting the best, to all appearance, from the sparse numbers who offered their services for this hazardous temporary work. They were of the classes of respectable servants or widows of good reputation. Some of them proved valuable helps, while others had soon to be dismissed as useless. All were placed under the supervision of the old staff, who proved themselves equal to the arduous duties they were called upon to fulfil. The large tribe of under nurses were selected from the class of healthy paupers in the workhouse. Unhappily (or happily) they could not be obtained in sufficient number, as there was a scarcity of able-bodied women in the establishment. To make up the deficiency a supplemental staff was formed of the convalescent cases, who were urged to render such assistance as lay in their power, and as their strength would permit. Considerable pressure was required in the first instance to induce them to give the slightest assistance. Firmness and persuasion, however, prevailed, and eventually they gave very material help.

The securing of what was deemed a sufficient staff of nurses did not terminate our anxieties with regard to the nursing department. Far from it, we had to deplore, from day to day, the fact that, after a few days' employment in the wards, the nurses themselves succumbed to the disease, thus not only diminishing our forces when most urgently needed, but demanding extra assistance from a reduced staff. Those anxieties moderated in the course of time, for all recovered, and are now seasoned and qualified for the duties which they have to perform.

Another difficulty was the registration, disinfection, and washing of the heterogeneous mass of filthy clothing in which the patients were admitted. Each article had to be disinfected and washed, and thus delivered to the patients on receiving their discharge. This department of our service occasioned no small amount of solicitude—some bundles went astray, and others were destroyed as unfit for use; and many patients were, in consequence, detained in hospital longer than they otherwise would have been. But when the large number of daily admissions (60 to 100), the condition of the clothing itself, the purifying process it had to undergo, and the novitiate of the staff, are considered, the irregularities

and shortcomings were few in comparison with the magnitude and odiousness of the work which had to be undertaken. The disinfecting apparatus of the Workhouse Hospital being adequate only to the patients located there, the town establishment, erected by the Corporation, was placed at the disposal of the vestry for the Kirkdale and Ashfield-street Hospitals.

RECOLLECTIONS OF WORK IN AN AMBULANCE.

By WILLIAM MAC CORMAC, F.R.C.S., Surgeon to the General Hospital, Belfast.

III.

THERE were many cases which came that day (September 2nd) under our care, of deep interest; amongst the rest, two in which I was afterwards compelled to tie the common carotid for secondary hæmorrhage.

CASE I was that of a French colonel, who had been wounded near Balan on September 1st. The ball had entered the right cheek, passed downwards through the horizontal ramus of the inferior maxilla, comminuting it extensively; and lodged deeply beneath the right sterno-mastoid muscle, where it was with great difficulty detected. On the following day, I removed it through a very deep incision along the posterior edge of the muscle, at a point level with the angle of the jaw. The ball was much altered in shape, and a piece of the lower jaw was firmly impacted in it. I thought the colonel was quite convalescent, when, on September 10th, he had a severe attack of hæmorrhage both from the mouth and from the wound made for the extraction of the ball; this was checked. He had a second attack, which was also arrested; then a third, all on the same day, and more profuse than the others, took place. At midnight, I cut down upon and tied the common carotid. No return of the bleeding took place. The ligature fell in fourteen days; I brought the colonel away with me when I left Sedan, and he is now staying in Brussels. His father, also a colonel, was shot almost in the same manner at Waterloo, and recovered, like his son, from the wound.

CASE II.—My other case, similar in many respects to that just narrated, was not so fortunate in its issue. Jacob Kieder, a Prussian, aged 22, was wounded on September 1st. The ball entered just beneath, and slightly external to, the left ala of the nose; it then ripped up the whole of the hard and soft palates in the central line, with the exception of the alveolar ridge. Three days afterwards, the bullet was extracted through a deep incision opposite the middle of the posterior border of the right sterno-mastoid. This patient made good progress until the afternoon of September 11th. He was, like the colonel, apparently convalescent, and able to walk about. On that day, very profuse bleeding took place. The blood poured down through the wound in the roof of the mouth so fast as almost to choke him; and free bleeding also occurred from the incision behind the sterno-mastoid. The difficulty was to ascertain whence the hæmorrhage came. Pressure exerted alternately on each carotid failed to afford the clue, as no decided effect was produced. There was no time to hesitate; the man was rapidly bleeding to death. I decided that, although the mouth-wound was mesial, the bullet had, in traversing the right side of the neck, probably injured some branch of the right external carotid. I tied the right common carotid, and, to my great relief, the bleeding was permanently arrested; otherwise one might have had the undesired opportunity of witnessing the effects of simultaneous ligation of both carotids; for I would have tied the opposite external carotid, had the first ligature failed to stop the bleeding. Nieder for five days progressed favourably; acute double pneumonia then set in, and he died.

CASE III.—A third case, very similar to these two, except that there was no secondary hæmorrhage, was that of an infantry soldier named Charleroi, aged 27. He was wounded on September 1st. The ball entered one inch and a half external to the left commissure of the lips, and emerged behind the middle of the right sterno-mastoid muscle. The lower jaw was fractured at its angle on the left side. This man died exhausted eight days afterwards.

CASES IV and V.—We had two singular cases in each of which a piece of shell traversed horizontally across the face, passing beneath the bridge of the nose, but leaving the bridge complete, and the nose but little altered in form. In each case, one eye was destroyed, and the lids of the other grazed; both patients were in a short time discharged convalescent. There were three other cases in which one eye was destroyed, and a remarkable example of temporary loss of vision from a shell-explosion close by, which caused no further injury.

There were several other cases of wound of the neck and face ad-

mitted on the 1st and 2nd of September, of some of which I may furnish a few details.

CASE VI.—I can only recollect one case of extensive injury to the upper maxilla. A man came in during the heat of the fighting on September 1st, with his left cheek partially torn away by a shell. The bone was a good deal comminuted, and the antrum of Highmore laid open. The soft parts were lacerated and contused throughout a length of five inches, and the greater portion of the masseter muscle was torn off. I removed all loose pieces of bone and shreds of flesh, sutured the wound, and applied carbolic dressings. I never saw this man again, nor heard of him. I believe he left the hospital after getting his wounds dressed.

CASE VII.—About the same time of the day, Captain Bera came to us with a large portion of the body of the lower maxilla carried away by a shell. Fortunately, the alveolar ridge was intact. I removed all loose portions of bone, and adjusted the soft parts. He recovered with scarcely any deformity. He was a very handsome young man, and was chiefly anxious that his good looks should be preserved to him.

CASE VIII.—An infantry soldier, named Mathie, was shot through the face the same day. The ball entered just beneath the zygoma, and rather less than an inch in front of the left ear; it then crossed the nasal fossæ, and emerged through the right cheek, fracturing the right malar bone. This man did not appear to be inconvenienced even by his wound, and soon left the hospital quite convalescent.

CASE IX is very like the rest. Bulion, 1st Zouaves, was also shot across the face. The ball entered under the left malar bone, immediately in front of the edge of the masseter muscle. It ripped up the hard palate on the left side; and then, being diverted upwards, emerged beneath the right zygomatic arch, three-quarters of an inch in front of the ear. After a fortnight's treatment, this man left the hospital convalescent.

CASE X.—Navel, 4th Regiment of Marines, was wounded by a ball which entered beneath the centre of the left zygomatic arch, and made its exit exactly at the tip of the right ear. The last molars of the upper jaw on the right side, half of the soft palate, and the uvula, were torn away. This man also recovered.

CASE XI.—Private Fays received a ball on September 1st, which entered the left cheek just in front of the masseter muscle, and emerged just over the vertebra prominens. The front of the chest was echymosed. There were no symptoms of serious injury, and in three weeks he was discharged convalescent. The wound, however, remained fistulous.

CASE XII.—Galliard, *chasseur à pied*, was struck on the 1st September by a ball which entered beneath the left eye, and, after smashing the left malar and palate bones, emerged below the right ear, to re-enter the anterior border of the trapezius. Then passing downward and backward, it made its final exit over the inferior costa of the scapula. This man quite recovered.

CASE XIII.—Antoine, 53rd Regiment of the Line, was also wounded on the 1st, *en battant la retraite*. The ball entered just to the left of the sixth cervical vertebra, and emerged through the right cheek, just in front of the insertion of the masseter muscle in the lower jaw. The wound of entrance, with its bruised and inverted edges, was much larger than the wound of exit, whose edges were as if cut and everted. For a fortnight, Antoine did well. He then took typhoid fever, and died.

CASE XIV.—This is a case almost identical, except its results, with the last. Fritz, a soldier of the 89th Regiment of the Line, was also wounded *en battant la retraite*. The ball entered a little below and to the left side of the vertebra prominens, and emerged through the middle of the left sterno-mastoid muscle. The wound of entrance was much larger than the wound of exit. He recovered without any symptom of importance.

CASE XV.—Bernard, 5th Regiment of the Line, was struck by a ball which entered one inch externally to the left commissure of the lips, fractured the left ramus of the lower jaw, and emerged through the central point of the fold where the chin joins the neck. The same ball, passing downwards, again entered just below and externally to the right sterno-clavicular articulation, and, after fracturing a couple of ribs, was cut out on a level with the nipple, but four inches externally to it. For a time, this patient did well, but he ultimately died of pleuropneumonia excited by the fractured ribs.

CASE XVI.—Renan, wounded, like most of the others, on September 1st, was a soldier of the 3rd Marines. The ball entered just below the left ala of the nose, passed through the upper lip, knocked away the two left incisors, also the canine and first bicuspid teeth, grooved deeply the dorsum of the tongue, left the cavity of the mouth by piercing the right posterior pillar of the fauces, and finally emerged behind the right sterno-mastoid muscle. This man was discharged con-

valescent in a fortnight, having suffered the very smallest amount of inconvenience possible.

These cases are chiefly remarkable on account of forming a series very similar to each other in most important particulars, and in none more than the marked smallness of the mortality, or, indeed, of any serious consequences whatever attending them. The majority recovered rapidly. This fact has been observed in other wars with regard to wounds of the face. We had, also, a very large number of wounds traversing the neck in various directions without injuring important parts. In one case only was the trachea wounded.

CASE XVII.—Farjonel was struck by a ball which entered in front of the left sterno-mastoid muscle, and emerged just above the centre of the right clavicle, wounding the trachea in its passage across the neck. During respiration, the air flowed freely out of each aperture. He made, nevertheless, a good recovery.

There must, doubtless, be many instances of wounds of the front vessels of the neck, but these die immediately, and are never carried off the field at all, while the surgeon has his hands too much occupied with living wounded to have time to examine the injuries received by the dead.

Coming a little lower down in the body, there were under our care three cases in which the clavicle was smashed by a ball, which afterwards wounded the lung. In one of these I found it necessary to excise one third of the clavicle. In a second, the ball was cut out behind, having traversed the lung with a piece of the clavicle sticking in it. These two patients died. The third recovered; in him, the ball, besides fracturing the clavicle, had passed through the infrascapular fossa of the scapula, starting it. In all these there was profuse hæmoptysis.

The longest day must come sometime to an end, and so did the 2nd September. It was only in the evening that we learnt authoritatively what our position really was. General De Wimpffen, who succeeded MacMahon in command of the army, when the latter was shot through the thigh, posted a proclamation in the town, in which he announced that he felt constrained to capitulate in order to avoid an useless massacre; that the whole army could have been destroyed, without being able to reply even to the enemy's fire; and that, further, when on the evening before he had appealed to the courage and devotion of his troops to make a sortie and cut their way out through the German lines, only two thousand men could be found to rally round his standard.

September 3rd.—It was raining heavily all night, and the unfortunate soldiers must have found it difficult to keep their fires alight. They could not have slept much, as nearly all night we heard the confused humming noise which a mass of men so crowded together is sure to make. In the morning they presented a sad and sorry plight. Outside the town we saw the German troops being paraded, and could hear distinctly the huzzas and cheering with which they received the news of their wonderful success when the king passed them in review. About nine in the morning, to the strains of splendid music, the Prussians marched into Sedan, occupying as their head-quarters the Sous-Préfecture, which the unfortunate Emperor and his staff had only left a few hours before. I was particularly struck by the fine appearance of both men and officers, and especially by their horses. They looked more as if they had just left the parade-ground in Berlin than like troops who had been for two months campaigning in the heart of an enemy's country. During the day a little episode, somewhat exciting, took place. A patrol of soldiers came up to take possession of the barrack. Chizelles and I went to the gate to meet them, on which they levelled arms at us. We explained that we had no soldiers amongst us, but only wounded, both French and German, in the barrack. Immediately on receiving our explanations they retired, expressing themselves as perfectly satisfied; and from that time forward we were in nowise interfered with by either the Prussian medical or military authorities, except in one particular, which is a matter requiring an explanation, which I will now make. For the first fortnight we had for the nursing of our patients to depend exclusively upon the service of military *infirmiers*, or nurses. Several of these men were most excellent fellows; some were quite invaluable, having received a thorough training in nursing the sick and dressing wounds at the great French Military Medical School of Val-de-Grâce. Others, again, were as bad as these were good. There is a regular service of *infirmiers* in the army, and these men are held to be inviolable, just as the sick themselves, or the surgeons are, according to the terms of the Geneva Convention, to which both French and Prussians had agreed. Under these circumstances we were made very indignant when, on two occasions, a large number of our *infirmiers* were marched off and sent prisoners to Prussia. The first abstraction took place on September 10th. We then got a fresh supply, with the assurance that these should be left to us; and again on September 15th a large proportion of them were removed, after we had had both times

all the trouble of training them, as well as they could be trained, to their work. The annoyance and inconvenience, and loss in every way, both to ourselves and to our patients, can, perhaps, be imagined, but scarcely described. Besides, it seemed a direct violation of the Geneva Convention. What, however, I did not discern till afterwards was, that only those men not regularly inscribed as *infirmiers* were removed. The staff of *infirmiers*, properly so-called, was never interfered with. This statement I make on the authority of the French officier d'Administration, M. Billotte, with whom we were associated, and whose valuable assistance on all occasions I wish to acknowledge in the strongest manner. The Prussian authorities were distinctly *dans leurs droits* in seizing upon those *quasi-infirmiers*. But their action did not on that account embarrass us the less; and when it is considered that there were twelve thousand five hundred wounded French soldiers alone accruing from the battle of Sedan, one cannot help wishing that the Prussian Commandant of Sedan might have been a little less exigent.

We received only twenty-two fresh cases that day (Sept. 3rd), and there were comparatively few out-patients to look after; but, if so, of work inside the Hospital there was no slackness. There were still several cases requiring operation, and many amputations were performed that day. It is unnecessary to go into details about them at present, further than to say that in every instance chloroform was employed; that during the operation bleeding was controlled by digital pressure—the tourniquet I never used; and that the arteries were twisted, not tied, with the exception of the first few cases. Unlimited torsion was the method employed. The amputations were performed by long anterior and shorter posterior flaps cut from without inwards, never formed by transfixion, and embracing only the skin and its subcutaneous connections, or sometimes a thin layer of muscle, but the general mass of muscles was divided by a circular cut of the knife. Wire stitches were employed to unite the edges of the flaps, leaving usually a portion unclosed to allow the easy escape of the discharges. The dressings were very simple, consisting of a few strips of lint dipped in carbolic lotion, or a turn or two of bandage to keep them in their place.

The resections of the elbow and shoulder were done through a single straight incision—in the former case behind the joint, in the latter in front, unless when the scapula was injured, and then the incision was made from behind. The knee-joint resection was made through an oval incision from the front.

CASE OF SUCCESSFUL OPERATION FOR NON-UNION AFTER RUPTURE OF THE LIGAMENTUM PATELLÆ.

By JOHN J. HILL, L.R.C.P.Ed., Government Surgeon, Lambton, New South Wales.

ON May 24th, 1869, Charles V., a miner, aged 20, whilst jumping, felt something give way over his right knee, and immediately found his leg powerless. The knee-cap was pulled upwards four or five inches from its natural position. He was at once seen by an unqualified practitioner, who bandaged the limb and kept him in bed for a few weeks. On his getting up, the leg was found to be useless. His medical attendant then advised him to sit on a table and swing the leg backwards and forwards several times a day. As this did not effect a cure, the limb was put up in starched bandages; but, as no improvement took place, he discarded the bone-setter and consulted several surgeons, who all came to the conclusion that the ligamentum patellæ had been ruptured, and had healed without adhesion between the ruptured portions, and that nothing could now be done for the improvement of the limb except the use of an artificial knee-cap. This was tried, but with very little advantage.

I was then consulted, and, on examination, found the patella about two inches above its natural position, and quite moveable laterally. The lower end of the ligament could not be detected. The patient had no power of extension in the limb, and walked with crutches, dragging the limb after him.

After due consideration, I determined, with the patient's permission, to cut down on the two ends, scarify them, and then bring them together and endeavour to procure adhesion. Accordingly, on August 28th, I made a longitudinal incision, about two inches long, over the knee. I found that the rupture had occurred just at the juncture of the ligament with the lower edge of the patella, and that there was a quantity of adipose tissue intervening and separating the two surfaces. I scarified the ligament, and scraped and notched the edge of the patella; and, having placed the limb on a grooved straight splint running from the heel to the buttock, suspended the lower end in an

elevated position, so as to relax the extensor muscles as much as possible. I then adjusted the scarified ends, and, having closed the wound, fixed a leathern collar around the limb above the patella; and by means of lateral cords attached to this and drawn tight beneath the sole of the foot the displaced bone was kept in its natural position. I also fixed another collar around the limb below the knee, and, strapping it tightly to the upper one, forced the lower portion of the ligament into apposition with the patella. Perfect rest was enjoined, and cold water dressing applied around the knee. On the following day, the patient was comfortable and the knee cool; pulse 90. On August 30th, the knee was considerably swollen; the pulse was 100. It was necessary to loosen the straps. On August 31st, this swelling was decreasing; pulse 95. On September 1st, the swelling was gone; pulse 80. After this, all went on well, the wound soon healing. The limb was kept on the splint for six weeks; and, on its removal, I found that he could lift the extended leg off the bed, showing that some adhesion had taken place.

He remained in bed for a fortnight longer, and was then allowed to get up with a straight splint on behind the knee. After a few weeks, this was removed, and the power of extension was found to be perfect. On January 1st, 1870, he resumed his work as a miner, and reports that he finds the leg as strong as the other one.

THE THERAPEUTICS OF THE SEA-SIDE: WITH SPECIAL REFERENCE TO THE NORTH-EAST COAST.*

By GEORGE OLIVER, M.B.Lond., Redcar.

ACCORDING to the experiments of Beneke, it would appear that, when persons from inland places are subjected to the influence of sea-air, and *a fortiori* to sea-bathing combined with sea-air, disintegration of tissue (as indicated by the excretions) is augmented; but this is more than counteracted by the ingestion of new material, so that the body gains in weight and energy. Some difference of opinion has been expressed as to the value and reliability of Beneke's experiments; and though it would be more satisfactory if they were confirmed by further experimental investigation, yet our knowledge of the physical constitution of sea-air, and unbiased observation at the sea-side, corroborate Beneke's conclusions.

Apparently the same end is obtained by sea-air and by sea-bathing—namely, a tonic effect. Yet it would seem more than probable that in some respects the mode of action of sea-air upon the body differs somewhat from that of sea-bathing. Sea-air, for instance, according to Dr. Burdon Sanderson (*British and Foreign Med.-Chir. Review*, Jan. 1856) and other observers, has an evaporating power, on an average, at least twenty per cent. less than that of the air of inland places; it is therefore highly probable that cutaneous and pulmonary evaporation is lessened by sea-air. On the other hand, sea-bathing acts powerfully upon the skin and lungs, moderately upon the kidneys and bowels. We have here possibly a reason why sea-bathing, and in particular tepid and warm sea-water baths, which stimulate the skin more than sea-bathing does, and much more than plain water, should to some extent prove supplemental, or rather corrective, to the action of sea-air, in some instances in which this alone appears to exert a prejudicial influence. I have now and then met with persons from inland localities complaining of loss of appetite, languor, and almost constant headache—apparently sufferers from the direct effects of strong sea-air—who have derived much benefit from warm sea-water baths and sea-bathing. When sea-air appears to disagree, and in particular when the skin is inactive, I frequently prescribe salt water baths, and I am convinced of their utility in such cases.

Perhaps the best and most obvious indication of the beneficial effects of sea-air is an increase of appetite. I have sometimes observed the appetite impaired for a short time after arrival at the coast, as if the primary effects of sea-air were too powerful for the digestive organs; but, after a while, nature generally restores the lost balance, and often with a rebound in the opposite direction. When the appetite remains for many days or weeks below that usual with the individual, notwithstanding careful attention paid to the bowels, and especially when at the same time there exist headache and feelings of lassitude and depression, we suspect that sea-air is acting injuriously. It is very often extremely difficult to trace the causes or conditions which determine the prejudicial effects of sea-air. According to my own observation, they have been most frequently met with in nervous irritable

subjects, whose powers of digestion are habitually feeble, and in particular in delicate females about the age of puberty or at the climacteric period. In such cases, tepid and warm sea-water baths do much good. Now and then, I have found a very liberal allowance of alcoholic stimulants very useful in apparently counteracting the over-powerful effects of sea-air. I have met with several persons who have found stimulants a necessity at the coast, but who, while inland, could do without them. As a rule, when alcoholic beverages can be dispensed with, much more benefit is derived from the sea-side without them.

Our knowledge of the effects of sea-air on disease is to a large extent corroborative of the results of scientific inquiry into the physiological action of it. Dr. Parkes observes (*The Composition of the Urine, etc.*, p. 115): "The extraordinary tonic and alterative effects of 'sea-air' on the inhabitants of inland places, entitles sea-air to be classed among remedial agents rather than among ordinary physiological conditions." Undoubtedly the term "tonic" embraces in great part the therapeutic action of sea-air; but the experience of the profession has shown it to be specially useful in certain classes of cases.

The climatic conditions of marine health-resorts differ very considerably; even if it were not difficult to draw from them conclusions as to the effects of sea-air *per se*, the practical value of the knowledge gained would be trifling. Hence the results of individual experience will probably be more useful than general remarks concerning the effects of sea-air on disease. I hasten, therefore, to give a brief outline of my own impressions of the therapeutic action of sea-air at Redcar, and Saltburn on the coast of Cleveland. The climate of this portion of Yorkshire is similar to that of the north-east coast line—dry and bracing; and during the spring, keen and irritating to the weak chest. A broad, firm, and sandy beach extends for a distance of about ten miles along the coast; the waves are constantly breaking over it, and charging the air with a fine salt spray. At Redcar, which is nearly on the sea-level, because of a projection of the coast, currents of sea-air are almost constantly circulating over the place; in fact, this is exposed as very few watering-places are to the full influence of the sea; hence the air is nearly always recognised as strongly marine. The beach forms a magnificent natural promenade close to the breaking waves, where undoubtedly sea-air is strongest. At Saltburn we have beautiful rural scenery side by side with all the advantages of the sea-shore—a charming combination, which will secure for the place a most prosperous future.

The coast of Cleveland has appeared to me specially useful in the following classes of cases.

1. *Convalescents*.—Sea-air is undoubtedly more powerful as a restorative agent than is the atmosphere of inland places; it greatly accelerates the production of new tissue, and the collection of lost energy: hence sea-air is a natural tonic agent specially called for during the period of convalescence. Sea-bathing, when judiciously conjoined with it, greatly intensifies its effects.

At Coatham, near Redcar, a Convalescent Home, which accommodates one hundred patients, has been doing good service during the past ten years. The patients are carefully weighed every week. I find that over eighty per cent. of patients admitted make a gain in weight at the expiration of three weeks; and in the majority of these cases the gain is very decided. Nothing can be more satisfactory than the results obtained from the treatment of convalescents in this institution. A large Convalescent Home is being erected at Saltburn-by-the-Sea. In order that the funds of these institutions may be better economised and utilised, it would be very desirable if medical men and subscribers would avoid as much as possible sending such cases as are totally unsuitable for treatment on the north-east coast.

2. *Diseases of Children*.—Seeing that the ordinary action of sea-air, and of sea-bathing, upon the body is to cause the nutrition to resemble that characteristic of the period of growth (*i.e.*, rapid destruction and more rapid construction of tissue), we are not surprised to find that many of the diseases of children, in particular such of them as depend on retardation of the changes involved in nutrition, should be directly counteracted by the health-agents of the sea-side. The almost universal experience of the profession testifies the truth of this position. From my own observation, I am fully convinced that sea-air and sea-bathing exert a powerful influence on nutrition during the period of growth; when defective, they rouse it to a higher degree of activity, and correct morbid tendencies which spring directly from enfeebled formation of tissue. As a rule, the appetite is more frequently increased by sea-air in children than in adults. I have an impression that sea-air sometimes acts injuriously in those cases of children in which the appetite for, and digestion of, food are not considerably improved: at any rate, such cases do not get on so well at the sea-side.

Sea-air on the north-east coast greatly assists blood-formation; probably by stimulating the functions of digestion and assimilation indi-

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

rectly, by freely oxidising the blood and the tissues generally; hence the anæmic, badly nourished children of our large towns derive great benefit from it. Rickets is also well treated by strong sea-air; this is a rare disease on the north-east coast.

I have repeatedly observed that such remedies as iron, cod-liver oil, alkaline salts—especially those of potash—phosphate of lime, etc., remedies which we may for convenience designate “medicinal foods”, are apparently of great value in the treatment of children at the sea-side. It is not improbable that sea-air may favour the action of some medicinal tonics, more especially during the period of growth.

Hospitals for diseases of children should be located as far as practicable at the coast. I am anxious that a children's hospital should be established at Redcar; it would be a boon to the populous towns in the immediate vicinity, and the climate is most suitable for the purpose. I hope the need for such an institution on the coast of Cleveland will soon be supplied.

3. *Scrofula*.—The unanimous opinion of the profession has asserted that scrofula above all other disorders is benefited by sea-air and sea-bathing. I have seen excellent results from the treatment of strumous cases at Redcar. At the Convalescent Home, it would appear that these cases do best during the winter months. The climate of the north-east coast is undoubtedly well adapted to the treatment of nearly all forms of struma. It is more than probable that a dry, moderately cold sea-air, such as we have on the north-east coast, may exert a more powerful effect on the imperfect nutrition of scrofulosis, than the somewhat moist and warm sea-air of the south and west coasts; though, now and then, special complications may cause us to decide in favour of the latter. In the treatment of glandular enlargements, and of intractable ulcerations occurring in strumous subjects, I have observed beneficial results from the local employment of sea-weed—the red seaweed (*laminaria digitata vera*) which contains iodine.

4. *Some Functional Disorders of the Nervous System* sometimes derive benefit from bracing sea-air. I have seen hysterical paralysis, and aphonia (probably hysterical) disappear completely at the sea-side. Short sea-trips prove very useful and even curative in such cases—in aphonia, not depending on organic changes, the voice has been suddenly restored during such trips.

5. Some forms of *Dyspepsia* do well at the coast—in particular what has been termed “atonic dyspepsia”, accompanied with exhaustion of the nervous system, and with but slight changes in the gastric mucous membrane; a class of cases produced mostly by over-work, anxiety, and the like.

6. *Debility produced by Town-life*.—The tonic properties of sea-air are of great value to those persons whose energies are exhausted by over-work, especially of the brain, or by what is commonly called worry. In such cases, expenditure of energy has exceeded the supply; exhaustion has occurred, and will continue, until income and expenditure are again fairly balanced. The health-agents of the sea-side assist the efforts of nature in the restoration of the lost balance of energy, chiefly by increasing the supply. It may be justly said, that rest anywhere will bring round the desired result; but it is often of importance to secure the best effect in the shortest time, and bracing sea-air is the most valuable hygienic agent for that purpose.

7. *Degenerative Changes in the Tissues*, as in old age, and in the prematurely old. It is not improbable that residence at the sea-side, where the sea-air is strong, may be of great value when the tissue-changes begin to flag, when construction is imperfect, and when old and used matter is allowed to remain. Somewhat in support of this position, we have the fact of longevity at the coast; and, as a rule, the old people who reside there look younger and more robust than persons of corresponding age inland. The climate of Redcar appears to me well suited to cases of paralysis depending on degeneration. There is not only a strong sea-air which may be had at all times of the tide on the beach, which is everywhere most easy of access, but the absence of hills is particularly grateful to persons whose pedestrian powers are impaired.

8. I have heard the east coast objected to in cases of *Spasmodic Asthma*. It would appear that any very decided change of air often does good in this most capricious disease. I have seen some cases greatly relieved, while others appear to have been made worse by the dense atmosphere on the coast of Cleveland. Redcar is a good resort for cases of hay-asthma. *Apropos*, I have met with a sort of spurious asthmatic attack set up apparently by inhaling the strong marine effluvia emitted from the sea-weeds which cover the rocks of Redcar; certainly this must be a rare occurrence, yet I think it is noteworthy.

The following classes of cases are unsuitable for residence on the north-east coast.

1. *An Irritable and Dry Condition of the Bronchial Tubes*, whether coexisting or not with disease of the lungs. The climate of the north-

east coast is almost sure to increase the bronchial trouble, except perhaps during the warm months of the year; and even then any sudden fall of temperature, and a strong sea-wind, are apt to act injuriously upon the chest. Is this due to an excess of ozone,* or to excess of saline matter in the air, or to dryness of it?

2. *Inflammatory Skin-Affections* are often greatly aggravated by the dry salt air of the east coast. I do not think the dry scaly affections suitable for treatment at the sea-side. A very dry harsh condition of the skin I have not unfrequently found to be a contra-indication, especially when obstinate. Visitors to the north-east coast should pay special attention to the skin; sea-bathing and occasional tepid and warm sea-water baths are to be specially commended for this purpose.

3. Cases of *Tubercular Consumption* in all stages of the disease, so far as I have been able to observe, are injuriously affected by the north-east coast. Though tubercular phthisis among the residents is a very rare disease, yet imported cases, as a rule, make a very unsatisfactory progress; sea-air on the north-east coast appears rather to hasten than to retard the course of the disease. I have, however, met with persons suffering from the ordinary chest-symptoms of pulmonary phthisis, and exhibiting the signs of consolidation of lung, but without much, if any, rise of temperature, persons of a decidedly strumous habit, who were not injuriously affected by strong sea-air, but who, on the other hand, really appeared to derive benefit from it. These were probably cases of scrofulous disease of the lungs, or rather of fibroid degeneration of lung; I question whether they were really cases of tubercular phthisis.

4. Cases of *Bright's Disease* should avoid the dry climate of the north-east coast, in particular during the winter and spring.

The east winds which prevail during the spring months, and often even until the end of June, make it a risky thing for delicate invalids to visit the north-east coast before the beginning of July. The dry polar winds which are thought to be hurtful to people in general, are really rather beneficial than otherwise to the moderately strong; to persons, for instance, with sound lungs. The very bracing and more powerful sea-air of the winter months (October, November, December, January) is, I believe, of very great value in the treatment of scrofula. The study of the therapeutic properties of a cold atmosphere, and in particular of cold sea-air (e.g., residence at bracing marine health-resorts during the winter months), deserves more attention than it has hitherto received.

The climate of the north-east coast is undoubtedly a decided one; if not beneficial, it is very apt to produce injurious effects. It is well calculated to call forth and develop vital energy, and thus to invigorate an enfeebled system; but the substratum of energy submitted to it must not be too low, nor must it have been lowered by exhausting organic disease, or the result may be, as I have more than once suspected, still greater depression.

INTESTINAL OBSTRUCTION: AMUSSAT'S OPERATION: RECOVERY.

By THOMAS B. BOTT, M.D.,
Surgeon to the Dispensary, Bury.

JAMES WALKDEN, aged 28, brickmaker, in the summer of 1868, whilst climbing a bank, fell back, and the handle of his spade, which was upright in the ground, came into collision with the parts about the anus. He had severe pain at the time, and was driven at once to stool. No blood or anything abnormal was evacuated. He suffered pain in walking for many days. Subsequently, he occasionally had gripings in the lower parts of the abdomen, which caused him to go to stool at once.

Three or four weeks before coming under my care, he noticed that his motions were narrow—not much thicker than a tobacco-pipe stem. He generally went to stool twice a day; but he was rather irregular as to time.

Early in February 1870, he was seized with violent pain in the bowels. The bowels were not evacuated. He called in the parish surgeon, who gave him purgatives. He had a motion somewhat resembling barn on Saturday, February 12th, 1870. The bowels had not again operated; but the pain increased.

I was called to him on the evening of Thursday, February 17th, 1870. He lay supine. His face was rather shrunk and anxious. He had no sickness now. He suffered from a feeling of tension of the abdominal parietes. The abdomen was very hard to the touch, but not tender on pressure; it was tympanitic, more or less, except in the hypogastric and iliac regions. The left iliac region was especially dull,

* Dr. Brameld informs me that the ozonimeters of the observatory at Saltburn almost invariably record a great charge of ozone in the atmosphere. Is this to be accounted for by the proximity of abundant vegetation, or by the character of the sea-winds at this part of the coast?

swollen, and hard. The rectum was empty. I was unable to reach any stricture or other obstruction with the finger. The parts on the anterior wall of the rectum were very tense—evidently the result of the pressure caused by the liquids and fluids in the bowel. The feeling to the touch was that of a distended bladder; but the introduction of the catheter showed that this viscus was almost empty. At least, two moveable hard lumps could be felt on the anterior wall and to the right side. I ordered small doses of tincture of hyoscyamus in camphor-water, and directed the abdomen to be fomented with a hot decoction of poppies, and an enema of soap and water to be given.

Feb. 18th. The enema came back *alone*, immediately after being given. I administered enemata myself—first of soap-water, then of turpentine suspended in water by means of the yolk of an egg. No fæces accompanied the expulsion of these clysters.

On the 19th, my father saw the case with me. Bougies of various sizes, down to that of a No. 8 catheter, were introduced. They all passed about six inches, and were arrested opposite the promontory of the sacrum. I could not detect anything like the hard surroundings of stricture; there was simply no passage. Enemata of tepid water, and subsequently of tobacco-water, were given, without a favourable indication being obtained. Dr. Adam Fletcher saw the case with me on the 20th, and endeavoured to pass bougies. The remedies of the previous day were repeated.

On the morning of the 21st, I inflated the rectum with air by means of bellows, and obtained considerable forcing power by this means; but there was no indication of any satisfactory result. He was wasting in the body. The eyeballs were sunken; the features pinched, and expressive of pain and anxiety.

All our means for obtaining a passage *per vias naturales* being exhausted, nothing could now be done to save the man from a painful death but colotomy. He and his friends were anxious that he should live, and consented to have the operation performed. At 3 P.M., therefore, whilst he was under the influence of chloroform, assisted by my father (Mr. Bott), Dr. A. Fletcher, and Mr. John Parks, I performed Amussat's operation. I made an incision over the left loin, according to the directions given by Mr. Erichsen in his book on *Surgery*. Having cut through the tissues and arrived at the fatty areolar tissue next to the bowel, I found it to bulge somewhat into the wound. It was of a reddish tinge. We made the bowel fast by sutures attached to the upper and lower edges of the wound. On opening the viscus between the sutures, liquid fæces gushed forth to a distance of upwards of two feet, sometimes accompanied, and sometimes intermitted, by flatus. Altogether, about as much as would fill a chamber-pot was evacuated. When the flow ceased, we washed the wound with glycerine of carbolic acid (B. Ph.). We then fastened the edges of the bowel to the integument at the edges of the wound. Whilst doing this, we noticed that the peritoneal surface of the gut was exposed in front. Some serous fluid poured out from the opening in the peritoneum. We brought the edges of the wound together by means of three stitches and a strip or two of plaster; applied a pledget of lint to the wound, and a thicker piece over it; and over all put a bandage. He was removed, while still unconscious, to bed. He was in that state, with a good pulse, at 4.30 P.M., at which time I left him. I ordered him to have a grain of opium every four hours, to keep the bowels quiet.

7.30 P.M. He had severe griping and cutting pain in the hypogastric region. He felt inclined to relieve the bladder, but was unable. The catheter was used, but the bladder was empty. There was considerable oozing of blood from the wound. Some fæces and flatus escaped from the opening in the bowel. The wound was dressed with lint soaked in dilute oil of carbolic acid, in the proportion of 1 to 8. A bandage was placed round the abdomen. He was ordered to take beef-tea frequently. I gave him thirty drops of laudanum, and ordered a grain of opium to be taken every hour.

Feb. 22nd, 10.30 A.M. He became easy soon after my visit last night, and went to sleep. He passed urine once during the night. Pulse 140, weak. He looked pale and haggard. The tongue was dry in the centre. He had no pain on moderate pressure over the abdomen. The wound was dressed with lint dipped in Condry's fluid. His soiled flannel waistcoat and sheet were removed, without giving him pain.

Feb. 23rd. He had a good night. Pulse 140. The wound was dressed, and clean clothes put on him. At 5 P.M., he was ordered to take one grain of opium three times a day, and one when any pain came on. He was also ordered egg and milk, alternated with beef-tea.

Feb. 28th. The stitches were all undone. The bowel had receded to the bottom of the wound. Dr. A. Fletcher saw the case with me, and suggested that we should prevent the escape of fæces, except when the wound was dressed. We placed a plug of lint in the opening in the bowel, and packed the remainder of the wound with lint dipped in carbolised oil (1 in 20).

March 1st. There had been no escape of fæces, and he had had a good night. I dressed the wound, after removing the plug and allowing the fæces to escape. It looked healthier. He was ordered to have a mixture of laudanum and hydrocyanic acid every four hours.

March 4th. The wound had been dressed twice a day; it was granulating nicely. Pulse 118. The tongue, which had hitherto been dry, furred, and cracked, was much improved. There was a copious flow of liquid fæces to-day. I dressed the wound night and morning, cleaning it first by very dilute Condry's fluid, projected from an elastic bag with a nozzle attached. He took three or four pints of milk daily, besides chicken-broth, beef-tea, and eggs occasionally.

March 6th. He passed *per anum* some hard buff fæculent substance, preceded by bloody mucus and softened mucous membrane.

On March 10th, he was passing large stools through the wound twice a day.

On April 4th, he passed *per anum* a stool four inches long and half an inch in diameter, of a light yellow colour—in fact, of the same colour as the fæces passing by the wound. From its appearance, it was evident that the fæcal material had passed in very small pieces through the stricture, and accumulated in the rectum to the size mentioned. It was accompanied by a considerable amount of mucus. The granulations of the wound were on a level with the surface. As the weather was fine, he spent some hours of the mid-day in the neighbouring fields. He passed flatus *per anum* occasionally—about once a week.

April 21st. He passed a stool *per anum*.

May 20th. He passed some blood *per anum*. He had been wearing for some time, in the hole communicating with the bowel, a gutta-percha plug about the thickness of the little finger, with a broad flattish disc about three inches by two at its external extremity. It was mushroom-shaped, and was kept in its place by a bandage. It effectually prevented the escape of fæces for twelve hours. If a longer time elapsed before the wound was dressed, the action of the bowels forced the thin fæces by the sides of the plug to the surface.

June 3rd. He passed small quantities of yellowish mucus, tinged slightly externally with blood, about once in from fourteen to twenty-one days. I examined the rectum with the finger. I could reach no stricture. The hard rounded tumours on the anterior wall had gone. No hardness or thickening of the wall of the rectum could be detected. He had occasional griping pains in the left iliac region.

On July 30th, he passed *per anum* a reddish yellow mass three inches by one inch and one-tenth in dimensions, somewhat resembling a piece of softened muscle. A thin slice under the microscope appeared to consist of blood and mucus, with a few crystals.

Oct. 1st. He had had no evacuation *per anum* since the last report.

REMARKS.—This case has been quite as successful as such cases can generally be expected to be. The man's life is prolonged for an indefinite period. The most potent prejudice, both with patient and surgeon, against this operation, is a fear lest the former should, if the operation succeed, become a nuisance both to himself and to his neighbours. This man does not seem to be an annoyance either to himself or to others. He has very good control over the evacuation of the contents of the intestine; except that, if he do not allow their escape twice in twenty-four hours, he feels uncomfortable; there is a little griping, and some fluid oozes out by the side of the plug. Sometimes, as during a recent attack of diarrhoea, it is necessary to remove the plug oftener. He seems happy, and is gaining flesh. With the experience of this case before me, I would certainly perform colotomy if similar conditions, or any conditions in which this operation was the only means of saving the life of the patient, should present themselves. The operation is no more difficult than that for strangulated hernia; and, if the peritoneum is not injured, it is surely not more dangerous. In this case, although the peritoneal sac was opened, and although, as the escape of serous fluid showed, there was some inflammation of the peritoneum prior to the operation, yet no serious disturbance followed. The irritation caused by the exposure of a mucous surface to the air was well allayed in this case by the administration of hydrocyanic acid.

If I had to perform the operation again, I would, before making any incision, draw a line with pen and ink on the skin parallel with the spine, and halfway between the spine and the left anterior superior iliac spinous process. This would be a guide to the locality of the colon, which I should expect to find behind it and within an inch of it.

VACCINATION.—At the last meeting of the Boston Board of Guardians, a letter from the Poor-law Board was read, complaining that the guardians had not complied with the provisions of the Vaccination Acts. After discussion, it was decided to hold a special meeting in a month, to take the matter into consideration.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN
THE HOSPITALS OF GREAT BRITAIN.

ROYAL INFIRMARY, EDINBURGH.

EPILEPTIC CHOREA OF THE RIGHT ARM.

Under the care of THOMAS LAYCOCK, M.D.

THE notes of this case were taken by Mr. Hinchcliff.

Jane Cairns, aged 39, single, a domestic servant, residing in Edinburgh, was admitted to Ward 11 on May 29th, 1870. The patient's family history was very obscure, her memory being so defective that she appeared to remember very little of her family. Both parents were dead. She had two brothers alive, who were very healthy. She had measles and scarlet fever when an infant. There was no history of infantile convulsions. She had occasionally suffered from headache and dyspepsia; but her health had been very good until about two years ago, when she ceased to menstruate; and shortly after this she began to suffer daily from severe headache. Eighteen months ago, she began to have fits, sometimes once a day; at other times, she would have as many as three or four fits a day. No history of fright or injury could be elicited from the patient, and she did not know any cause for the occurrence of the fits. From her own account, she had no warning of the approach of an attack. She suddenly lost consciousness; she did not fall, whether sitting or standing. Her friends told her that during the fit there was a slight convulsive movement of the right hand and arm, with a jerking of the head. Anything she might be holding in her right hand dropped on the floor, but not from the left. The fits lasted about three minutes, during which time she was quite unconscious; and, on recovery, she had no recollection of having had a fit, unless told by her friends.

She continued to follow her usual occupation of domestic servant until two months ago, when one day, while she was attending to a vessel on the fire containing some hot fluid, a fit seized her, and she upset the vessel, and the contents fell on her feet, scalding them severely; on which account she came to the hospital, and was under the care of Dr. Gillespie in the surgical wards, where she remained five weeks, during which time she had fits daily, which the nurse described as being very like the above, none of them lasting more than five minutes. She was treated for the fits by Dr. Gillespie, she thought with benefit.

On May 9th, she was transferred from the surgical hospital to the medical house, Ward 10, where she remained until May 29th, when she was removed to Ward 11. As the nurse of Ward 1 has left the hospital, no account of her state during the time she was there can be got; but she appears to have had fits daily, of the same character as those already described.

On admission to Ward 11, she was found to have well marked ptosis of the right upper eyelid, the eye being almost closed. The pupils were both natural, and contracted equally. She said that her sight was not quite so good as formerly, that of the right eye being most defective. Hearing was perfect on both sides. The mouth was slightly drawn over to the left side. She did not suffer from headache. There was no pain in the limbs or in any part of the body. Sensation in all parts was perfect, and there was no paralysis. Her memory was very defective. She appeared confused on being questioned; seemed to have a desire to give correct information, but was unable to do so. Touch, taste, and smell were perfect. She had a fit generally once a day, sometimes twice. She had no warning of a fit coming on. There was no distinct aura. She had total loss of consciousness during the paroxysm; and generally she did not know she had had a fit, unless told of it by the nurse or the patients in the ward. From the nurse's description of the fits, they appeared to consist of clonic spasm of the right arm and hand, jerking up and down; first rubbing her head, and then her dress, as if trying to smooth it. The head also jerked from side to side. The mouth opened and shut, but she did not bite her tongue. The eyes were wide open. No other part of the body seemed to be affected. The whole fit lasted about two minutes. She did not fall, whether sitting or standing; but anything which she was holding in her right hand dropped on the floor. She did not feel drowsy on recovery, but appeared as well as ever. Sometimes, on coming out of a fit, she spoke and muttered unconsciously. The circulatory, respiratory, digestive, and integumentary systems were quite normal; in fact, her general health was very good. She had not menstruated for two years, but had not suffered from any uterine disturbance since that time. The

urine was normal in quantity and quality. She was ordered, on admission, the following.

R̄ Zinci valerianatis gr. xxxvj; aquæ ʒvj. M. A tablespoonful to be taken three times a day.

June 5th. She had had one or more fits every day, of the same character as those described.

June 16th. She had fits daily up to the 13th, but had none on the 14th and 15th. She had a fit this morning, differing from the others, inasmuch as, for the first time, she fell. She still continued the medicine. Her general health was very good.

June 21st. She had had fits daily since the last report; but on the 20th she had three, and she appeared much exhausted on coming out of them. She did not fall. She was ordered to-day to take a tablespoonful of the following mixture thrice daily.

R̄ Potassii iodidi, potassii bromidi, āā ʒj; infusi quassiae ʒvj. M.

June 30th. She had had no fits since the 24th. In the evening, she was feverish. Pulse 98, full, bounding; temperature 99.5 deg. She had no headache. The bowels were confined. She had a feeling of general weariness, and had a slight cough, with a muco-purulent expectoration, slightly frothy.

July 1st. She felt a little better to-day. There was no recurrence of the fits. She was ordered to remain in bed. The feverishness had disappeared; the cough was a little easier. On auscultation of the chest, slight mucous rales were heard on the right side. There was no dulness on percussion. The vocal resonance was normal.

July 2nd. She had a fit to-day, of the same nature as before. Ptosis of the right eyelid was becoming more marked.

July 4th. She had two fits yesterday. She was still remaining in bed; but the chest-symptoms were greatly alleviated.

July 7th. There were no fits on the 4th or 5th, but one on the 6th, and one this morning. The patient was able to go about again. She complained of mistiness over the right eye, and did not see so well as formerly. She was ordered twelve grains of compound assafoetida pill three times a day.

July 13th. There had been one or more fits daily since the last report. The patient felt better in her general health.

July 21st. She had had no fits since the 13th. The ptosis was not so great as formerly, and she saw better with the right eye.

July 28th. There had been no recurrence of fits since the 13th. The patient felt well and strong.

July 29th. As the clinical wards closed to-day, the patient was discharged, greatly improved.

CHARING CROSS HOSPITAL.

EXTENSIVE EFFUSION INTO THE PERICARDIUM, CAUSED BY A
FIBRINOUS CLOT OCCLUDING THE ORIFICE OF
THE CORONARY VEINS.

FOR the following notes we are indebted to Mr. Ralfe, Registrar of the hospital.

In a *post mortem* examination made by Dr. Green on a case of phthisis (November 8th), the following interesting pathological condition was observed. On opening the pericardium, it was found to contain about eight ounces of clear serum. There was no evidence of pericarditis. The heart was of usual size; but the coronary veins were unduly distended and varicose, as if some impediment existed to the return of blood by them to the right auricle. On opening the right auricle, this impediment was found to consist in a large fibrinous clot organised towards its base, occluding the orifice of the coronary veins. This clot must have been formed some days before death.

Dr. Green, in his remarks to the *post mortem* class, said that he had not observed hydropericardium resulting from such a cause before; and Mr. Ralfe, on referring to numerous standard works, has not been able to find a record of a similar case.

RICHMOND SURGICAL HOSPITAL, DUBLIN.

TREATMENT OF IMPERMEABLE STRICTURE OF THE URETHRA BY
EXTERNAL PERINEAL URETHROTOMY.

(Under the care of Mr. WILLIAM STOKES.)

THE subjoined cases have been reported by Mr. George Hetherington.

CASE I. *Stricture of the Urethra of Ten Years' duration: External Perineal Urethrotomy: Recovery.*—David E., aged 33, a sailor, was admitted into the Hospital under Mr. Stokes's care on December 18th, 1869, suffering from a close stricture of the urethra. He attributed it to an attack of gonorrhœa, which he contracted ten years previously, and which he subsequently much neglected. At the time of his admission into hospital, he was only able to void his urine drop by drop. On examination, Mr. Stokes ascertained the existence of a dense stricture of the urethra at the region of the bulb, and for upwards of ten days

he made frequent but unavailing attempts to pass the smallest catheter or bougie. Owing to an attack of retention of urine which supervened after three unsuccessful attempts to pass an instrument, Mr. Stokes determined to perform external urethrotomy. On the afternoon of Jan. 2nd, the operation was performed. Owing to the failing light, the great depth of the perinæum, the violent struggles of the patient, on whom chloroform had but little effect, and the great length of the stricture, it was attended with extreme difficulty. The operation (which was Arnott's modification of Hunter's method) succeeded perfectly, and Mr. Stokes was eventually able to introduce a large silver catheter and to draw off an enormous quantity of foetid urine. The instrument was then secured to the bladder and the patient sent to his bed. Five days after the operation, a No. 6 gum-elastic catheter was introduced without any difficulty, and the wound in the perinæum was found to be rapidly closing. Ten days after this the perineal wound was found to be not larger than the head of a large pin, and this Mr. Stokes succeeded in effectually closing by a plastic operation. On the 28th February, the patient left the Hospital. The largest catheter could be introduced without the slightest difficulty, and the perineal opening was completely closed.

CASE II. Impermeable Stricture of the Urethra: External Perineal Urethrotomy: Recovery.—Evan R., aged 40, a slate-shipper, a native of North Wales, was admitted into the Hospital under Mr. Stokes's care on the 30th June, 1870, on the recommendation of Dr. Roberts of Port Madoc, North Wales. The patient stated that he had been suffering many years from a close stricture of the urethra, which he attributed to a neglected gonorrhœa. Both previously and subsequently to his admission into hospital, numerous attempts were made to introduce a catheter; and after a time it became obvious that external perineal urethrotomy offered the only means of introducing an instrument into the bladder. On Thursday, July 21st, Mr. Stokes performed the operation in the manner recommended by Guthrie. The operation was, as usual, most difficult and protracted, but eventually he succeeded in efficiently dividing the stricture and introducing a large-sized instrument. The healing of the wound in the perinæum was very protracted, but ultimately it completely united. For upwards of eight weeks, large-sized elastic instruments were kept in the bladder without causing the slightest annoyance or irritation of any kind. After this, the patient was enabled to pass without any difficulty one of the largest of the flexible gum-elastic French catheters. The patient then returned in health and spirits to his native country.

[DR. STEEVENS'S HOSPITAL, DUBLIN.]

CEREBRO-SPINAL MENINGITIS WITH SOME PECULIAR SYMPTOMS. (Under the care of Dr. GRIMSHAW.)

GEORGE A., aged 29, a footman, was admitted into hospital on April 4th, 1870. He had eczema of the legs some months previously, for which he was successfully treated by Dr. Moore in Sir Patrick Dun's Hospital. He had been "bilious" for some time, and had slightly enlarged liver. He felt ill on April 1st, but thought it was a bilious attack. On the morning of April 3rd, he suddenly became weak and cold, vomited green matter, had pain in the head during the day, and was attacked with diarrhœa in the evening, for which he was treated with lead and opium pills.

On admission, he had vomiting and diarrhœa. There was no pain in the head. He had stiffness and pain in the neck, and slight retraction of the head. Dark purple spots (varying in size from one-eighth to a fourth of an inch in diameter), raised, and shotty to the touch, were scattered over the legs; a few were present on the thighs, and none on other parts of the body. Temperature 98.4 deg.; pulse 120, quick and collapsing. He was ordered five grains of lead and opium pill every three hours, and eight ounces of wine.

April 5th. The diarrhœa and vomiting were less. The pulse was 120, weaker than yesterday; respiration 24, and natural in rhythm. He did not sleep last night. The right arm was slightly paralysed. The left arm was slightly stiff. Both arms were hyperæsthetic. He had no stiffness of the legs or back. He was very thirsty. The tongue was coated with a dense white fur. He was ordered ten grains of bromide of potassium every three hours, and twenty grains of hydrate of chloral at night. The wine was increased to twelve ounces.

April 6th. He was somewhat better, and slept well. The spots beginning to fade; the stiffness of the arms and neck, and hyperæsthesia, were still present. The treatment was continued.

April 7th. He was not so well. There was some yellowness of the skin and eyes, evidently slight jaundice. The liver was not larger than it had been before his present illness. There was effusion into the right wrist-joint, with swelling of the hand. The bowels were too free on the previous evening; he therefore had some lead and opium pill.

The treatment was ordered to be continued, and the swollen hand to be rolled in cotton-wool.

April 8th. He had swelling of the left wrist, and herpes on the upper lip. He said he felt stronger. The treatment was continued.

April 10th. The herpes on the lips was drying; the swelling and hyperæsthesia had decreased. There was inflammation of the conjunctiva of the right eye. He was ordered to continue the former treatment, and to bathe the eye with warm milk and water.

April 12th. He was improved in every way; the eye was much better. The wine was reduced to eight ounces.

April 14th. The stiffness and swelling were subsiding.

April 15th. The eye was quite well. He could raise the left hand to the mouth, and could move the right hand. The hyperæsthesia and stiffness of neck were gone. The wine was reduced to six ounces.

April 16th. He was better; slept without chloral. The bromide of potassium was stopped, and he was ordered fifteen minims of tincture of perchloride of iron in infusion of quassia four times a day.

April 18th. He could move both hands to his mouth.

He continued improving from this date. On May 8th, he was up, none of his symptoms remaining, except stiffness of the shoulders. This stiffness was treated by the interrupted current of electricity, under which he gradually improved, and recovered the use of his shoulders. He was discharged from hospital on June 1st, with but slight stiffness of the shoulders.

REMARKS.—Dr. Grimshaw remarked that this case presented many peculiarities, differing in important points from those he had met with during the late epidemic of cerebro-spinal meningitis. Although the patient had *all* the usual symptoms of cerebro-spinal meningitis, yet none of these were intensely marked, as compared with those which had been previously seen in the hospital. The patient also laboured under three of what may be termed complications of the disease—namely, paralysis, effusion into joints, and affection of the eye. Although these complications had been frequently recorded, and Dr. Grimshaw had seen all of them, yet they were all rather rare, and, as far as he (Dr. Grimshaw) knew, had never been all recorded in a single case. He had himself met with but one case where even two—the eye-affection and joint-effusion—were found together. Another remarkable point about the case was, that the inflammation of the cerebro-spinal axis seemed to be altogether confined to the cervical portion of the spinal cord, as the nerves arising from that locality were alone affected. As to treatment, Dr. Grimshaw pointed out the value of chloral as a remedy, producing sleep, and allaying the distress which the patient experienced from the stiffness and hyperæsthesia. The bromide of potassium had not received as fair a trial as it deserved in the treatment of this disease, considering its well-known power in allaying spinal irritation. Dr. Grimshaw had employed belladonna to most other cases with this object, and believed it had served the purpose of allaying the hyperæsthesia.

IRISH SCHOOLS OF MEDICINE.

THE ADELAIDE HOSPITAL.

THE inaugural address of the winter session was given by Mr. B. Wills Richardson on Monday, the 7th instant. The various members of the staff, and a large concourse of visitors and students, were present. The lecturer referred to the importance now attached to clinical examinations; the public, on the one hand, having become alive to the necessity for bedside study on the part of those who were destined to be physicians and surgeons; and the different licensing bodies having, in consequence, introduced a system of practical examination, of which the diagnosis of both medical and surgical diseases—surgical manipulation—and, in the dead-room, operative surgery, were essential parts. Mr. Richardson subsequently spoke of a department in the Adelaide Hospital especially worthy of attention, viz., the children's wards, and likewise of the dispensaries for medical and surgical cases, for skin-diseases, and for ophthalmic and aural affections, which were attached to the Institution. An able address was concluded by some excellent advice as to a student's mode of reading, choice of companions, and gentleness and courtesy of demeanour.

MEATH HOSPITAL.

AN introductory lecture was delivered on the 7th instant by Dr. James Wharton, Vice-President of the College of Surgeons in Ireland. Dr. Stokes, D.C.L.; Dr. Hudson; Dr. George H. Porter, Surgeon in Ordinary to the Queen; Dr. Macnamara; and many others were present. The subject of the address was that of hospital training, and it

received full justice at the lecturer's hands. His remarks were addressed more particularly to students of the first and second years. To the former class, Dr. Wharton recommended a diligent attendance on the hospital dispensaries, medical and surgical; to the latter, a more distinctly clinical course of study in the wards themselves. To both classes, the importance of collateral reading was commented on. Having next dwelt at some length on the topic of proposed medical legislation, the lecturer went on as follows. "As a prominent portion of hospital training, I must say a few words with reference to the conduct to be observed in hospitals. To understand this point, it is necessary to bear in mind what any hospital is. I can give no better definition than by quoting the eloquent and touching words of Dr. Stokes, 'the sick poor man's home.' Here, then, are relief for the sick, comfort for the poor, and a shelter for those who need it. Charity founded such institutions, and charity continues, though not very liberally, to maintain them in proper efficiency. Hence, there is a sacredness in such a place as that in which we are now assembled. Before entering the wards, teachers and pupils have their heads uncovered, in respect to the inmates, whose protectors and attendants they are during their stay. They are ministered to, not through constraint, but willingly, because, unlike the rich, they can procure no other aid. The regulation is to visit them punctually; for the sick, rich and poor, eagerly watch for their attendants. For the time being, other concerns are set aside, so that they shall exclusively occupy attention; in short, and again to quote from Dr. Stokes, 'private duties are subservient to hospital engagements.' No account is to be taken of the position of those under charge save to better it, but everything which concerns their ailments. To alleviate or remove these is our interest, even if we take the lowest ground, but it is, moreover, our bounden duty and service. To this must be devoted constant energy, labour, industry, study, zeal, and experience. Gentlemen, these are not empty sounds; let them become impressed and engraven upon you as with a pen of iron. Fix your minds upon your work while at your work. Never leave a ward without having learned some fact, some truth, and so will you be kept from conversing upon topics which may at the time have no connection with your engagements, but which may bring sorrow or disappointment to its occupants, on the ground of a want of sympathy for their sufferings. In your supervision of the sick committed to your care, cultivate habits of cheerfulness, tenderness, and neatness, so that neither they nor others may have cause to complain of a want of such characteristics, so desirable in the physician, and particularly in the surgeon. Be mindful that as you shall conduct yourselves, and discharge your duties in hospital, so will you behave yourselves in private position hereafter—a truth to be held continually in remembrance. Here you will find among the advanced pupils gentlemen willing and able to guide, for the Meath Hospital class is well entitled to any eulogium I can offer, if, indeed, I may so express myself, for, in reality, none deserve credit for the proper discharge of duty, although they merit censure if they neglect it." The lecturer reminded the students that, to carry out their course of study, bodily health, mental labour, and corporeal vigour were co-operative, while the maintenance of the latter afforded a barrier to the encroachment of illness. They must not disregard sanitary laws; regularity of living, wholesome food, temperance, exercise, and recreation must be duly observed; but nothing deserved the name of recreation which caused man to forget his responsibility, failed to incite him to elevate his tastes, to regulate his passions, to strengthen his faculties, and to refine his mind. Dr. Wharton then gave some further advice as to the use to be made of the opportunities of hospital instruction, and congratulated Dr. Porter, one of the surgeons, on his recent appointment as Surgeon to the Queen in Ireland. He concluded by reminding his hearers that "the 'Old Meath', as it is called by its former pupils when they talk of or visit it, affords many an example for your imitation. I do not presume to allude to the living, though the task were easy, but to those 'whose voice, though dead, yet speaketh.' Let the memory of Whitley Stokes, Cheyne, Graves, Crampton, Porter, Smyly—and of him, too, the most recently removed from amongst us, and in the prime of manhood, Maurice Henry Collis—animate you continually. Hallow this institution on their as well as on its own account, and so by upholding its fame you will establish your own and promote the well-being of your fellow-men, whether at home or in distant lands."

The different courses of lectures in the School of Physic in Ireland for the winter session have commenced without the delivery of any inaugural address, it being three years since the Board of Trinity College departed from the custom, previously universal, of opening the session in a formal manner.—No introductory lecture was given at the commencement of the clinical session in the Richmond, Whitworth, and Hardwicke Hospitals.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 19TH, 1870.

THE INTIMATE PATHOLOGY OF CONTAGION.

II.

SEEING that some of the chemical actions belonging to the fermentative class may, in all probability, take place without the agency of living ferments, and seeing also, as indicated by Professor Rolleston, that certain processes of infection seem to be certainly not dependent upon the influence of living particles, the question may well arise, whether the particles of pepsine and the vaccine particles are living or not living. Are they minute particles of living matter capable of undergoing growth, development, and multiplication? or are they, on the other hand, merely not-living granules of a peculiar kind, which have been precipitated in the fluids in which they occur, and whose presence in other fluids suffices to initiate certain chemical changes accompanied by a precipitation of similar particles?

It seems to us that at present we possess no adequate data to enable us to come to a final decision on this subject. There are many weighty reasons, however, which may be urged in opposition to Dr. Sanderson's view that these particles are living organisms. It should be remembered that perfectly pure and healthy vaccine lymph never contains any other formed elements. There are only those minute spherical particles, regarding whose mode of origin nothing is known, and which have never been seen to multiply after the fashion of organisms by a process of division. And yet, whenever other unmistakeably living particles appear in an organic fluid, in the course of a few hours they seem to pass on into more developed forms. *Bacteria* and *Vibrios* make their appearance, and are seen in multitudes, intermixed with the more simple particles, which are only known to be living on account of their developmental capacity. We are aware, moreover, from the observations of Davaine on animals affected with the disease known as *sang de rate*, and from those of Vulpian on frogs poisoned with portions of cyclamen root inserted subcutaneously, that *Bacteridia*, *Bacteria*, and organisms of this class, are enabled to multiply prodigiously within the vascular system, so that numbers of them are obvious in any drop of blood which may be examined. These diseases, too, are almost always fatal. The development of such organisms in the blood goes on increasing. It is, therefore, in all probability, not true that the presumed living vaccine particles do not undergo development, because the human body and its fluids are not suitable media for the occurrence of such development. Why, then, should these particles, if living, always remain in their most rudimentary form? It is true that *Bacteria* will appear in stale vaccine lymph, but they will similarly appear in any exposed organic fluid; and the proof is wanting that in such cases the vaccine particles have themselves grown into *Bacteria*. But, still further, what evidence we do possess on this subject is even adverse to the notion. Vaccine lymph containing particles may be introduced beneath the skin, and five, six, seven days after, in the vaccine vesicle which results we still can find only similar particles in the new fluid. We have no evidence whatever of a development such as would almost inevitably have taken place had the particles been living, and similar to what occurs in putrefying organic fluids. The most careful microscopical examination of the blood in patients suffering from scarlet

ever, typhus, typhoid, and other infectious diseases, has never revealed anything like definite organisms. And, in reference to sheep-pox, Dr. Sanderson writes: "While no result follows from the inoculation of the blood or of any of the secretions, the liquid expressed from the pulmonary nodules has been found by M. Chauveau to be extremely virulent, certainly not less so than the juice obtained from the pustules." And yet this is a disease just as contagious as variola in the human subject, with which it is also comparable in other respects. Why, then, if variola, cow-pox, scarlet fever, measles, and other infectious diseases, are due to the presence and multiplication of living particles, should not these living particles undergo that development which undoubtedly living particles always rapidly undergo in organic fluids outside the body—more especially when this development of living particles within the body into *Bacteria* and *Bacteridia* has been shown to be possible by the observations of Vulpian and Davaine? Have we, in fact, sufficient evidence to lead us to believe that the contagious particles of Sanderson and Chauveau are really living particles? It is true that the particles increase in number in the vaccine vesicle, as in other infectious diseases; but, however strong a point this may be in favour of their being living particles, it must not be forgotten that, if a crystal be thrown into a mixed supersaturated solution containing many saline substances, its mere presence will determine the formation of many similar crystals in this fluid, provided only that it contains saline substances whose crystalline forms are isomorphous. Making the necessary modifications for organic matter, and considering the chemical complexity of living tissues, is it not possible to suppose that something similar may occur in infectious diseases—more especially when the changes appear so subtle and inscrutable in their nature, changes which, when once they have taken place, are in many cases incapable of being reproduced, even though the individual appears, after recovery from the malady, to have lapsed into his ordinary condition? The particles may be not-living; they may initiate chemical changes by contact; and their presence in the fluids of certain individuals may suffice to determine the precipitation of other similar particles. Only by some such process as this does it seem possible to explain the influence of the emanations from the *Ascaris megalocephala*: and only on some such hypothesis does it seem possible for us to explain certain well-known peculiarities belonging to the zymotic diseases as a class. Subtle chemical changes, once initiated, may require a certain time to attain their maximum and then decline. But when the development of organisms is once initiated, what should stop their increase save the death of the individual in whom this multiplication is taking place?

Those who believe, however, that the spread of the zymotic diseases is dependent upon the spread of "germs" or living particles, may be divided into two opposite camps, since two opposing theories are in the field. As Dr. Sanderson says, "According to one [theory], they naturally exist as particles of living tissue, and thus take part not only in morbid processes, but in the performance of the normal functions. According to the other, they are originally morbid, and are imported into the body from without, being derived either from the tissues or organs of other infected individuals, or produced by the transformation of the contents of the reproductive cells of the parasitic fungi inhabiting the higher plants."

The first theory is more especially familiar to us through the writings of Dr. Lionel Beale, whilst with the second Professor Hallier has of late most prominently identified himself. The theories of Hallier have become well known; and those who have not, as well as many of those who have, read his somewhat voluminous writings on the subject, will especially value the clear and able abstract given by Dr. Sanderson of the views of this enthusiastic mycologist, and will be thankful for the careful manner in which he discriminates between proven fact and mere hypothesis. Although pledging himself to neither of these doctrines, and although believing that they are at present little better than plausible guesses, Dr. Sanderson nevertheless thinks them both "sufficiently probable to deserve consideration". Before accepting or rejecting either of them, however, he thinks that the following questions need

further investigation. "(a) Is it true that the destructive parasites which inhabit the tissues of many of our common plants produce microzymes by a normal process of development? (b) Are such microzymes respectively endowed with distinctive morbid properties? (c) Is it true that microzymes take part in any of the normal chemical functions, especially those relating to the transformation of the albuminous compounds? (d) Can they arise *de novo* in living tissues, in mere consequence of impaired activity of nutrition?"

In conclusion, then, whilst deeply impressed by the difficulties of the problem and by the very complex nature of the evidence involved, we do not find that the evidence adducible is sufficient to entitle us to believe that the infective particles of which we have been speaking are really living; neither do we think that the "two obvious objections which stand in the way of the acceptance of any chemical explanation of the phenomena of contagion" are so weighty as Dr. Sanderson supposes. It seems possible, as we have already hinted, (1) that the multiplication of the contagious particles in the body of the infected individual may take place independently of those reproductive processes common to living beings, which, in the absence of all proof, have been assumed to be the modes by which the contagious particles increase; and (2) it would seem to us no more strange that certain minute not-living albuminoid particles should be able to resist the influence of adverse external influences, than that similarly minute living particles (having a more complex chemical constitution, and also removed from their proper medium) should be able for a time to withstand adverse influences, and to act like fresh contagium when brought into contact with the fluids of the living body.

It should be remembered, however, in the consideration of these questions, that the possibility of the *de novo* origination of diseases which, in the main, may be perpetuated by processes of infection, cannot be hastily dismissed. The need of some such supplemental hypothesis has been felt by many who are best entitled to speak upon the subject, and has of late been strongly urged by Dr. Murchison. Difficult—nay, impossible—though it must be to prove in any given case the absence of such particles as those to which Dr. Sanderson refers, yet the cumulative effect of instance after instance of the strongest presumptive evidence in favour of their absence, or of the absence of other contagious influences, cannot be ignored. This possibility of the occasional *de novo* origination of some one or other of the zymotic diseases harmonises quite well with the notion that the infective particles are not-living, since it could be conceived that, under the influence of certain conditions, changes might take place in the fluids of an individual similar to those which are only more readily excited by the presence of particles which have been produced by previous changes of a like nature. Further, this possibility might harmonise with the notion of the similarity of the contagious particles to the low organisms met with in putrefying fluids, if the doctrines which have been lately advocated by Dr. Charlton Bastian should prove to be correct. For then, under the influence of similar determining conditions, actual living particles might be evolved in the animal fluids, owing to the occurrence of such chemical changes as, on the last hypothesis, are supposed to be attended by the deposition of not-living particles. Similarly, the "spontaneous" occurrence of the chemical changes of which we have been speaking might, in accordance with the doctrine of Dr. Lionel Beale, lead to some mysterious morbid modification in the nature and properties of the minute particles of living matter which have been derived from pre-existing anatomical elements,—even though such changes are far more frequently initiated by contamination with pre-existing morbid particles.

Who can say what influence the final settlement of these abstruse and abstract questions may have upon the future of the human race, and how far the results of scientific research upon such apparently unpractical questions may prove to be beacon-lights for future hygienic legislation?

DR. GEORGE JOHNSON will deliver the Address in Medicine at the next Annual Meeting of the British Medical Association.

PROFESSOR LISTER will deliver the Address in Surgery at the Annual Meeting.

TWENTY-FIVE cases of street accident, one of which proved fatal, were attended to in the Charing Cross Hospital during the month of October, being two more than in the previous month.

YELLOW FEVER is declining at Valencia. At Barcelona, on the 1st, there were 53 admissions into the hospital and 20 deaths; at Alicante, 40 and 20 respectively.

THE Lumleian Lectures at the London College of Physicians will be delivered next week by Dr. West; the Croonian Lectures by Dr. Parkes; the Gulstonian Lectures by Dr. Gee; and the Harveian Oration in June 1871 by Dr. T. K. Chambers.

WE call special attention to the two important notices relating to the English and Irish Poor-law Medical Officers' Associations, which appear this week in the columns of our impression specially devoted to the interests of the Poor-law medical service.

ARRANGEMENTS have been made by Messrs. A. and C. Black with the family of the late Sir James Simpson, Bart., to publish his principal papers in three volumes: 1. *Anæsthesia, etc., with Hospitalism*; 2. *Diseases of Women*; and 3. *Select Obstetric Works*.

THE Geographical Distribution of Phthisis among Females in England and Wales will form the subject of Mr. Haviland's next lecture at St. Thomas's Hospital. It will be delivered on Tuesday next, the 22nd instant, at 4 P.M.

DR. BARCLAY of Leicester has published in the local paper a very able argument, in which he calls upon the managers of the infirmary to make a better and fuller provision for cases of contagious fever. Scarletina is epidemic; and the town authorities are, as usual, dozing. We shall hope to hear that Dr. Barclay has carried his point.

AT a meeting of the St. Marylebone Vestry this week Dr. Whitmore reported that the deaths from scarlet-fever in the parish had increased from an average of 70 deaths per annum to 250. After some discussion it was agreed to purchase a disinfecting apparatus, with a view of checking the progress of the disease.

AN interesting report has been published by Mr. Basil Cane, Poor-law Inspector, on relapsing fever in Liverpool, and is made the subject of lengthened comment by our contemporaries. Thanks to correspondents in Liverpool, all the facts and deductions from them have been previously laid before our readers in these columns.

MEDICAL MAYORS.

THE following members of the medical profession have been elected mayors for the ensuing year: Mr. John Griffin, Banbury; Mr. Joseph May, Devonport; Mr. G. G. Sampson, Ipswich (re-elected); Dr. L. Spencer, Preston (re-elected); Dr. Rooke, Scarborough; Mr. Fortescue Morgan, Stamford; Mr. R. Ley, South Molton; Dr. John Tibbits, Warwick; Dr. Evan Pierce, Denbigh; and Dr. F. Chambers, Margate.

THE RED CROSS SOCIETIES.

DR. HUMPHRY SANDWICH, C.B., writes to *Macmillan's Magazine* as follows:—"There is no doubt of the enormous utility of these private societies when intelligently worked; at the same time, I should like to see more military surgeons and fewer titles on our committee. What would be said of a committee for the defence of London with only one military man upon it, and he seldom present at his deliberations? It seems to me that the members of the medical profession are either remiss in coming forward on such occasions, or else they are snubbed; while lords, like the revolutionary leaders of Paris, are ready to command a fleet, or an army, or perform a surgical operation at a moment's warning." In these opinions we entirely concur.

CHOLERA IN RUSSIA.

THE cholera which has been prevalent at Berdiansk in the south of Russia has quite disappeared. Happily, it did not at any time assume a severe type, although the quickly fatal result which took place in some cases caused no small amount of anxiety at the time.

CONTAGIOUS DISEASES IN LONDON.

IN his weekly report the Registrar-General states that the scarlet-fever epidemic has exhibited signs of abatement during the last four weeks, the deaths having been 192, 167, 174, and 150. Small-pox has not been so fatal in London since the early part of 1868 as during the last three weeks; in fact, so large a number as 40 fatal cases has not been recorded in any week since April, 1867. More than half the deaths from this cause have occurred in the east districts.

STATISTICS OF DISEASE.

THE New York Board of Health have issued a notice requiring physicians to observe the law strictly by reporting to the Health Department every case of contagious disease occurring in their practice. The Board observe that this is absolutely necessary in order that they may supply the profession with correct statistics of the movement or prevalence of diseases, and requisite also for the scientific study of contagious disease, and for the due application of measures for arresting the spread of disease.

THE MEDICAL BILL.

ON Tuesday last the Vice-Chancellor of Cambridge invited the members of the Senate to attend in the Arts School to discuss the report of the Medical Syndicate, which recommended that, in view of probable legislation with regard to the qualification of practitioners in medicine and surgery, the powers conferred upon the Syndicate should be continued till the division of the Michaelmas term, 1871. It further suggested that they should be empowered to watch any proceedings in Parliament in reference to medical legislation, and to report from time to time to the Senate. No discussion took place. The report was adopted.

THE HUNTERIAN SOCIETY.

AT the next meeting of the Hunterian Society, on the 23rd instant, at eight o'clock, at the London Institution, Finsbury Circus, Mr. D. De Berdt Hovell will read a paper on Hysteria, in which the following propositions will be maintained. 1. The disease called hysteria has no necessary connection with the uterus. 2. It is essentially a condition of depressed physical and moral power, and all the phenomena of the disease are produced by irritation, in some form or other, superadded to that condition. 3. The ill-defined, obscure, intractable qualities of the disease are mainly due to the hypothesis of uterine irritation, and the erroneous treatment which ensues thereupon. 4. The difficulties of the subject are entirely due to the preconceived opinions with which it has long been regarded; when these have been abolished, the disease will at once become both simple and tractable. Members of the profession interested in the subject are invited to join in the discussion.

ARCHÆOLOGICAL EXTRACTS.

JUST now, more than ever, extracts of meat have assumed a position of the highest importance. If they have not determined the fate of armies in this war, they have certainly helped to save the lives of many thousands. It is therefore interesting to learn, from a recent article by Dr. Pott in the *Zeitschrift für die Gesammten Naturwissenschaften*, that extracts of flesh and fish have been prepared in Java and Sumatra for several centuries. The raw material, after being boiled and comminuted, is placed in a press, the expressed juice being exposed to a moderate heat till it assumes the consistence of syrup. The extracts so prepared all possess an intensely saline taste, arising from the accumulation of organic salts caused by their great concentration. Upon analysis, they were found to contain mere traces of gelatine, and to give no indication of albumen. One sample contained 20.9 water, 16.4 ash. The dry extract contained 9.54 nitrogen.

MEAT FOR THE MILLION.

MR. TALLEMAN is about to renew his excellent efforts to provide cheap dinners for the poorer classes of great towns with Australian meat. He gave a dinner last week, to which he courteously invited representatives of this JOURNAL. But the system of dining representatives of the press seems to us on all occasions objectionable. We shall, however, take legitimate occasions of testing the working of Mr. Talleman's arrangements when they are in ordinary operation order; and, from what we have seen of them on former occasions, we think them worthy of the attention of those who are interested in the physical welfare of the masses in the great towns of England. A good meal has always been supplied at Norton Folgate at prices ranging from twopence to five-pence.

STUDENTS OF THE DAY.

THE facilities afforded by the new system of "unattached studentship" for cheap education of the highest class at the University of Oxford have not been largely appreciated. They are especially important to students of medicine; for Oxford now has a splendid school of natural and physical science, and offers many rich prizes to young men of ability and liberal education, who are moderately tinctured with liberal studies, as all medical men should be, and desire to be complete physicians. No physician will in the future be complete whose knowledge is not broad-based and exact. The physician of the future must come to the bedside armed with a practical familiarity, not a vague, verbal, and shy acquaintance, with physics and with chemistry. He must be accustomed to the methods, and familiar with the language, of scientific research—able to handle and to understand the principles of instruments of precision. The day is dawning when it will be thought humiliating to be unacquainted with the physics of the body, and to be incapable of chemical examination of its secretions and experimental estimation of its functional activity in health and in disease—when what is now the treasured knowledge and rare aptitude of the few will be regarded as the indispensable and commonplace accomplishment of every medical practitioner. We have ventured to assert this in a few "plain truths to medical students" with which we prefaced our educational number. Those plain truths have been welcomed and reprinted by teachers here and on the other side of the Atlantic. It is deeply important that the students of to-day and their guardians and directors should practically appreciate these truths. There is a painful levity and a distressing superficiality of study prevalent amongst students. This is a very critical time in which young men are entering the profession. The new modes of study are not yet completed; and the more perfect modes of examination are not yet fully adopted, but their adoption is so certain that it may be taken for granted; and students who do not come under the "new regulations" should, for their own sakes, bring themselves under them. They should voluntarily attend the courses of laboratory work in practical physiology and practical pathology, which their successors will be forced to attend. They should voluntarily acquire the knowledge which will be compulsory matter of attainment for those who come immediately after them. So their conscience will hereafter be saved many a pang, and their cheek many a blush. If the British profession is to maintain its relatively high position in the world of medical science and practice, it must give not less attention to a strictly scientific training as a basis than is given in Germany and France. If we have not the advantage of Government laboratories and institutes and State grants in aid of science-teaching, we must not on that account disregard scientific training, nor sneer at the increasingly necessary scientific studies by which young men must prelude their medical career, if they would not hereafter figure unhappily. All the avenues to a complete education should be trodden by many and diligent feet. It would be difficult to point to any more worthy to be frequented than that opened by the University of Oxford, by the economical system of unattached studentship. It appears, from a report just issued by the delegates, that, among twenty undergraduates, the average weekly cost of living—board, lodging, and extras—

on the twenty returns, was 31s. But, if the lowest ten be taken, the average falls to 26s. Taking this average as the sum per week for which a thrifty student can get respectable board and lodging in Oxford, we arrive at the following figures for a year's expenses: Board and lodging for three terms of eight weeks, at 26s., £31 4s.; University dues, £4 10s.; Examination-fees (on the average), £1 1s.; Tuition expenses (about), £10 10s.; total, £47 5s. It will, of course, be observed that these figures do not include travelling, books, clothes, pocket-money, or cost of living in the vacations. Still they prove conclusively that a careful student can get through his Oxford career for a sum not exceeding £50 a year.

MILK AS A VEHICLE OF INFECTION.

IT has been shown that there is reason to believe that in many cases the milk from cows suffering from the prevalent foot-and-mouth disease has proved poisonous. In the majority of investigated instances, there was no such evidence. Mr. John Gamgee offers the explanation that, although it is not the milk itself that acquires special properties, it is often deteriorated from its secretion or retention in a congested or inflamed gland; but it is the material reproduced on and in the inflamed skin and mucous membrane that is dropped into the milk in the act of milking that renders it poisonous. The contagious matter in such cases is capable of effective destruction by the use of baths, fomentations, and lotions.

LIEBIG ON FERMENTATION AND THE ORIGIN OF MUSCULAR FORCE. A SERIES of papers by the above-named eminent chemist has been recently presented to the Bavarian Academy of Sciences, and published in different scientific journals in Germany. The papers bear the titles "On the Alcoholic Fermentation"; "On the Acetic Fermentation"; and "On the Origin of Muscular Force"; and have been admirably translated and published by Dr. Paul in the *Pharmaceutical Journal*. Like everything which Liebig has written, they are very interesting, and will well repay the trouble of reading. Liebig regards fermentation from a purely chemical point of view. The transformation of grape-sugar into alcohol and carbonic acid is not a vital act done by the yeast-plant—not a part of its growth—but is a purely chemical phenomenon with which the plant happens to be accidentally connected. Liebig's hypothesis is that the connection is of this sort: the yeast-plant produces a small quantity of a very fragile, very changeable, compound, and the chemical change of this compound sets up a change in the grape-sugar in contact with the decomposing matter. Accordingly, in fermentation there is simply a propagation of molecular movement from the fragile, decomposing secretion of the plant to the grape-sugar in contact with it. The acetic fermentation is a purely chemical phenomenon, being nothing more nor less than oxidation of alcohol, so as to yield water and acetic acid. This oxidation is sometimes effected by means of dilute chromic acid, which gives up its oxygen to alcohol; sometimes by platinum black, which absorbs oxygen from the atmosphere, and then transfers it to any organic substance in contact with it; sometimes by traces of turpentine, which ozonise atmospheric oxygen, and so transfer oxygen from the air to organic substances; sometimes, lastly, by the vinegar-plant (*Mycoderma aceti*), the mechanism of whose action is probably like that of turpentine. But the oxidation is no vital act; and the property of bringing it about is no more a vital property of the *Mycoderma aceti* than the property of weighing—say the $\frac{1}{100000}$ of a grain—is a vital property of the plant. Respecting the source of muscular power, Liebig combats Fick, Wislicenus, and Frankland, who, as is well known, regard muscular work as the product of oxidation of fat and carbo-hydrates. Criticising the celebrated Alpine experiments of Fick and Wislicenus, who went up the Faulhorn in the strength of non-nitrogenous food, and did not excrete a larger quantity of urea than usual whilst engaged in so unusual an exertion of muscular activity as was required in order to ascend the mountain, Liebig remarks that these gentlemen omitted to weigh themselves before and after their experimental journey, and that they did not examine their fæces, but restricted

the examination to the state of the urine. The human body is not like a gun, and the effect of food is hardly to be compared with that of a charge of powder. A strong muscular man, even when fasting, will do more work than a weak child that is highly fed. The power of doing muscular work is a growth, and the effect of doing muscular work is a change in the muscular structure itself, which has to be repaired by growth. After violent muscular exertion, there is a period of increased excretion of urea.

CANADIAN MEDICAL ASSOCIATION.

THE third annual meeting of the Canadian Medical Association was held in Ottawa on the 14th and 15th September, under the presidency of the Hon. Charles Tupper, M.D. In his opening address, the President referred to the adoption of a code of ethics by the Association, and to the labours of the body for the improvement of preliminary and professional education. The Association had determined that the establishment of a common portal of entrance to the profession was desirable. At present, a medical man in one of the provinces could not legally practise in another. A Bill had been prepared by a committee and would be discussed by the meeting. He was opposed to the infliction of penalties on persons practising without a qualification; but would punish those who falsely claimed the possession of qualifications to practise. The financial position of the Association appears not to be very satisfactory. This is attributed in great measure to the custom which has hitherto prevailed of receiving subscriptions from those members only who were present at the annual meetings. Notice, however, has been given of a bye-law, that every member of the Association shall pay an annual subscription of three dollars, whether present at the annual meetings or not. Dr. Horatio R. Storer of Boston, and Dr. Sullivan of Malden, were elected honorary members of the Association. It was decided to hold the next annual meeting in Quebec, under the presidency of the Hon. Dr. McNeill Parker of Halifax.

CHYLOUS URINE.

IN the valuable report on the microscopic objects found in cholera evacuations, to which we referred last week, Mr. T. R. Lewis gives an account of an observation of great interest made on a case of "chylous urine". Whilst following the changes taking place in these particular corpuscles in various fluids, he had opportunities of making an examination of the urine of a patient in the General Calcutta Hospital under the care of Dr. Lyons, who had been suffering from the condition known as chylous urine for about a month, together with pain in the right testicle, and great emaciation, in spite of good food and a good appetite. As the colour closely resembled many rice-water stools, he carefully examined it, and was repaid in a way he had not anticipated. It was albuminous to the extent of about one-fourth of its bulk, slightly acid, with a specific gravity of 1.015. Ether caused a separation into two layers—a clear urine-like fluid containing oil-molecules, and a white homogeneous mass consisting of minutely molecular *débris*. Before the addition of reagents, the fluid under the microscope so closely resembled the condition of a cholera stool just described, as not to be distinguishable from it—yellowish-green cells, some hyaline, some granular, some protruding a tongue-like prominence, and others with the contained plasma puckered in various ways. A few of the larger corpuscles were seen to shift themselves (like *amoebæ*) a distance fully their own diameter, the shape altering at the same time. At first he doubted that they really were blood-cells, as the extent of variation in size was considerable. The fluid very quickly gelatinised in the test-tube; indeed, it frequently does so in the patient's bladder, giving rise to stoppages during micturition. He had not seen cholera discharges spontaneously gelatinise, although such a condition is said to occur. A portion of the coagulated mass (which, when stirred, closely resembled a lump of moist gluten) was teased on a slide with needles, and examined. It consisted of fibrillæ studded with blood—granular cells, scarcely differing from those seen in the flakes of cholera-discharge, except, perhaps, in being more universally granular. They

seemed to present more of the character of pus-cells. In the midst of this fibro-albuminous matter, several *embryos of a round worm* were discovered every time the urine was examined. A careful sketch of a large one, after the addition of acetic acid, is given. In the course of a few minutes, when the sketch was nearly completed, a *caudal bursa* became visible under the influence of the acid. "When first seen," says Mr. Lewis, "I thought they were some detached filaments of a fungus, judging from the hyaline structureless appearance presented. After a time, however, a few of them were observed to move very slowly, when all doubt as to their nature was at an end. It will not be surprising that the existence of these was not suspected, when we consider that fully two hundred of the larger size could pass abreast through a very small pin-hole, an orifice not exceeding the fiftieth of an inch in diameter, as may be verified by a simple calculation. Perhaps this fact may help to throw some light on a very obscure disease, of which little is known beyond the symptoms, although frequently met with in some parts of the world; and, indeed, may perhaps account for its localisation to such places as the West Coast of Africa, where, I am told, it is by no means a rare malady. As the mature worm still retains a hold on its victim, being perhaps safely lodged in the kidney—and I have not seen an embryo of this kind before, nor yet a drawing—I must leave to a more experienced helminthologist to decide to what species of nematode it belongs."

OUR SUCCESSFUL ENEMY.

IN a warfare which we are called upon to carry on just now against a very aggressive and destructive enemy, we are (says the *Pall Mall Gazette* in a recent article) copying French rather than Prussian tactics, and are meeting with the fate which might be expected. We are losing every week more lives in London from his hostilities than are killed in the weekly sorties from Paris; and, as we lost thirty thousand killed last year, and about three hundred thousand wounded, by this enemy, we ought seriously to consider how to meet him. Of course we speak of scarlatina. We cannot expect our defenders to "spring up from the soil"; and all our talking and powerful writing are useless, unless somebody is impelled to take up the defence. Failing so strong a measure as the formation of a National Provisional Government to supersede the Home Office, which is sleeping over the report of a Sanitary Commission appointed eighteen months ago, and of which the second volume will presently appear, suppose a few patriots in every district would go to the local Boards of Health and ask them what they are doing; why they do not appoint adequate staffs of inspectors, the *éclaireurs* of an army of defence; why they do not provide proper places and means of disinfection, our field and siege artillery; provide hospitals and refuges, our fortresses and strongholds; and enforce isolation, which is equivalent to blowing up tunnels and cutting lines of rail. At present, we are showing neither the intelligence and persistence of the Germans, nor even the patriotic activity of the French. We have fallen back upon our British expedient of grumbling, which seems to have no effect upon the progress of scarlet fever.

SPREAD OF SCARLET FEVER.

WE have received the following details of some observations lately made at the Birmingham Children's Hospital, which furnish evidence that scarlet fever may be diffused through the medium of the laundry. Up to the beginning of this year, the in-patient department of this Institution was situated in the centre of the town, and was by no means perfect in a sanitary point of view, the building having formerly been a private bank. The contagious wards were not so completely isolated as could be desired, although every possible precaution was used: still the number of cases of scarlet fever which arose in the Hospital was so small that it seemed that the patients ran no greater risk than at home. Last January, the new Hospital at Edgbaston was opened; and here the arrangements were vastly superior. The wards are spacious, light, and well ventilated; and the contagious department—com-

plete in itself—has no communication with the main building. The nursing, too, has been greatly improved, being carried out now by the nurses and probationers of the Training Institute, superintended by the well-qualified ladies. But, although the general hygienic condition of Hospital was improved by these changes, the number of cases of scarlet fever occurring in the wards underwent an alarming increase, so much so as to excite the anxious attention of the staff, and to lead them to insist upon the most careful provisions for isolation and disinfection. In all they were ably seconded by the lady-superintendent and her very intelligent nurses. Their efforts, however, were all in vain until the secret was discovered. The linen from the contagious department—which under the old *régime* had been separated from the rest and entrusted to a different laundress—was now, after undergoing immersion in Condry's fluid, washed along with that from the other wards in a laundry attached to the building. The knowledge of this, coupled with the fact that cases of scarlet fever almost invariably occurred in the ward nearest to the laundry and drying-ground, and farthest from the fever-ward, led the medical officers to request that the infected linen might for the future be sent away from the Hospital; and since this course has been adopted (now two months) no case of scarlet fever has arisen in the wards. This affords valuable evidence in favour of the view that ordinary washing, even after the use of disinfectants, is not sufficient to deprive the linen of the power of communicating the poison; and it may perhaps help to explain the appearance of this disease in two or three members of a family at the same time, where they have perhaps each put on clothes from the same wash on the same day, and thus have exposed themselves to the infection. We trust that the lesson taught by these facts will not be lost upon the heads of families, and that they will attract the attention of our sanitary authorities.

A CANADIAN MEDICAL BILL.

AT the annual meeting of the Canadian Medical Association on the 14th and 15th September, the principal business was the discussion of the draft of a medical bill, which had been prepared by a committee appointed at the previous meeting. After examination of the Bill clause by clause, it was referred to a committee for amendment in accordance with the wishes of the Association. Copies were also directed to be sent to the registered members of the profession throughout Canada; and it was decided to have the Bill brought up for final examination at the next annual meeting. The principal points of the Bill, as amended in discussion, are the following. The medical profession of the dominion of Canada is to be incorporated into a "College of Physicians and Surgeons" having a corporate seal. There is to be a General Council of thirty members, ten representing Ontario, ten Quebec, five New Brunswick, and five Nova Scotia. Each School of Medicine or University having a staff of teachers or board of examiners, regularly conferring medical degrees, is to send one representative; and the remaining members for each section are to be elected by the registered practitioners not connected with the teaching or examining bodies. The original draft contained provision for a Council of twenty-four members, twelve to be elected by the Universities and other bodies and twelve by the votes of the profession. It also contained a provision for the formation of a Branch Council for each of the provinces of Ontario and Quebec, and for the provinces of Nova Scotia and New Brunswick unitedly; but this was struck out. The members of the Council are to receive only their actual expenses for travelling, board, and lodging. It was proposed to have three examining boards; but the meeting decided on having one Central Examining Board only. Every person desiring to be registered must pass an examination before the Board appointed by the Council, and also obtain a degree or diploma from one of the bodies recognised by the Bill. All persons registered under the Medical Act in Great Britain, or the Acts amending the same, are to be entitled to registration under the Canadian Act, "provided the same privileges be accorded to registered members of the College of Physicians and Surgeons of the dominion of Canada in Great Britain." The Council may recognise, as entitling to registration, such degrees or

diplomas of British or foreign examining bodies as are granted in respect of a like degree of knowledge and education to that required in Canada. There is to be a preliminary examination in general education; the subjects of which, as well as the minimum of those of professional education, are defined in the Bill. There are penal clauses against fraudulent registration and the assumption of medical titles. One clause provides that "the General Council may make representation to the Governor-General in Council upon sanitary subjects, and when called upon shall give its opinion respecting matters touching the public health".

MEDICAL AFFAIRS IN LIVERPOOL.

A LIVERPOOL correspondent writes:

The *annus medicus* has opened auspiciously in Liverpool. At the Medical School, the entry of new students was larger than for many years past, and the work is going on vigorously. The Medical Institution commenced the session with a brilliant display of microscopes at the Microscopical Section, and in the Medico-Chirurgical Department with an interesting and instructive paper, by Mr. F. W. Lowndes, upon "The Necessity for the Registration of Still-births", in which he showed from careful and extended inquiry that in the present state of the law there exist great inducements and alarming facility for fraud and crime. In some cases, children born alive are often certified by ignorant women, called midwives, for the purpose of evading burial fees; in other instances, although no actual proof has come to light, there is too much reason to suppose that infanticide has been concealed by the same means. A recent inquiry in the Coroner's Court brought to light a case in which the body of a child, taken to a mortuary for interment as still-born, was found to have been born alive. The midwife who certified it as still-born confessed that it had lived twenty minutes. She was dismissed with a reprimand and a caution, that being the utmost that the present imperfect state of the law renders possible in dealing with such cases. After an agitation protracted over many months, and in the face of difficulties of no small magnitude, the battle of "Hospital Sunday" has been won, and we are now anxiously looking forward to the first trial in Liverpool of a charitable effort that has proved so successful in other towns. A committee of clergy and laymen are arranging the details, and it is expected that the collections will be made in the course of a few weeks. Relapsing fever is still on the increase here; and, from the published reports, the mortality from this epidemic appears to have risen perceptibly. The local authorities are doing their utmost to meet the difficulty, but the intensely contagious character of the fever—far greater than that of either typhus or typhoid—and the densely crowded state of large districts of the town, renders it almost impossible to keep pace in affording hospital accommodation for the rapidly and continuous accumulation of cases: indeed, isolation, however desirable, is to a great extent impracticable in this large community.

SCARLET FEVER AND THE DUTY OF A MASTER.

AN application was made a few days ago to Mr. Dayman, at the Wandsworth police-court, for his advice. The applicant's daughter was a servant at Balham, and about a fortnight ago she was attacked with scarlet-fever. The master now wished him to remove her, and he wished to know from the magistrate whether he was bound to do so. The doctor said the disease was more infectious now she was recovering. Mr. Dayman said the master could discharge his servant at any time. The applicant said there were five suffering from the fever in the same house. His daughter took it from her master's child. He wished to know whether he must take her into his own family. Mr. Dayman said he could take her to the Fever Hospital. The applicant expressed fear that the hospital authorities would not admit her as she was recovering.

INQUESTS ON SMALL-POX.

Dr. LANKESTER, who sets an admirable example in the enlightened manner in which he fulfils the duties of a coroner, and makes them subserve large public interests, held an inquest on Wednesday at Islington, on the body of a male infant aged five months, who died from small-pox, not having been vaccinated. The deceased caught the disease from a sister seven years of age, also unvaccinated (and who was removed to the Small-pox Hospital), who also communicated it to

the mother. Dr. Lankester remarked that the law demands that every one should be vaccinated. It is unlawful for a man to accumulate dirt and filth, which may become the means of spreading disease and death among his neighbours; and similarly the law does not allow a man to make his body or those of his children hotbeds for the development of the deadly small-pox. The vestries have power to send people neglecting vaccination laws before a magistrate, who has the power to fine them. In reply to a question from the coroner as to what was done in Islington, Dr. Donald said that the present inspector had only been in office a short time; but, since his appointment, numbers of children had been vaccinated. The coroner said that the great mass of people are on the side of vaccination. In Ireland, where vaccination is now practised, the disease, instead of being a scourge, is almost unknown; and to a great extent it might be so in this country. The jury returned a verdict of death from small-pox, accelerated by non-vaccination; and censured the mother for her culpable neglect in not having the deceased vaccinated.

SCOTLAND.

UNIVERSITY OF EDINBURGH.

THE total number of medical students who had matriculated up to the 15th instant was 526.

FEMALE MEDICAL STUDENTS.

ON Saturday, the Managers of the Edinburgh Royal Infirmary again met to consider the question of issuing ordinary tickets to the females now studying medicine. The following letter and memorial from students of medicine were read and considered.

"Edinburgh, 12th November, 1870.

"Sir,—We take the liberty of asking you to present to the managers of the Royal Infirmary, at their meeting to-day, the accompanying petition from the students of the Edinburgh Medical School, and also to draw their attention to the following facts connected with it:—That the petition has been signed by 504 students of medicine, and that of this number 490 gave their signatures yesterday in the course of seven hours; that the greatest care has been exercised by the committee in charge of the petition that none but registered medical students should sign it, as it was presented for signature only at the various medical class-rooms and at the gate of the Royal Infirmary; that, with special reference to the teachers who have admitted ladies into their classes, we find, on a cursory examination, at least thirty students studying under Dr. Handyside, twenty-four under Dr. Watson, and seven under Dr. Duncan, have signed the petition.

"Signed in the name of the Students' Committee by
ROBERT LAWSON, University.
T. W. PARRY, Royal College of Surgeons.

"Peter Bell, Esq., Clerk of the Incorporation.

"To the Honourable the Managers of the Royal Infirmary of Edinburgh.

"My Lords and Gentlemen,—We, the undersigned medical students of the University and Royal College of Surgeons, Edinburgh, understanding that an application has been made by the ladies at present studying medicine in Edinburgh for admission to the Infirmary, respectfully petition that such application, in so far as it may refer to the usual visiting hours—between twelve and two o'clock—be not granted, on the following grounds. 1st. Because many of the medical officers are opposed to the innovation. 2nd. Because, if the ladies be allowed to visit the wards at the usual hours, one of two things must necessarily result—either that many subjects of the gravest medical importance will be imperfectly treated or omitted altogether; or, in the event of such subjects being entered into in detail, we should feel compelled to abstain from being present while such topics are being discussed before a mixed audience. 3rd. Such being the case, we would respectfully draw the attention of the managers to the fact that, when we entered

upon our hospital studies, we had no means of foreseeing that there was any probability of their having to be pursued under circumstances so distasteful to us; and, further, that had such circumstances been foreseen, they would have materially influenced us in our choice of a school of medicine.—For these and other reasons to which we think it unnecessary to refer, we respectfully submit that it would be prejudicial to the best interests both of the institution and of the students to throw open the wards of the hospital for the simultaneous instruction of male and female students."—After some discussion, the managers resolved to delay giving their decision until a future meeting.

A petition was also given in, signed by the whole medical and surgical staff of the Infirmary, with five exceptions, requesting the managers not to come to any decision on this very important subject without first asking the opinion of the staff. Accordingly, the discussion was again postponed till Monday, when, at the request of the managers, the whole medical and surgical staff met in the board-room—very few were absent; and we understand the feeling was nearly unanimous that clinical instruction with both sexes present in the wards was most undesirable. The managers again met on Wednesday, and decided, by a majority of ten to six, not to grant tickets to female students.

IRELAND.

CONFERENCE OF THE MEDICAL BODIES.

THE following bodies, which issue licences in medicine and surgery, are holding a conference at present: the Dublin and Queen's Universities, and the Colleges of Physicians and Surgeons. Sir D. Corrigan, Sir R. Kane, Dr. MacCormac, Mr. Walsh, Mr. Wharton, Mr. Macnamara, Rev. Dr. Haughton, Dr. Haste, LL.D., Dr. Apjohn, Dr. Banks, Dr. Beatty, and Dr. Stokes, are the representatives.

RETENTION OF DEAD BODIES IN HOSPITALS.

THE father of a lad who had died in the Adelaide Hospital of fever, having demanded the removal of the body, Dr. Little informed him that the rules of the hospital required its retention for twenty-four hours, and that in the interests of science a *post mortem* examination was necessary. It is very desirable that the like rule should be adopted in all hospitals, so as to prevent the spread of contagion and the possibility of premature burial. Dr. Little deserves the thanks of the profession for his conduct in this matter.

THE ARMY AND NAVY SERVICES.

So many candidates from Dublin have sent in their names, that the competition for the vacancies in the army in February will be very close. All the successful candidates at the late navy examination were educated in Trinity College, the College of Surgeons, Dublin, and Queen's College, Cork.

MEDICINES FOR POOR-LAW DISPENSARIES AND WORKHOUSES.

So many complaints as to the quality of the drugs supplied by contract to Poor-law Guardians have been made, that the appointment of a pharmacist who should prepare and distribute medicines for all these establishments is being actively promoted.

PHARMACY BILL FOR IRELAND.

UNDER this Bill it is proposed to create a "Pharmaceutical Society of Ireland", who shall, conjointly with the Apothecaries' Hall, examine chemists, etc. None of the powers of the Apothecaries' Hall are given up, and without legislation they would continue to license medical practitioners. This body was not included in the conference of the Irish medical bodies just held.

Mr. DANIEL RICHARDSON, late Medical Officer for the Western District of the parish of Brighton, has been granted a superannuation allowance of £52 per annum.

NOTES OF THE WAR.

THE Queen of Prussia has expressed a desire that trains should as quickly as possible be sent to Metz to remove the numerous sick in that place. The necessary arrangements have accordingly been made.

PARIS UNDER INVESTMENT.

WE hear by balloon-letter of November 11th from one of our medical correspondents in Paris:—The sortie and temporary occupation of Bourget has brought ten wounded to our ambulance, and has filled four or five others. The number of wounded being small, and that of surgeons being large, they get at present the most skilled attention; and probably our surgical results, so far, are of a kind unequalled in any war. Space does not allow me to tell you of some very beautiful resections and conservative operations, which have perfectly succeeded. Great apprehensions as to food; fresh provisions altogether failing us; vegetables very scarce; and salt rations the order of the day. We have good private stores; and our wounded in this ambulance will, I hope, not suffer—thanks to private benevolence, and partly to the funds left by Colonel Lindsay. But there is a terrible prospect before us; and already I have patients among the poor who are nominally ill, really starving. You know what want of fresh meat and fresh vegetables, milk, butter, and eggs, means: it means scurvy, typhoid, and starvation of children, lying-in women, and sick people. I have had a weary round to-day, and came home heart-broken. But this is only the beginning of the suffering in store; and the weak and helpless—the innocent—suffer most. The spirit of bravado is dying out, and the sad pinch of want is beginning to be felt. There is considerable abuse of ambulances, which are made the means of claiming provisions, exemptions, etc. General Trochu has appointed a Special Commission to regulate them; it consists of Jules Ferry, Wolf, Drs. Larrey, Champouillon, Chenu, Guyon, Labbé, Béhier, Broca. M. Jules Worms is acting as Secretary. He was here yesterday. The operations of the Commission have caused a great deal of grumbling among the *fainéants* whom they have unearthed; but *tant mieux*. We expect presently plenty of work, alas! We hear of great martial preparations. I don't know what they will come to; but we cannot stay here inactively to starve. I am writing in bad spirits; but, with the sad sights I see, it is difficult to keep a cheerful heart.

REMOVAL OF SICK AND WOUNDED.

THE Committee of Evacuation at Weissenburg, which in September sent above 21,000 sick and wounded into North and South Germany, is still occupied in forming and forwarding sanitary railway trains on the American model. These trains are being sent at regular intervals as far as possible towards Paris, and the patients are to be discharged into the German lazareths. The first train is already on the road to Chalons, and is to convey the wounded to the lazareth established by the Crown Princess at Homburg. The Evacuation Commission consists of an officer, a staff-surgeon, twelve surgeons, two inspectors, a railway officer, and more than eighty attendants, bearers, etc. There is said to be a want of women to attend to the cookery department.

THE SAXON HOSPITALS.

A REPORT from the reserve lazareth of Saxony, dated November 5th, states that the number of sick greatly exceeded that of wounded. Dysentery and diarrhoea had diminished; but typhus still prevailed extensively, and was even increasing. There had been many deaths, especially from typhus; in most of these cases, however, typhus was complicated with other diseases. In the French lazareth at Dresden, several of the French who were admitted were on the point of death from typhus. In the "Turnhalle" reserve lazareth at Leipzig, hospital gangrene was introduced by three Frenchmen who had been sent from the lazareth at Darmstadt.

WARMING OF TRANSPORT CARRIAGES AND HOSPITALS.

EXPERIMENTS have been instituted by the Ministry at Berlin as to the possibility of warming the carriages for the transport of the sick. Iron stoves are to be used; and the patients are to be protected from draught and cold by placing curtains over the doors and closing up as far as possible all openings in the sides. Measures have been taken for warming the "baraken-lazareths" at Tempelhof. The barracks have double walls, the space between which is filled with peat. The warming is effected by a large iron stove, from which a tube passes through the entire barracks.

SANITARY REPORT OF THE PRUSSIAN ARMY.

THE Medical Department of the War Office at Berlin has just published a Statistical Sanitary Report of the Prussian Army for 1867. With the exception of some shorter papers in the *Zeitschrift der Königlich-Statistischen Bureau* (1865), this is the first time that an official and detailed sanitary report on the Prussian Army has been published. It is to be hoped that the respective authorities will follow the same way in future, as even this single report has many interesting points; and the comparison of the reports of several years will show still more appreciable results. The following is a brief review of the principal subjects of the present report.

Excluding officers, surgeons, and clerks, the total number of the army in 1867 was 253,230 men. There were 40.5 patients daily among 1,000 men—a number inferior to the average of former years, though some circumstances, such as the retention of some of the sick and wounded of 1866 in the hospitals, contributed to increase the number. There were altogether 285,812 cases of illness; 138,992 were admitted to the hospitals; 146,820 were treated as out-patients. Compared with other countries, there were among 1,000 men: in France, 50 patients; in England, 42.47; in Prussia, 40.5. The illness lasted in the average: in England, 17.81 days; in Prussia, 12.7 days; in France, 8.6 days. For every man in the army there were: in France, 18 days of illness; in England, 15.50; in Prussia, 14.8.

Regarding the different classes of disease, the following gives a general view:—Zymotic diseases, 13,286=52 per mille of the total number of the army; diseases of the chest, 29,393=116 per mille; diseases of the intestinal canal, 45,576=179.98 per mille; other internal diseases, 32,544=128.52 per mille; diseases of the eye, 23,782=93.91 per mille; venereal diseases, 13,641=53.87 per mille; surgical cases, 102,321=404.03 per mille; scabies, 25,278=99.82 per mille; total, 285,812=1128.54 per mille.

The causes of prevalence of the single diseases in different parts of the army and at different places are explained as much as possible in the report, and are often very striking, but mostly not of general interest. Syphilis, for instance, is more frequent among those stationed in or recruited from large towns, and among those troops who have a large number of volunteers. In general, syphilis is less frequent than in other armies.

The losses of the army by death were 1,570, or 6.196 per 1,000; by disease especially, 5.086 per 1,000; by accidents, 0.50 per 1,000; by suicide, 0.64 per 1,000. The largest amount of deaths was among the military nurses; the most frequent cause was typhoid fever. Generally speaking, the mortality was small. It was: in the Prussian Army, 1846-63, 9.49 per 1,000; in 1867, 6.19 per 1,000; in the French Army in France, 1867, 11.74 per 1,000; in the English Army, 1867, 9.40 per 1,000; in the Austrian Army, 1867, 12 per 1,000. Invalidings were exceptionally numerous in the Prussian Army in 1867, in consequence of the war of the preceding year.

A large number of statistical tables and three coloured diagrams specialise the results, which are given in the first or general part of the work. At the end is given a synopsis of the medical staff of the army in 1867. In the beginning of the year, we find 920 surgeons; at the end, 984. Among them are 1 general staff-surgeon, 15 general surgeons, 186 superior staff-surgeons, 302 staff-surgeons, 284 assistant-surgeons, 55 "Unterärzte", 141 volunteer surgeons. This is the number of surgeons in the army in peace; in war-time the number is increased, out of Reserve and Landwehr, to more than 3,000.

A REPORT OF HOSPITAL WORK.

DR. VINCENT CZERNY of Vienna is publishing in the *Wiener Medizin. Wochenschrift* a report on the cases treated by him in the Stanislaus College at Weissenburg. He says that, in consequence of the want of instruments, he was at first obliged to abstain from several operations which he would have performed. Surgeons should take care to be provided with instruments and materials for dressing; this caution is necessary, as many come empty handed to the seat of war. He would willingly have made trial of Lister's method in the treatment of perforating wounds of the joints; but at first oil and carbolic acid were not to be had, not to speak of silk and gutta-percha. Dr. Czerny says that a surgeon is lost in war who has learned only one plan of treatment. At Weissenburg, the surgeons used whatever was at hand; at first permanganate of potash, later carbolic acid, in many cases creasote lotion, lead lotion, or solution of chloride of lime; and, when none of these were at hand, they had recourse to the open treatment of wounds. In many cases attended with very offensive suppuration, the last-named method proved of marked service. The smell diminished, and the cleansing of the wound went on rapidly. There was no opportunity of trying a rigidly antiseptic plan of treatment, as none of the patients came under care less than two days after the receipt of their injuries.

The rooms of the college had windows on one side only, and were therefore—especially at first, when they were crowded—ventilated with difficulty. The washing was done in a separate building. Chloride of lime and sulphate of iron were used for disinfecting the cast-off dressings, etc., which were buried in a pit in the garden and covered with earth. Dr. Czerny's stay at Weissenburg lasted nine weeks, ending on October 9th. He had under his care 90 patients—39 Germans and 51 French; of these 28—9 German and 19 French—died. This large mortality is attributed in part to the severity of the injuries, and in part to the occurrence of traumatic diseases. All the patients were wounded, with the exception of two—one suffering from pneumonia, and the other from inflammation of the knee-joint: both these recovered. The causes of injury were in 13 cases, splinters of balls; in 73, bullets; there was one case of sabre-cut, and one of a kick from a horse. Of the cases of bullet-wound, in 25 more than one projectile had struck; a French officer had been wounded by *five* balls. Dr. Czerny gives the following summary of his cases. Fracture of the skull, 3 cases; one was trephined at a late period, and died. Fracture of the upper jaw, 2 cases; one was attended with amblyopia. Fracture of the lower jaw, 1 case. Wounds of the neck, 2 cases; both died—one of hæmorrhage from the jugular vein, the other of trismus. Perforating chest-wounds, 7 cases, of which 2 died. Non-perforating chest-wounds, 2 cases. Perforating wound of the abdomen, 1 case—fatal. Non-perforating wound of the abdomen, 1 case. Shot-wound of the vertebral column, 1 case, fatal; of the pelvis, 3 cases—2 fatal. Injury of the hand, 1 case, requiring amputation of a finger. Wounds of the soft parts of the upper limb, 1 case. Shot-wound of the shoulder-joint, 2 cases, in both of which resection was performed. Fracture of the humerus, 3 cases—1 fatal. Wound of the elbow-joint, 1 case; resection was done. Wounds of the soft parts of the lower limb, 16 cases—1 fatal; fractures of the thigh-bone, 21 cases—6 fatal; in these two classes, one died of purulent œdema, 1 had gangrene through injury of vessels, 3 died of tetanus, secondary amputation was performed in one case with a fatal result, the aorta was tied unsuccessfully in one case, and there was one other case of amputation. The leg was broken in 8 cases; amputation was performed in 4, of whom 2 died. Of gun-shot wounds of the hip there were 4 cases, in one of which resection was performed; all died. There were 6 cases of shot-wound of the knee, 5 fatal; amputation was performed in 2 cases, of which 1 died. There was 1 case of shot-wound of the ankle, for which resection was performed. There were thus 88 cases of injury, and 28 deaths—produced mostly by injuries of the hip and knee-joints, wounds of the neck, and fractures of the thigh-bone.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

THE next meeting of the Section will be held at the Midland Institute, Birmingham, on Friday, November 25th, at 3 P.M.

BALTHAZAR W. FOSTER, M.D., } *Honorary Secretaries.*
T. VINCENT JACKSON, }

Birmingham, November 18th, 1870.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, November 1st, 1870.

PRESENT:—W. D. Husband, Esq., F.R.C.S., in the Chair; Mr. Whipple, Dr. Falconer, Mr. Baker, Dr. Henry Barnes, Dr. Bryan, Dr. Chadwick, Mr. Clayton, Mr. Hodgson, Mr. Nicholson, Dr. Procter, Mr. H. Smith, Mr. Southam, Dr. Stewart, Mr. W. P. Swain, Dr. Wilkinson, Mr. Wood, and Mr. Williams, General Secretary.

The following resolutions were unanimously adopted.

1. That the next annual meeting be held at Plymouth, on Tuesday, the 8th of August next, and the three following days.

2. That Dr. George Johnson, F.R.C.P.L., be appointed to deliver the Address in Medicine.

3. That Professor Lister, F.R.S., be appointed to deliver the Address in Surgery.

4. That the subject for competition for the Hastings Medal for 1872, be "Investigations into the Germ-Theory of Disease". The essays to be sent to the General Secretary on or before the 1st of May 1872.

5. That the subject brought forward by Dr. Bryan be referred to the Journal Subcommittee; and that those who consider they have cause of complaint owing to the non-insertion of their papers, which have been inserted in other journals, or the loss of papers at the Journal office, be requested to specify, in writing, to the General Secretary, the

titles and dates of the papers in question, and the periodicals in which they have appeared, that the Subcommittee may be enabled fully to investigate the complaints referred to them, and to report to the next meeting of the Committee of Council. The report to be printed, and sent to the members of the Committee of Council, along with the circulars calling the meeting.

6. That a Subcommittee be formed, consisting of those five gentlemen who are already appointed to revise Laws 15 and 16, with Dr. Bryan and Mr. G. F. Hodgson added to them, to consider and suggest means for improving the organisation and financial condition of the Association, and to report to the Committee of Council before the 1st of May, 1871.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary.*

13, Newhall Street, Birmingham, November 1870.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE first ordinary meeting of the session was held at the Royal Hotel, College Green, Bristol, on Thursday evening, October 27th, at seven o'clock; CHARLES BLEECK, Esq., President, in the Chair. There were present fifty-six members and eight visitors.

Communications.—1. Dr. HORACE SWETE read a paper on the Position of Medical Men receiving Resident Nervous Patients.

2. Mr. DOBSON read a paper on the Treatment of Ulcers by Transplantation of Skin. He attributed the origin of this method of treatment to M. Reverdin, and the introduction of it into this country to Mr. Pollock. Mr. Dobson pointed out the method which he adopted in his cases, stating that he took small pieces of skin from the upper arm, not larger than split peas; that he divided these on his thumb-nail into five, seven, or twelve pieces, as the case might require; and grafted these into the granulation into incisions, which he made previously with a sharp lancet, using the point of an ordinary sewing-needle for the purpose of removal from the nail, and of insertion into the incised granulations. He detailed fully two cases. In one, the whole thickness of the integument on the front of the abdomen had been destroyed by the explosion of fireworks in the trousers-pocket. The wound healed with a circumferential cicatrix three inches in diameter, which enclosed an open granulating surface eight inches long and five broad, which for six months did not make a single advance towards recovery, but healed perfectly in twelve weeks under transplantation. He had removed eight pieces of skin in all, which yielded, by subdivision, forty insertions, several of which he lost from improper dressing. The other case detailed was an old varicose ulcer of ten years' standing. He related several other cases. In a granulating surface after loss of the entire integument of the leg from phlegmonous erysipelas, he had made, ten days ago, twelve transplantations of pieces of skin not larger than a pin's head, eleven of which were growing vigorously. The same vigorous growth must not be expected in chronic ulcers as occurs in healthy florid granulating surfaces. He showed how skin from a younger person was more vigorous than in an old person when transplanted into the same ulcer. He had seen, in a very healthy granulating surface, a piece of skin not larger than a canary-seed produce an island of cicatrization as large as a florin; but the average growth was about the size of a sixpence. He spoke of the immense value of transplanting skin in a practical point of view, and showed to the meeting two cases as evidence of this.—This paper gave rise to a long discussion, in which the President, Mr. Prichard, Mr. Bernard, Mr. Steele, Dr. Marshall, and others, took part.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

THE second meeting of the fourteenth session was held at Maidstone, on November 8th; MATTHEW A. ADAMS, Esq., in the Chair.

The next meeting was appointed to be held at Gravesend, in March; and Dr. Gramshaw was elected Chairman.

New Member.—Robert Argles, Esq., of the West Kent General Hospital at Maidstone, was elected.

Communication.—A paper on the Diagnosis of Abdominal Tumours, by Dr. S. Monckton.

The members adjourned to dinner at the Star Hotel.

Previously to the meeting, the members assembled at the Ophthalmic Hospital, and examined the following morbid specimens. 1. A lens that had escaped under the conjunctiva, at the insertion of the superior rectus, from a blow on the eyeball. 2. A gun-shot injury: vitreous space full of blood, with a shot in the midst. 3. Diabetic cataract in a girl of sixteen years; the contents of the suction-curette were shown to contain sugar. 4. A convalescent case of severe ophthalmia in herpes frontalis.

The members also went through the wards of the General Hospital, where they were shown cases of atony of the bladder, vesico-vaginal fistula, hemiplegia, empyema, etc. New instruments were also exhibited.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

NOVEMBER 8TH, 1870.

GEORGE BURROWS, M.D., F.R.S., President, in the Chair.

ON THE ELECTROLYTIC TREATMENT OF HYDATID TUMOURS OF THE LIVER. BY C. HILTON FAGGE, M.D., AND ARTHUR E. DURHAM, F.R.C.S.

THIS paper was based upon eight cases of hydatid disease of the liver successfully treated by electrolysis. The authors believed that this method of treatment had not hitherto been adopted in any other case of the same nature in the human subject. The operation was performed in the manner recommended by Dr. Althaus in his treatise on *the Electrolytic Treatment of Tumours*. Two needles were passed into the tumour, and were connected with the negative pole of a modified Daniell's battery of ten cells. The positive pole, terminating in a moistened sponge, was placed upon the abdomen. The current was allowed to pass for a period varying from ten to twenty minutes. The needles were then withdrawn. A little clear fluid in some cases appeared at the seat of the punctures. No preliminary tapping nor exploratory puncture was made. The diagnosis rested on the facts that the patient had a wounded elastic tumour projecting from the liver, and that this was cystic, as proved by the needles rubbing freely one against the other in its interior, although introduced an inch or two apart. The operation was followed in most cases by rapid diminution of the tumour, which even shortly after the operation became soft and flaccid. In some cases, fluctuation became perceptible in the lower part of the abdomen. Some of the hydatid fluid probably escaped through the punctures, having been possibly forced out by the accumulation of hydrogen gas in the cyst. The success of the operation would thus appear to depend, not on the direct action of the electric current, but on its effecting a kind of subcutaneous tapping; and simple acupuncture might possibly be followed by equally successful results. Slight febrile symptoms, and more or less pain, in most cases followed the operation; these, however, rarely lasted more than three or four days. In one instance, they were altogether absent. In most cases, the patients were able to get about in a few days, and some of them were discharged at the end of two or three weeks. Even at this early period, the tumour had, in some cases, very manifestly decreased; and, as a rule, this decrease steadily progressed. After six months or a year, no trace of the disease remained; or, at most, there was only some ill-defined fulness of the epigastrium. In one case only the result still remained doubtful. All the patients were in perfect health. In each of them, the tumour had been large. In three cases, more than one cyst existed, and each cyst had then to be electrolysed separately. In the latter part of the paper, the results of electrolysis were compared with those of simple tapping. The authors held that electrolysis rivalled tapping in being unattended by immediate danger to life, and that (according to their experience up to the present time) it involved no danger of suppuration within the cyst and consequent risk and suffering—which often followed simple tapping. Dr. Playfair, in accordance with the authors' suggestion, had treated a hydatid tumour of the liver by simple acupuncture. The result of this case promised to be favourable; but as yet sufficient time had not elapsed to warrant any decided expression of opinion as to the value of the treatment.

Dr. ROBERT LEE referred to a case, as illustrating the difficulty of diagnosis, of a lady in Calcutta who had come to England on account of a tumour in the abdomen. He found evidence of pregnancy; but the presence of a hydatid cyst of the liver was also diagnosed by another practitioner. After a favourable delivery, a tumour still remained. Nothing was done to it. The lady returned to Calcutta, and was said to have perfectly recovered.—Mr. HULKE had punctured a hydatid cyst in a young woman; very little fluid escaped. On her death in childhood, three years afterwards, the cyst was found to have wasted.—Mr. BARWELL asked why two needles were introduced in connection with the negative pole; and why the positive pole was connected with sponge instead of being introduced into the cyst.—Dr. ALTHAUS expressed his gratification that a suggestion which he had made had been carried out in practice. The method would be an improvement, even if the results were due to mere acupuncture. Perhaps, however, the change in the character of the fluid produced by electricity might render

it poisonous to the parasite. The positive pole was not introduced, because the metal became decomposed, and the salts produced would act as foreign bodies.—Dr. MURCHISON said that the results recorded were of great interest. It seemed that the fluid of hydatid cysts could escape without exciting irritation in the serous cavities. Perhaps, in some cases, too much had been done by attempting to empty the cyst altogether; and the question arose whether it were more advisable to allow the fluid to penetrate gradually into the peritoneum, or to let it out of the body altogether. Where suppuration had occurred, it was mostly in cases of secondary refilling of the cyst, where the operation was repeated too soon. It was in exceptional cases only that the secondary enlargement would not subside spontaneously. Simple tapping had been performed in Iceland with great success. He would perform electrolysis if he had an opportunity. He did not think that air could enter during tapping if the fluid were drawn off with care, and an aspirator were used.—Dr. HILTON FAGGE doubted whether an aspirator would be an improvement.—Mr. DURHAM said that two needles were used for the purpose of diagnosis and of treatment. If the two needles could be made to rub together, it would show that the contents of the tumour were fluid; and they also afforded an increased surface for the electrical action. He had employed tapping successfully in eight cases; but tapping was followed by suppuration in some cases, while electrolysis was not. The opening made by the trochar was larger than that made by the needle, and might allow the escape of scolices into the peritoneum.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 1ST, 1870.

RICHARD QUAIN, M.D., President, in the Chair.

MR. W. ADAMS exhibited an Exostosis removed from the posterior superior angle of the Scapula. It projected beneath the scapula, and elevated it on the ribs. It was taken for an enchondroma, but turned out to be partly bony. It began to grow when the child was two or three years old; Mr. Adams saw it at the age of 11. He found removal of a small portion quite sufficient. Similar growths occurred on the ilium.—Mr. HULKE asked if it was not always the rule that cartilage should precede bone in such tumours. He thought they were not always symmetrical.

Mr. NUNN exhibited a specimen of Atrophy of the Uterine Walls, with an intrauterine fibroid growth. Some years ago he had exhibited a large fibrous tumour, supposed to be ovarian; others thought it might prove uterine, the uterus being absorbed. This case illustrated the possible origin of such tumours in such a manner. The cervix was quite normal, although the body was nearly absorbed. In the former case there was no body, but a cervix only.

Mr. F. MASON exhibited a Congenital Papillary Tumour, removed from a patient aged 20. It grew on the abdominal wall, half-way between the umbilicus and Poupart's ligament. There was no pain, but a scanty ill-smelling discharge, which caused the patient to desire its removal.

Dr. HILTON FAGGE exhibited the Liver of a patient who had suffered from Scleriosis. She was aged 67, and the disease began eighteen months ago. It spread rather rapidly over the lower limbs, hands, face, and even the eyelids. She could not move her jaws, and really died of starvation. The skin was hard like a board, but separated distinctly from the muscles. The new formation was chiefly in the skin, which was much thickened; and, although its origin was not quite clear, there was a distinct under-surface to the skin. The cuticle, in certain parts, was like that of ichthyosis, and the connective tissue contained many elastic fibres. The internal organs were healthy, but their connective tissue seemed harder than usual. This was especially so in the liver, where it seemed to have undergone some chemical change.—Dr. TILBURY FOX asked if there was any disease of the lymphatics. It was said that the change took place in the true skin only.—Dr. FAGGE replied that the cuticle was certainly altered in some parts, though not generally. He could not say whether the lymphatic system was affected.—Dr. DICKINSON had a patient, now ill a year, aged 30. The scleriosis began on the abdomen, whence it spread. The face was peculiarly rigid, and the hands almost so.—Mr. F. CLARKE asked if the skin fulfilled its function.—Dr. GREENHOW asked if there was any impairment of sensation.—Dr. FAGGE said there was little perspiration, and apparently no loss of sensation.—Dr. DICKINSON said that in his case the skin was cold and stiff. The loss of sensation was not distinct.

Mr. H. ARNOTT exhibited a specimen of Cancer affecting an imperfectly descended Testicle. The patient, a butcher, aged 50, was healthy. About fifteen months ago he was hurt by a calf, after which he noticed

his left testicle swollen and tender. Last May it began to increase rapidly, and it became more painful. It looked as if the disease was spreading up the cord. There was no evidence of any constitutional taint. Mr. Arnott tapped the scrotum and removed two or three ounces of fluid, but a hard mass, enclosing the testis, was left. He found the tunica vaginalis thickened, and opened towards the abdominal cavity; nevertheless, he determined to remove the whole, which was done, and the patient did well. The disease was medullary.—Dr. MURCHISON said there were several cases on record of cancer in an undescended testis in the abdominal cavity. Some were of very rapid growth. In a former recorded case there was also some injury as a starting-point.—In reply to Mr. Barwell, Mr. ARNOTT said he had carefully examined the tunica vaginalis. The thickening was merely the result of chronic inflammation; but, where it abutted on the cancerous mass, it contained some large cells, and ended in a purely cellular structure.—Dr. DICKINSON said cancer was common in undescended testes.—Mr. DAVY thought that ordinary peritonitis did not follow interference with a thickened peritoneum.

Mr. DUNCAN showed part of a watch removed from a man wounded at Sedan. There was a large suppurating tract over the ilium, the ball having entered between the two spinous processes. As this did not heal, it was explored, and the portions of the watch were discovered and removed. This was twenty-one days after the battle. The man did well.

Dr. WHIPHAM exhibited a specimen of Rupture of the Transverse Ligament, with caries of the cervical vertebræ. Death was sudden. There was a large extravasation of blood under the arachnoid, the origin of which was uncertain. The parts were tolerably healthy, except at the point of rupture. The blood probably came from the dislocation of the odontoid process. One kidney weighed $10\frac{1}{2}$ ozs., the other only $3\frac{1}{4}$. The patient had always supported her head when she moved.—The PRESIDENT had a somewhat similar case that day. The patient had an apparatus constructed for protection, but it had been removed to apply a poultice, when death took place instantaneously.—Mr. W. ADAMS thought the extravasation of blood the most curious part of the case.

Dr. GREEN exhibited a specimen of Pulmonary Aneurism, from the body of a girl aged 18, who had been under the care of Dr. Headland. She had been suffering from phthisis, and died of sudden hæmoptysis. In the apex of the left lung there was a very large and rugged cavity, and below was a smaller one containing the aneurism, which was of the size and appearance of a Morella cherry.—In reply to Dr. Powell, Dr. GREEN said the disease was more advanced in the left than in the right lung, but there was no chronic induration.

Dr. TILBURY FOX exhibited two specimens of Madura Foot. One was of ten years' date, but was active only two years. The bones alone were preserved; they seemed necrosed. The other was of two years' standing. In amputating one, the tibia was soft a long way up. There was no trace of fungus now, but many fish-roe-like particles, apparently crystallised fat. The fibres were altered so as to resemble fungi. It looked as if the disease began in the bone.—Mr. HULKE thought that against this theory was the fact that the first affection was a pimple on the skin.—Dr. MOXON thought there was no great alteration in the neighbourhood of the channels in the former specimen. The roe-like bodies were very interesting.—The specimens were referred to Drs. Bristowe and Fagge and Mr. Arnott.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 11TH.

JAMES PAGET, Esq., F.R.S., President, in the Chair.

Mr. POLLOCK read particulars and exhibited several cases of Skin-grafting and Skin-transplantation. He stated that in 1869 M. Reverdin originated in Paris this method of treating large ulcerated surfaces. In May 1870, the author first heard of M. Reverdin's experiments, and at once decided to test the treatment. A girl, aged 8, had been in St. George's Hospital for three months and a-half, with an extensive open burn of the right thigh, of more than two years' duration. The ulcerated surface extended from the buttock to the knee—broad above, and ending almost in a point below. Mr. Pollock at first transplanted two small pieces of skin about the size of millet-seeds, taken from the lower part of the abdomen. Subsequently other pieces were transplanted at various periods—in all, about fourteen pieces. The child was exhibited to the members, and it was seen that the burn was nearly healed in a period little over five months, without any perceptible contraction of the cicatricial tissue. The child had greatly improved in health as the progress of cicatrification had advanced. Two pieces of black skin had been on one occasion transplanted to the ulcerated surface, and became

attached; when they grew the area of the pigment deposit had considerably increased in one of them, although the whole of the cicatricial tissue due to the transplantation of this portion of skin was not generally dark. The sore was attacked some time afterwards by sloughing, which was chiefly confined to the portion in which the black skin had been engrafted, and destroyed the whole of the cicatrix due to this transplantation. Mr. Pollock usually transplanted very small pieces, as in the plan pursued by M. Reverdin; and he considered it essential to success that the surface of the granulations should be healthy. In some cases the operation had entirely failed, in consequence of the state of the sore. In other cases, though the piece transplanted had become attached and vitalised, yet, owing to the state of the patient's health, it had remained stationary, and gave no sign of increase. Mr. Pollock, in conclusion, thought a tribute of admiration and gratitude was due to M. Reverdin from the profession for the boon which he had conferred upon surgery by the introduction of this method of dealing with large and obstinate ulcers.

Mr. LAWSON read a paper on the Successful Transplantation of Portions of Skin for the Closure of large Granulating Surfaces. He exhibited two patients, and related the history of a third, in whom this mode of treatment had been attended with satisfactory results. In one patient a large ulcer of the leg, which had resisted all treatment for over four years, was completely closed in a few weeks after a piece of skin of the size of a fourpenny-piece had been planted on it. As soon as the new skin had established its vitality, granulations sprang from the circumference, and rapidly closed in the wound. In another patient the results were equally satisfactory. In a third case Mr. Lawson formed a new eyelid for a patient who had a complete ectropion of the upper lid. He dissected the lid from its attachments, pared at two points the corresponding tarsal margins, and united them by two fine sutures, and thus obtained a fixed level surface upon which to transplant a portion of skin. On the fourth day, when the wound was covered with healthy granulations, he transplanted a piece of skin of the size of a threepenny-piece, and two days later another portion of the size of a silver fourpenny. Both pieces rapidly united to the granulating surface, and the space between them was speedily filled up with cicatricial tissue. A new lid was thus formed, which was sufficient to protect the eye; but the presence of two pieces of skin, different in appearance from the ordinary eyelid, gave to the patient a peculiar look. In each of these patients the engrafted skin, not only soon became vascular, but acquired sensibility, and after ten or twelve days could appreciate the slightest touch with a blunt instrument. The conditions which Mr. Lawson found essential for the operation were:—1. That the new skin should be applied to a healthy granulating surface. 2. That skin *only* should be transplanted, special care being taken that no fat adhered to it. 3. That the portion of skin should be accurately applied to the granulating surface. 4. That the new skin should be kept in position without interruption, and that it should be lightly covered with a layer of lint, and over that a small compress of cotton-wool and a bandage, for the purpose of maintaining its warmth, and thus to assist in retaining its vitality until it had established its new life.

OBSTETRICAL SOCIETY OF LONDON.

NOVEMBER 2ND, 1870.

EDWARD J. TILT, M.D., Vice-President, in the Chair.

Dr. WILTSHIRE exhibited an infant, aged 3 weeks, presenting a remarkable example of the so-called Mother's Marks, the whole of the right arm being black and hairy, and similar patches of various sizes being scattered over the body. An elder brother of the child had webbed fingers. The mother attributed the deformity to a fright during gestation.

Dr. HALL DAVIS reported a case of Extrauterine Gestation of the left ovarian variety, occurring in the third pregnancy of a married woman, aged 39. When first seen, the physical signs induced him (Dr. Davis) to suppose that it was a case of retroverted uterus containing a fetus, and attempts at reduction were made. On the same evening, violent vomiting took place, and the swelling in the posterior part of the pelvis disappeared, leaving what seemed to be an empty sac. On abdominal examination, the hard head of the child was felt in the right lumbar region, apparently immediately under the abdominal wall; and below it, another smaller prominence. It was not moveable, and there was no constitutional disturbance. Dr. Davis believed that the child had escaped by rupture into the abdominal cavity, during vomiting. In consultation, however, this diagnosis was not supported, and, therefore, the operation of abdominal section, which he believed to be indicated, was not performed. The patient died on Oct. 28th; the sixth day after the rupture. The necropsy confirmed the diagnosis

of the escape of the child into the abdominal cavity, and proved that the pregnancy had been extrauterine. Dr. Davis considered that the only chance of saving the patient, although it might be a remote one, would have been abdominal section and removal of the child, as also of the cyst with its placenta, and the effused blood.—Dr. WILTSHIRE asked if the uterine sound had been used. He mentioned a case of supposed extrauterine foetation which was under his own observation. He regretted that gastrotomy had not been resorted to in this case.

Mr. J. B. WALKER exhibited a Placenta that had been retained *in utero* for two months, without hæmorrhage or foetid discharge.—Dr. G. C. P. MURRAY, who had seen the case with Mr. Walker, said that at first he had been able to introduce his finger into the uterine cavity, but that no part of the placenta had been felt. The umbilical cord had come away without traction, almost immediately after the finger had been introduced. The patient having lost no blood whatever, and feeling perfectly well, Dr. Murray agreed with Mr. Walker that it would be better to watch the case closely, and wait upon the least occurrence of bleeding, rather than to dilate the os uteri and again seek for the placenta.

Dr. MARTYN read a paper on the Management of Childbirth with a view to promote successful Suckling. The author described the causes which often interfered with efficient suckling, and stated at length his views on the etiology of milk-fever. He then enumerated the best means of treating puerperal patients with regard to this point, and insisted especially on the error of the usual practice of putting the child to the breast immediately after delivery. The child should not attempt to suckle until the secretion of milk had been thoroughly established.—Dr. THOMAS BALLARD said that ten years ago he had invited attention to the importance of not allowing the child to be put to the breast until the third day after delivery; and had endeavoured to prove that the feverishness which the author indicated, and the more severe forms of milk-fever, were mainly caused by the practice of putting the child to the breast a few hours after birth. The reasons for doing so were not valid. The principal one, that of producing uterine contraction and thus arresting hæmorrhage, did not often apply, because the accoucheur would usually satisfy himself on this point before he left the patient. That of the child getting colostrum to purge away the meconium was a misconception. No milk was secreted for sixty hours; and the irritation of the child's bowels caused by early sucking was the result of its sucking at a breast which yielded nothing, and not of its swallowing a cathartic fluid.

Mr. COWARD, of Christchurch, New Zealand, read a paper on a case of Inversion of the Uterus. This occurred in a primipara, 22 years of age. The labour was normal, and the inversion took place suddenly when only gentle traction was being made on the cord. The inversion was at once reduced, the placenta having been first removed. The patient made a good recovery.

Dr. MADGE read a paper on a case of Inversion of the Uterus. This happened in a primipara, whose labour was quite natural. After delivery, the nurse was making firm pressure on the uterus, when inversion suddenly took place. Dr. Madge first peeled off the placenta, and then reduced the uterus without much difficulty. The patient made an excellent recovery.—Dr. BRAXTON HICKS said that, in the cases of inversion which he had seen, there had been no traction by the medical man on the cord. In one case the patient had not been touched, as the placenta had been expelled spontaneously before the attendant's arrival; and in another, it occurred immediately on the delivery of the child by the forceps, in a case of inertia of the uterus. He thought that a short funis in many cases would be sufficient to commence the action, if the fundus were flaccid.—Dr. HALL DAVIS believed that two classes of cases of inversion of the uterus occurred in connection with labour. First, there were the cases resulting from traction on the umbilical cord, however applied, the placenta being as yet attached to the fundus of a relaxed uterus; as during the completion of the second stage of labour, the advancing child dragging on a short cord, or during the sudden birth of the child, the parturient woman being erect. Secondly, there were cases in which the displacement was the effect of an inverted action of the muscular fibres of the uterus, quite independent of, and often in the absence of, the attendant. The latter class of cases he believed to be the most frequent.

A paper was read by Dr. TRACY, of Melbourne, entitled a short Description and History of the Lying-in Hospital and Infirmary for Diseases of Women and Children at Melbourne, with some account of what has been done in it. The paper consisted of a minute description of the building, and its elaborate arrangements for the safety and comfort of the patients, and concluded with an account of the principal operations performed in it.—Dr. MARTIN, of Melbourne, said that, as one of Dr. Tracy's colleagues, he would take the opportunity of stating that Dr. Tracy was entitled to the highest credit for his performances

in obstetric surgery at the Antipodes. With none of the advantages available in the older countries, Dr. Tracy had always been a watchful observer of whatever was worthy of notice in scientific progress; and has made himself, as it were, a pioneer of obstetric surgery in Australia. As regarded the report of the Hospital, he (Dr. Martin) would assure the Society, that in construction, management, and success in working, that Institution would bear comparison with any other of the kind in any country.—Mr. LENNOX BROWNE desired to bear testimony, from the experience of several visits when in Melbourne, seven years ago, to the excellence of the arrangements of Dr. Tracy's Lying-in Hospital. He had twice witnessed Dr. Tracy perform ovariectomy, as well as several other obstetric operations. Dr. Tracy operated according to the very latest improved methods, with at least equal success. He thought that the Society was to be congratulated, no less than Dr. Tracy, in that it was shown of how great use were the printed *Transactions* to those Fellows unable to associate in person.

A paper by Dr. GEORGE MENDENHALL, Professor of Obstetrics in the Indian Medical College, Cincinnati, on the Mortality in the Lying-in Ward of the Cincinnati Hospital, was read. Dr. Mendenhall's paper gave an interesting account of an outbreak of puerperal fever, the source of which was traced to defective ventilating arrangements, by which a current of air from a surgical ward was led into the lying-in ward. As soon as this was remedied, the mortality ceased.

MEDICAL SOCIETY OF LONDON.

MONDAY, OCTOBER 31ST, 1870.

JOHN GAY, Esq., President, in the Chair.

The Medical Aspect of the Germ-Theory. By B. W. RICHARDSON, M.D., F.R.S.—Two theories had been set forth, viz., the vital or germ-theory, and the physical theory of the communication of disease. Certain truths were common to both these theories, and were generally accepted. These were: 1st. Certain diseases arise from organic poisons; 2nd. Such poisons are solid, probably colloidal in nature; 3rd. They are transmissible from person to person, and, when transmitted, are capable of exciting disease; 4. The poisons are specific for each specific disease. Dr. Richardson objected to the germ-theory on the following grounds. 1. The presence of the assumed germs is not proved; they are not found as definite parts of the different poisons. 2. The specific character of each assumed germ is not traceable in such specific malady, but is assumed on the ground that the diseases, being themselves specific, must therefore proceed from specific causes. 3. If the germs were reproductive and indestructible, the universe would become filled with germs, which, as media of disease, would destroy a people. Neither fermentation nor putrefaction can be proved in any forms of disorder to which the germ-theory is applied. The germs being entities, we are led to regard diseases as entities—manifestly a retrograde step in science. The germ-theory neither explains nor tallies with what we know of the progress of these diseases. The second part of the paper dealt with the physical, as opposed to the germ theory. Dr. Richardson believed in organic poisons as the causes of communicable disease. These poisons might become solid, but they were not reproductive independent germs; they were not derived from without, nor were they produced out of the body. They resulted from morbid changes within the body, in the secretions. These poisonous secretions conveyed disease from one body to another. The perspiration of the hand possessed with the poison of puerperal fever, might become a means of conveying the disease to an infinite number of patients, as in a case known to Dr. Richardson. The reproduction of the introduced poison was charged to the reproduction of the secretion affected by the poison, as the skin-surface in scarlet fever, and the bile in yellow fever. The poison might be destroyed, and then the disease caused by it died out. Of this, there were numerous instances in diseases now extinct. The physical theory explained the nervous derangements, as there followed a disturbance or irritation of secreting surfaces. It explained how a communicable disease might be purely local in its action, and how, beginning locally, the disease might spread generally. There might, perhaps, be a process of zymosis continually going on in the body; but this would be diminished rather than increased during the action of the poison.—Mr. DE MÉRIC did not consider that gonorrhœa had a place among the diseases communicable by specific poison. It was an inflammation only. With regard to syphilis, the case was different, but we were quite in the dark as to the nature of syphilitic virus. With respect to the colloidal nature of these poisons, Mr. de Méric mentioned experiments in which it had been shown that, when globules and cellular matters were eliminated, the clear serum yet retained poisonous powers.—Dr. SANSOM referred to a previous paper which he had read before the Society. He believed the theory set forth by Dr. Richardson to

be erroneous. Vital molecules were essential to fermentation and putrefaction. Infectious diseases were due to vitalised molecules: Chauveau had proved this. Dr. Sansom did not hold with the specific germ-theory put forth by Hallicr.—Mr. BRUDENELL CARTER said that it had been clearly shown by Professor Tyndall that the best test of the soundness of a theory was its fitting perfectly the facts to which it was applied. A most communicable disease was found in the contagions of ophthalmia introduced into France in 1779, and in 1830 a cause of total blindness in four thousand soldiers in Belgium. This disease had now been shown to be due to sago-like grains deposited on the eyelid, connected with obstructed lymphatics in the connective tissue; these, when they become inflamed, produced the ophthalmia. Here there was a very contagious disease, but no evidence of the presence of germs as a means of communicability.—Dr. BURDON SANDERSON agreed with Dr. Richardson in the main points. Certain contagious matters seemed to consist of colloidal matter. Further experiment was essential to solve the questions involved.—Dr. SCHULHOF thought the communicability of coryza and the destruction of contagious matter by disinfectants were points rather in favour of the germ-theory.—Dr. CRISP mentioned his own researches on the splenic apoplexy of animals. Davaine, in France, thinking that this fatal disorder depended on *bacteridia*, inoculated rabbits with the blood of creatures that had died of splenic apoplexy, and they were all poisoned and died. Vegetable parasitic diseases lent support to the germ-theory in their spread, which might be more fully explained at a future day.—Mr. BROOKE said that, if the germ theory were adopted, spontaneous generation must be admitted, or the sporadic origin of zymotic diseases must be ignored.—Dr. SEMPLE recognised a great distinction between fermentation and putrefaction. The one led to the formation of permanent and stable products such as alcohol, the other quite the reverse. Electrical states of the atmosphere were not sufficiently regarded as influencing diseases.—Dr. ROUTH thought that in hay-fever there was an example of disease caused by vegetable germs.—Mr. WOLFF spoke of the similarity in the action of contagions. Might there be an universal agent whose action was modified by local surfaces?—Dr. SILVER showed how Lister had made his belief in the germ-theory of practical value by excluding germs from wounds by means of carbolic dressings. Pyæmia was prevented, and rapid healing promoted. Colloidal particles might show evidence of life in the presence of microzymes.—Mr. JABEZ HOGG concurred with Dr. Richardson in his views in respect to fermentation. This might be set up without the aid of yeast in a saccharine solution.—The PRESIDENT asked how the accepted doctrine of the spread of cholera could be explained on the physical theory?—Dr. RICHARDSON, in reply, stated that he did not profess to explain what the exact changes were that took place in a secretion to render it poisonous. In cholera, a specific product or poison was generated, the smallest portion of which, taken in by another, poisoned the alimentary canal of that person. There was no reproduction of the thing itself. There was no evidence to be found of fermentative process in any disease, save increase of temperature, and this was not essential. Dr. Richardson, of America, had inoculated himself with *bacteridia* without any actual result being perceived. Mr. Wolff's theory would render all so simple that Dr. Richardson would be glad to find it prove true. Noxious gases had nothing at all to do with the production of communicable diseases; and the success of some surgeons who never used or heard of carbolic acid, was equal or superior to that of those who used it in the most approved and careful way. The physical theory would account for the spread of all communicable diseases.

MONDAY, NOVEMBER 7TH.

JOHN GAY, Esq., President, in the Chair.

MR. JOHN D. HILL exhibited a patient on whom he had performed primary Excision of the Knee. The young woman was on her way to the Royal Free Hospital to be treated for fractured ribs, when she was thrown out of the cab, and the knee-joint was torn open to the extent of four inches. Mr. Hill sawed off the articular surfaces and removed the patella. There was protracted collapse after the operation; but at the end of about five months a sound union was effected.

Mr. HILL showed a patient, aged 23, in whom an Aneurism by Anastomosis, one inch and a half across, followed a blow over the right temporal region. Mr. Hill tied the occipital, temporal, and posterior auricular arteries, and applied acupressure to some of the other vessels. Eventually he had to ligature the mass: its sloughing out was followed by free hæmorrhage. A complete cure took place.

Mr. HENRY SMITH wished to contradict a report which he had heard to the effect that he had given up the practice of Puncture for Swelled Testicle. The operation was now in greater favour than ever with him;

and he believed he could record about five hundred cases in which he had thus operated during the last five years. The operation seemed to relieve the tunica albuginea from tension.

The Correlation of Putrefaction, Fermentation, and Morbid Infection. By A. E. SANSOM, M.D.—The paper embodied the following propositions. 1. Putrefaction and fermentation are each due to the influence of living, growing, and multiplying material particles; *a*. Fermentation is the result of the vital acts of particles of vegetable protoplasm in an organic fluid of uniform composition, the particles assuming distinct morphological forms according to the nature of the fluid; *b*. Putrefaction is due to like influences exerted upon organic matter of a more complex or mixed kind. 2. The atmosphere contains minute spores, ova, and particles of protoplasm, which it wafts from place to place: these are for the most part perfectly harmless. 3. The diseases of infection are due to minute particles of living protoplasm, which are transmitted by physical intermedia; are capable of reproduction within the recipient organism; and are excreted in vastly increased numbers. 4. The infecting molecules differ in their potentiality pathologically, as other living molecules differ in their potentiality physiologically: special poisons thus induce special diseases. 5. Such molecules present complex reactions of living beings; and, though they resist certain physical influences, they are destructible by others: thus, they may be desiccated, and yet, in the presence of moisture, assume vitality; yet slight chemical or physical disturbances may destroy them. 6. Fermentation and infection are alike due to living molecules; but though it is possible that in some cases (cholera and typhoid) the molecules of fermentation in complex conditions can induce infection, it is far from proved that all the diseases of infection are due to the organisms of fermentation.—Dr. RICHARDSON thought that Dr. Sansom had made as able a defence of his points as could be expected. He alluded to the different effects of oxygen gas on matters according to its different state. Liebig had shown that oxygen was not essential to decomposition, save as it resulted from the decomposing compound. Experiments made some years ago by Dr. Barker of Bedford confirmed those of Dr. Parkes, quoted by Dr. Sansom, that sewer emanations inhaled did not appear to cause any specific disease. Several years ago, Dr. Richardson had shown before the Epidemiological Society that colloidal organic poisons were soluble only under certain conditions.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, NOVEMBER 2ND, 1870.

J. O. FLETCHER, M.D., President, in the Chair.

Uterine Fibrinous Polypus.—Dr. HADDON showed a specimen. The patient was unmarried, aged 28, and for eight years had suffered from dysmenorrhœa. Before that time, menstruation had been normal. She was of hysterical disposition. In the beginning of September, when the menstrual flow should have appeared, she felt ill, had an attack of hysteria, and the period passed over without the discharge showing itself. For some time afterwards, she complained of pain in the left inguinal region. On October 1st, she began to menstruate; and the discharge, which was very abundant, lasted for twelve days, and ended by the expulsion of the polypoid clot shown. The uterus had continued abnormally large since.

Nasal Polypi.—Mr. LUND made some remarks on the mode of removing these growths, and showed Marshall's instrument for effecting this. Mr. Lund had found it very useful.

Chloride of Aluminium.—Mr. LUND mentioned some experiments which he had made with this substance as an antiseptic. For surgical purposes, he had used a solution having a specific gravity of 1020. He found that it was very irritating to the sound skin, unless the vapour were allowed free exit. In a case of bruise of the arm, he had used it according to antiseptic principles; but extensive sloughing took place, and it had to be discontinued. Mr. Lund showed some meat which had been preserved in it; but he did not think it very good for anatomical purposes, owing to its changing the colour of the tissues.

Gangrene of the Lung.—Dr. LEECH showed a specimen. The patient had been an inveterate gin-drinker, but had only been ailing about six weeks; and it was not till three weeks before death that he had suffered from cough or expectoration. The posterior portion of the middle lobe of the right lung was the part affected. A cavity of the size of a fist was found, on washing away its diffuent contents. Chronic alcoholism was probably the cause.

Colloid Cancer.—Dr. BROWNE showed a piece of the omentum of a man who had during life an obscure abdominal tumour, complicated with effusion into the peritoneum. This latter fluid was removed on several occasions, and each time was thicker than before. At last it was quite jelly-looking, and required an ovarian trochar for its removal.

After death, the omentum and peritoneum were found full of a fatty-looking substance, which, Dr. Browne thought, was doubtless colloid cancer.

Skin-grafting.—Dr. BARLOW brought forward his patient shown at the last meeting, to show the progress made. The ulcer was rapidly filling up, both from the inserted points, which had now coalesced, and from the circumference.

Tumour of the Cerebellum.—Dr. MACCALL related the history of a girl, aged 10, who had had symptoms of brain-pressure for rather less than a year before death. At the necropsy, about six ounces of limpid serum were found in the ventricles, and in the right lobe of the cerebellum a well defined tumour of the size of a walnut, of a fibro-plastic appearance. This was surrounded by fluid, except at the lower surface, where it was connected with the brain-substance; and in its interior also was a small quantity of clear fluid. Under the microscope, it appeared to be composed principally of cells filled with molecular contents of granular matter, and a few elastic fibres. The tumour was shown *in situ*.

Embolism of the Branches of the Circle of Willis.—Mr. FOX read a paper on a case of Epileptiform Convulsions apparently produced by this cause. The patient was a woman aged 50, who was found to have an aneurism of the innominate artery. On December 8th, 1868, she suddenly felt faint, and gradually lost consciousness. She continued in a state of stupor for some time; and on the following day, when sensibility had returned, she could only articulate imperfectly, had total motor paralysis of the right side, and considerable diminution of the cutaneous sensibility. She complained also of coldness of the same side. On the evening of the next day, slight clonic spasm commenced in the right leg, and for three days went on increasing in severity. On the 14th, it began to diminish; and by the 17th she had nearly recovered her usual condition. She had subsequently many similar attacks, at varying intervals of time, and passing off in the same manner. In the autumn of 1869 they came on much more frequently, and towards the end of the year became purely epileptiform. After the paroxysm, she would lie in a state of stupor for some hours, and then awake in her usual health. On September 19th, 1870, she fell down in a fit, and had ten or twelve in succession. She died about ten hours after their accession. For about three months before her death, she became very emotional, and presented symptoms of incipient softening of the brain. At the *post mortem* examination, the base of the brain was found covered by a number of small arteries penetrating deeply into its substance, given off from the circle of Willis. Numerous plugs were found lodged in the larger arteries; and behind these the artery was generally dilated. In some places, a portion of the vessel was found occluded between two separate plugs. The internal carotid of the left side was enlarged, and had caused absorption of part of the posterior clinoid process. A recent clot, of the size of a walnut, was found in the right lateral ventricle. (Preparations of the part were exhibited.) Mr. Fox discussed the relation of the *post mortem* appearances to the symptoms during life, and referred especially to the conditions that would exist at the instant of any one artery becoming occluded; viz., hyperæmia behind the plug, and more or less anæmia beyond it. He considered that the temporary paralysis and clonic spasms of the earlier attacks were due, the former to diminished vitality of the brain, and the latter to return of motor power. Most of the other symptoms would be accounted for by the sudden congestion of the part.

CORRESPONDENCE.

THE THERAPEUTICS OF CONSTIPATION.

SIR,—Under the above title, I contributed a paper to the *Medical Times and Gazette* last winter (Feb. 19th, 1870), in which I recommended a combination of iron and extract of aloes as an almost perfect agent in overcoming the difficulties and pains of chronic constipation. In last week's JOURNAL I find a paper by the Rev. Dr. Bell, in which the same medicines are advised for the same purpose, with the addition of quinine. Of course I do not know whether Dr. Bell has seen my paper; but it is curious that he uses an identical train of reasoning and almost the same expressions. However, we are both probably actuated by an equal desire to conquer a troublesome disorder. But the details of my plan are somewhat different from those specified by Dr. Bell. I prescribe much smaller doses of aloes, and order them to be taken much more frequently. It is better, in my judgment, to give one-fourth of a grain three or four times in the day, than a single dose of a grain at bedtime. Then it will be wise to prescribe much larger doses of the sulphate of iron. The quantity of iron may be three or four

times that of the aloes, and will probably check any tendency of the latter medicine to purge. I believe that the combination of iron and aloes is the *essence* of the method, though quinine and belladonna and henbane may be useful auxiliaries.

In my paper last February, I laid great stress on the necessity of avoiding an over-purgative effect. If, on this account, the treatment have on any occasion to be stopped, there is so much time lost, and so much ground to be retraced. By minute and frequent doses of the aperient medicine, Nature is coaxed and assisted, instead of being forced and worried; and I believe that only in this way can permanent benefit be realised. I am, etc.,

Bath, November 7th, 1870.

JOHN K. SPENDER, M.D.

BABY-FARMING IN SCOTLAND.

SIR,—The Registrar-General for Scotland lately furnished me with some valuable figures regarding illegitimacy in Scotland; and in the courteous letter with which he favoured me he confirmed several of the points of my paper on baby-farming. As I think that much of his letter will be acceptable to those of your readers who are interested in the subject, I enclose you an abstract of it.—I am, etc.,

J. THOMPSON DICKSON.

“Registrar-General's Office, Edinburgh, Oct. 25, 1870.

“Dear Sir,—In reply to your note of yesterday, I send you our last annual report. I beg, however, you will not compare the perfect statistics of Scotland with the very imperfect statistics of England. The registers of England do not contain half of the cases of illegitimacy which occur among the population; there is no obligation on anyone to register a birth, and no penalty for refusing to register. I am quite satisfied that illegitimacy is at least as great in England as it is in Scotland. But, then, more than half of our illegimates are subsequently legalised by the marriage of their parents, whereas in England a child born out of wedlock remains with the stigma of illegitimacy for life. We have an exceedingly small proportion of cases of infanticide in Scotland; and I attribute this to the wise law of legitimation of the child *per subsequens matrimonium*: one very strong inducement to the destruction of the child is removed by this wise law. Of course we have a certain amount of baby-farming, but not at all similar to that in England, and confined chiefly to servant-girls who take nursing (*i.e.*, go out as wet-nurses), generally giving their own child to some of their nearest relatives, who rear it as part of their family.

“Believe me, ever faithfully yours,

“JAMES STARKE.

“James Thompson Dickson, Esq., M.B.”

THE POOR-LAW MEDICAL SERVICE OF GREAT BRITAIN AND IRELAND.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A GENERAL meeting will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, on Tuesday, November 29th, at half-past seven P.M. precisely, when the following subjects will be submitted for consideration: 1. Registration of disease; 2. The proposition for constituting out-door Poor-law medical officers deputy health-officers in their respective districts; 3. A review of the medical section of the Annual Report of the Poor-law Board, 1869-70; 4. Mr. W. H. Smith's notice of motion on poor-relief in the metropolis; 5. Dr. Brady's scheme for amended medical relief. Other important matters will also be brought before the meeting; and we trust that there will be a large attendance at what promises to be a very interesting gathering.

PROPOSED POOR-LAW MEDICAL OFFICERS' ASSOCIATION IN IRELAND.

It is proposed to form an Association to advance the interests and redress the grievances of the Poor-law medical officers of Ireland. The proposed regulations are the following. 1. The medical officers of each Union shall elect from amongst their number a Union Representative, who shall be in communication with the Board of Guardians of that Union. 2. The Union Representatives of each county shall elect from amongst their number a County Representative, who shall be in communication with the Parliamentary Representatives of that county. 3. The County Representatives shall invite every member of the medical profession in each county to join this Association, their interests (as far as they go) being identical with those of the Poor-law

medical officers. 4. The thirty-two County Representatives shall form the Council of the Association. 5. A meeting shall be held quarterly and alternately in each of the provinces of Ireland. 6. An annual meeting shall be held, when the General President, Treasurer, and Secretary, for the year, shall be appointed. 7. The annual subscription for each member shall be 2s. 6d. (There being one thousand Poor-law medical officers in Ireland, this would produce £125 *per annum*, which would cover printing, postage, and stationery.)—We trust that these proposals will meet with universal assent and adhesion. Communications should be addressed to Dr. D. T. T. Maunsell, 1, Harrington Terrace, Dublin.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

EXAMINERS IN MEDICINE.—In a convocation, on November 10th, the names of G. Rolleston, M.D., T. H. G. Wyndham, M.A., and A. W. Reinold, M.A., who had been nominated by the Vice-Chancellor to the office of Examiners in the first examination required for the degree of Bachelor of Medicine; and the names of T. K. Chambers, M.D., J. W. Ogle, M.D., and T. P. Teale, M.A., B.M., who had been nominated by the Vice-Chancellor to the office of Examiners in the final examination required for the same degree, were submitted to the house and approved.

UNIVERSITY OF CAMBRIDGE.

PHYSIOLOGY.—The Trinity Prælector in Physiology will give a course of lectures on Physiology, in the Physiological Laboratory, at the New Museums, on Mondays, Tuesdays, Wednesdays, and Thursdays, at 11 A.M. The lectures during the present term will deal with the Physiology of Digestion and the General Properties of Blood. The first lecture will be introductory to the whole subject. This course will be free to all members of the University.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent Second M.B. Examination.

First Division.

Barnes, Edgar George, St. George's Hospital
Bruce, John Mitchell, M.A. Aberd., University of Aberdeen
Burgess, Wm. Frederick Richardson, Guy's Hospital
Carter, Charles Henry, B.A., University College
Curnow, John, King's College
De Liefde, John, Guy's Hospital
Irvine, James Pearson, B.A., B.Sc., University College
Joubert, Charles Henry, St. Mary's Hospital
Pollard, Frederick, St. Thomas's Hospital
Roberts, Richard Lawton, University College
Seaton, Edward Cox, St. Thomas's Hospital
Smith, Arthur William, Guy's Hospital
Smith, Richard Thomas, University College

Second Division.

Aveling, Charles Taylor, St. Thomas's Hospital
Barrett, Ashley William, London Hospital
Cotterill, Alfred, King's College
Gibbings, Alfred Thomas, King's College
Harris, James Alfred, Edinburgh University and Royal College of Surgeons
Lowe, Walter George, St. Bartholomew's Hospital
Parker, Rushton, University College
Price, William, University College
Shewen, Alfred, University College
Vachell, Charles Tanfield, King's College
Whitmore, William Beach, King's College

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 15th.

Applin, George Peek, Addiscombe (Guy's)
Archer, George Ernest, Feltwell, Norfolk (St. Bartholomew's)
Ball, James Barry, Dublin (University College)
Brooks, Job Edwin, Silverdale, Staffordshire (Birmingham School)
Burgess, William Frederick Richardson, Bethnal Green Road (Guy's)
Clarke, John Stephen, New York (Liverpool School)
Crowther, William Edwin, Hobart Town (Guy's)
Douglas, William Thomas Parker, Banbury (Guy's)
Franklin, George Cooper, Leicester (St. Thomas's)
Garratt, William, Madras (Guy's)
Gray, George James, Stonehouse, Devon (University College)
Hammond, William, Howden, Yorkshire (University College)

Harrison, Richard, St. Lawrence Road, W. (St. George's)
Jackson, Thomas Scoresby, Whitby (Edinburgh School)
Jolly, Robert, Birmingham (Birmingham School)
Love, Augusta Edgar Burch, Vauxhall Bridge Road
Morris, Henry, Queen's Terrace, N.W. (St. Mary's)
Morris, Malcolm Alexander, Twickenham (St. Mary's)
Mummery, John Howard, Cavendish Place (University College)
Noot, William Mathias, Cardigan (Middlesex)
Orton, Edward William, Foleshill Coventry (Birmingham School)
Roche, Eleazer Birch, Norwich (King's College)

Admitted members on November 16th:—

Allnutt, William, L.S.A., Portsea, Hants (King's College)
Beatson, William, Camberwell (Guy's)
Burroughs, John Edward Buckland, Lee, Kent (Guy's)
Drake, Francis Henry, Pontefract (Leeds School)
Evans, Edward Beynon, Swansea (Guy's)
Fox, Hugh Courtenay, L.S.A., Stoke Newington (London Hospital)
Gosse, Charles, Adelaide, South Australia (Charing Cross)
Harris, Michael, Hackney (Guy's)
Johnson, William John, Worksop, Notts (Guy's)
Larkin, Frederick George, Maypole Heath, near Canterbury (Guy's)
Martin, Henry Charrington, Reigate (Edinburgh School)
Palmer, Henry Drake, Olney, Bucks (Guy's)
Ritchie, William, M.D. Dub., Newtown Limavady, Co. Derry (Dublin School)
Vasey, Charles Lyon, Cavendish Place (St. George's)
Walker, George Edward, Quorndon, Leicestershire (St. George's)
Wotton, Henry, Plymouth (Edinburgh School)

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, November 10th, 1870.

Anderton, James Heyes, Leigh, Manchester
Cotterell, William, West Port, New Zealand
Love, Augustus Edgar Burch, Vauxhall Bridge Road
Skrimshire, Frederic William, Holt, Norfolk

The following gentleman also on the same day passed his first professional examination.

Watson, Charles Russell, University College Hospital

As Assistants in compounding and dispensing medicines.

Fowler, William Ratcliffe, East Kirkby, Spilsby, Lincolnshire
Robertson, George, London Hospital

NAVAL MEDICAL SERVICE.—Names of the successful candidates who passed the recent competitive examination for admission into the Medical Service of the Royal Navy, held at the London University between the 7th and 10th November, in the order of merit in which they passed, and the number of marks obtained.

	No. of Marks.
Coppinger, Richard William, M.D. Queen's College, Cork ..	2060
Robson, William Edward, Royal College of Surgeons, Ireland ..	1700
Biddulph, Robert Waller, M.B. Trinity College, Dublin ..	1340
Tennings, John, Queen's College, Cork	1290
Allen, Marcus, Dublin University	1205
Beaumont, Henry, Royal College of Surgeons, Ireland ..	1130

MEDICAL VACANCIES.

The following vacancies are announced:—

ALTON UNION—Medical Officer for District No. 1.
BIRMINGHAM AND MIDLAND EYE HOSPITAL—Dispenser: applications, 30th.
CENTRAL LONDON DISTRICT SCHOOL, Hanwell—Surgeon.
COCKERMOUTH UNION, Cumberland—Medical Officer for the Cockermouth No. 2 District.
COVENTRY AND WARWICKSHIRE HOSPITAL—House-Surgeon: applications, 19th; vacancy, Dec. 31st.
CRAIGNISH, Argyleshire—Parochial Medical Officer.
DONCASTER GENERAL INFIRMARY AND DISPENSARY—House-Surgeon: applications, Dec. 1st.
DURSLEY UNION, Gloucestershire—Medical Officer and Public Vaccinator for the Uley or No. 3 District: applications, 23rd; election, 24th.
EVESHAM UNION—Medical Officers: applications, Dec. 12th; duties 24th.
GENERAL HOSPITAL, Birmingham—Physician: applications, 17th; appointment, 25th. Surgeon: applications, 17th; appointment, 25th. Resident Medical Registrar and Pathologist: applications, 24th; election, Dec. 2nd.
GENERAL HOSPITAL AND DISPENSARY FOR SICK CHILDREN, Bridge Street, Manchester—Assistant Medical Officer to the Dispensary: applications, 20th; vacancy, Christmas.
LIVERPOOL MAIN BRIDWELL—Surgeon.
LIVERPOOL SOUTHERN HOSPITAL—Physician: applications, Nov. 29th.
MANCHESTER CLINICAL HOSPITAL AND DISPENSARY—House-Surgeon: applications, before Dec. 3rd.
MORPETH DISPENSARY—House-Surgeon: applications, 25th; election, Dec. 9th.
OAKLEY HOSPITAL, Festiniog, Merionethshire—Assistant-Surgeon.
POPLAR HOSPITAL—Surgeon to Out-patients: applications, 29th; election, Dec. 7th.
REETH UNION, Yorkshire—Medical Officer and Public Vaccinator for Muker District: applications, Dec. 1st; election, 2nd.
STAFFORDSHIRE GENERAL INFIRMARY, Stafford—Surgeon.
TORBAY INFIRMARY AND DISPENSARY, Torquay—Physician: applications, 22nd; election, 29th.
WESTERN GENERAL DISPENSARY, Marylebone Road—Physician: applications, 28th; election, Dec. 7th.
YORK COUNTY HOSPITAL—Surgeon. }

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BAUMGARTNER, John R., Esq., appointed Resident Accoucheur to King's College Hospital.
 *BOTT, Thomas B., M.D., appointed Medical Officer of Health under the Bury Improvement Act, 1846.
 HAVES, Thomas Crawford, Esq., appointed House-Physician to King's College Hospital.
 HORSLEY, Henry, Esq., elected Surgeon to the General Hospital at Croydon, in the room of *J. S. Johnson, Esq., resigned.
 LEIGH, Richmond, Esq., appointed Junior House-Surgeon to the Southern Hospital, Liverpool.
 LITTLE, William, Esq., appointed Senior House-Surgeon to the Liverpool Southern Hospital, *vice* Mr. Davies, resigned.
 ROPE, Henry John, Esq., appointed House-Surgeon to King's College Hospital.

BIRTH.

SANSOM.—On November 12th, at Duncan Terrace, Islington, the wife of *A. Ernest Sansom, M.D., of a son.

MARRIAGES.

*ALLFREY, Charles H., M.D., of Chiselhurst, to Emily Malden, younger daughter of *Thomas Heckstall SMITH, Esq., of St. Mary Cray, on November 10th.
 MACK, Robert, Esq., Surgeon, to Isabella Cumming, second daughter of Alexander M'INTOSH, Esq., late of Invercoe House, Argyshire, at Christ Church, London, on November 7th.

DEATHS.

EVANS.—On November 14th, at Hampstead, aged 31, Eliza, wife of Herbert N. Evans, jun., M.B.
 LITTLEJOHN.—On November 9th, at Edinburgh, aged nearly 6 years, Mary, daughter of Henry D. Littlejohn, M.D.
 RIX.—On November 14th, Sarah Ann, wife of *Charles James Rix, Esq., Surgeon, of Manchester, aged 49.
 ROYSTON, John, Esq., Surgeon, at Chesterfield, Derbyshire, aged 50, on Oct. 30th.
 TERRY, Charles M., Esq., Surgeon, at Norbiton, aged 80, on November 10th.
 WELCH, George, Esq., Surgeon, at Stansted-Montfichet, Essex, aged 69, on November 10th.

THE LATE MARQUIS OF WESTMINSTER.—The Memorial Committee have reverted to their original design of erecting a Cottage Infirmary at Shaftesbury, instead of a middle-class school, as had been proposed.

VACCINATION.—At the last Spittlegate Petty Sessions, Charles F. Lane, grocer, was summoned for the third time for neglecting to have his child vaccinated. The defendant said he objected from conscientious motives; he had lost one child from vaccination, and felt that as a parent he must hold out. He asked the justices to mitigate the penalty on the ground that Government had promised an inquiry into the whole subject. He was fined twenty shillings, and fourteen shillings costs; or fourteen days' imprisonment.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. W. Hamilton, Tarbert; Mr. E. F. Willoughby, London; Mr. Chandler, Spa, Gloucester; Dr. Heywood Smith, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. Stewart, Dublin; The Secretary of the Clinical Society; Dr. T. R. Adams, Croydon; Mr. E. Ray Lankester, London; Mr. G. Dobson, London; Mr. Meade, Bradford; Mr. Lawson Tait, Birmingham; Dr. Fleming, Birmingham; The Secretary of the Quekett Microscopical Club; The Secretary of the Medical Club; Messrs. Black, Edinburgh; Mr. D. Davies, Bristol; Mr. R. Leigh, Liverpool; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. George Johnson, London; Dr. Laycock, Edinburgh; Dr. Ransome, Bowden; Mr. A. Haviland, London; Dr. R. Gee, Liverpool; Dr. A. B. Steele, Liverpool; Mr. R. D. Shield, Buckingham; Mr. G. S. Elliston, Ipswich; Mr. R. Dacre Fox, Crumpsall; Dr. Styrap, Shrewsbury; Dr. Playfair, London; Dr. Dobell, London; Dr. J. J. Phillips, London; Dr. G. Oliver, Redcar; Dr. Finch, Newbury; Dr. Harland, Wadhurst; Dr. Burder, Bristol; Mr. B. Squire, London; Dr. Maunsell, Dublin; Dr. Grimshaw, Dublin; An Opposer of Quackery; Mr. C. H. Ralfe, London; Messrs. Smith and Son, Dublin; Dr. J. Whitmore, London; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Dr. Skinner, Liverpool; Dr. W. Taylor, Cardiff; An Army Surgeon; Dr. T. B. Bott, Bury; Our Berlin Correspondent; Our Liverpool Correspondent; Dr. Hardie, Manchester; Dr. Fothergill, Leeds; Mr. T. Watkin Williams, Birmingham; Mr. Marrant Baker, London; Dr. F. J. Brown, Rochester; The Secretary of the Society of Arts; Dr. W. MacCormac, Belfast; Dr. Parkes, Netley; Dr. Fraser, Hounslow; Mr. W. W. Saul, Lancaster; Dr. Joyce, Rolvenden; Mr. T. C. White, London; Mr. H. M. Morgan, Lichfield; Dr. Sansom, London; Mr. E. C. Board, Bristol; Dr. Spencer, Preston; The Director-General of the Medical Department of the Navy; Dr. Mapother, Dublin; Mr. T. H. Bartleet, Birmingham; the Secretary of the Pathological Society; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
 WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
 THURSDAY...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M.—Entomological Society.
 TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. John Harley, "On the Endemic Hæmaturia of the S.E. Coast of Africa"; Dr. George Johnson, "Case of Traumatic Tetanus: Recovery after Removal of Foreign Body: and administration of Chloral, etc."
 WEDNESDAY.—Hunterian Society, 8 P.M.,
 THURSDAY.—Royal Society.
 FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Mr. Wm. Ackland, L.S.A., "Notes on a new Polarising Film." A Practical Demonstration in Microscopical Injection.—Clinical Society of London, 8.30 P.M. Mr. Brudenell Carter, "Case of Presumed Injury to the Ciliary Nerves from a Blow"; Mr. Durham, "Remarkable Case of Spontaneous Fracture of the Femur"; Dr. Wiltshire, "On Paroxysmal Hæmaturia"; Dr. Handfield Jones, "A Query as to the safety of Subcutaneous Injections"; Dr. Silver, "On the Use of Veratrum Viride in Acute Rheumatism."
 SATURDAY.—Association of Medical Officers of Health, 7.30 P.M. Dr. Stevenson, "The Properties of Chloralum"; Dr. Ballard, "A Localised Outbreak of Typhoid Fever in Islington in July 1870"; Dr. C. J. B. Aldis, "On Scarlet Fever for Ten Years in the Parish of St. George, Hanover Square."

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

MR. R. MEADE (Bradford).—Paper received, and will be inserted in due course.

L. B. asks:—"If a F.R.C.S.E. were to give a testimonial in favour of a linctus or lozenge prepared by a chemist, with the contents of which the surgeon giving the testimonial and the chemist who made it, are alone cognisant, would such a procedure be professional? or would it be infringing the bye-laws of the College?"

* * * The act would be decidedly unprofessional.

DR. GEE's Fifth Report on Fever in Liverpool, which appears in this impression, arrived last week too late for insertion.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following questions were put at the last examination for the diploma of Member. 1. Describe in their relative position the muscles, nerves, and blood-vessels which are brought into view by removing the *gastrocnemius* and *soleus* muscles. 2. Mention the various secretions contributing to the process of digestion. State whence they are derived; and the chemical constitution and special function of each. 3. Give the dissection required to expose the submaxillary gland. Notice all the parts brought successively into view in the course of the dissection; and describe the form, size, relations, and minute structure of the gland. 4. Describe the functions of the skin; and state what physiological effects result from their suppression. 5. State the origin and course of the vertebral arteries, and their distribution within the cranium. Describe also the mode in which the circle of Willis is formed. 6. On what form of lever do the greater part of the muscles act in moving the limbs? and state the mechanical advantages and disadvantages resulting from the use of that form of lever. Give some of the best marked instances of this kind in the human subject.

THE PREVENTION OF SCARLATINA.

DR. ARNISON of Newcastle, and Mr. David Davies of Bristol, forward to us copies of the rules which they have had printed for circulation. They are extracted from Dr. W. Budd's paper in the BRITISH MEDICAL JOURNAL, published in 1868. These valuable rules formed also the basis of the document circulated by Dr. Whitmore, to which we last week referred, and have been reproduced, we observe, by Dr. Lankester, as medical officer of St. James's.

POSTAGE OF THE JOURNAL.—In consequence of the alterations in the rates of postage and conditions of transmission of newspapers, the postage of the BRITISH MEDICAL JOURNAL will be one halfpenny; which must be paid each time the JOURNAL is retransmitted by post. In order to retain the privileges of a newspaper, the JOURNAL must not be stitched.

STITCHING THE JOURNAL.—Dr. Skinner, of Liverpool, writes as follows concerning a mechanical substitute by individual members for the stitching now forbidden by the postal authorities. "The want of stitching need no longer be an objection to the present condition of the JOURNAL, so long as we can obtain the simple, effective, and unsurpassable system of stitching or binding periodicals, loose music, scraps, etc., the invention of Messrs. Ashworth Brothers, of Ashley Lane, Manchester. I have for many months back used their system in regard to many periodicals—the *Illustrated London News*, the *Graphic*, the *English Mechanic*, the BRITISH MEDICAL JOURNAL, etc.—and I have no hesitation in repeating that it is altogether unsurpassable, and 'the very thing the doctor ordered'. If my fellow-members will only give the system a trial, they will continue it, and never regret the step they have taken."

DR. JOHN IRVINE, Tarves, is thanked.

C. J. H. has evidently mistaken the meaning of one of the paragraphs to which he refers. We concur with him entirely, however, in the conclusion which he draws, that medical men are in many positions, and especially in the performance of Poor-law medical and some sanitary duties, wretchedly underpaid. He will find frequent expressions of that opinion, and concurrent efforts to aid in bringing about a better state of things, in various parts of the JOURNAL, especially in the columns devoted to Poor-law medical and the sanitary questions.

WHICH IS THE CHEAPEST, QUICKEST, AND SUREST CURE OF SCABIES?

MR. JOHN WOODMAN, F.R.C.S., Medical Officer, City Workhouse, Exeter, writes, in answer to the letter of Mr. Couch, in the JOURNAL of November 5th:—"I would state that, in the City Workhouse, I always use the following. Mix sulphur, 2 lbs.; slacked lime, 2 lbs.; water, 1 gallon. Boil this steadily for one hour, stir, and keep the quantity of water up to the gallon. This rubbed in two or three times, I find always cures the worst cases."

MR. HENRY DODD (Rillington) writes:—"I use a strong solution of hyposulphite of soda (3ij to 3viij of distilled water) applied night and morning as a lotion. It has never yet in any case failed."

MR. C. ROBERTS, late Surgeon to the North Riding Prison, writes:—"I have tried most of the reputed remedies for itch, and have come to the conclusion that the most certain, expeditious, and economical of them, is the common sulphur ointment. I had my patients stripped naked, rubbed all over with the ointment, and put to bed in blankets which had become thoroughly impregnated with the sulphur ointment from frequent use. Two or three applications of the ointment, and a week's confinement to bed, followed by a good washing with soft soap, sufficed for the cure of nearly all cases. The confinement to bed and cell was generally considered a greater punishment than any hard labour, so that there was no need to hurry the treatment. The clothes are most easily and effectually disinfected by heat."

AN ARMY SURGEON writes:—"In reply to Mr. Couch's inquiry as to the best treatment for itch, I beg to say that the following treatment will, I think, meet all his requirements most effectually. Rub the person well every night with paraffin oil, washing in warm water and soap next morning. In my experience, this produces a cure in a week at the outside, work being continued as usual."

BETWEEN the cream given by country milk, such as that sold by the Aylesbury Dairy Company, and the cream from ordinary London milk, there is a vast difference; the former yielding butter of admirable quality, and the latter, butter that is very unpalatable. Children and invalids frequently relish the country milk, and are totally unable to take the town produce. For cooking purposes, on the other hand, the country milk appears to offer no advantage over the other.

CONTAGIOUS DISEASES' ACTS.

SIR,—I find it stated at the Social Science Congress, that Mr. Dalrymple, M.P. for Bath, had witnessed the examination of three hundred Algerian women in company with several French generals. It will doubtless be interesting to your readers to learn how far the system carried out in Algeria has served its avowed end in checking disease. If you will allow me, I will therefore quote a few lines from an article in the *Medical Times and Gazette* of September 24th, 1870, in which the returns of venereal disease in the French army are given. The article in question states that in Algeria the increase of venereal disease has been of a progressive character, and has been doubled since 1862. In 1865, there were 70 per thousand of effective strength suffering from venereal diseases; in 1866, there were 86 per 1000; in 1867, there were 145 per 1000; in 1868, 309 per 1000. Of 1000 sick treated in hospital, 179 suffered from venereal diseases; that is, more than one-sixth of the total number. The number of men non-effective from venereal diseases was equivalent to the loss of the entire army for 3.2 days, and of the men actually present 3.6 days, and each case was on an average thirty days under treatment. The utter failure of the filthy perquisitions of suspected women practised by the French administration, is thus demonstrated. The folly of inspecting women for the benefit of soldiers, as well as the inefficiency of the inspections of soldiers themselves as at present carried out in the French army, is proved by the fact that the increase was due in a great measure to an influx of fresh troops; and the editor of the *Medical Times and Gazette* very pertinently remarks: "we recognise in the spread of disease, in spite of preventive measures, one of the strongest proofs of the inefficiency of measures of repression under circumstances naturally favourable to the development and spread of venereal disease. In Rome, there are no Contagious Diseases' Acts, all such measures being very properly denounced by the Papal See; and I would call your readers' earnest attention to the fact, that the amount of venereal disease among the French troops quartered there is actually less than at any other station. Thus we find the relative proportions of venereal patients to the effective strength, and to total sick treated, were, in 1865, 81 and 35; 1866, 131 and 54; 1867, 73 and 26; and 1868, 29 and 9." Mr. Donald Dalrymple has studied the working of these laws to little purpose, if he has not learned that they are futile in a sanitary point of view.

November 1870.

I am, etc.,

T. WORTH.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

THE YELLOW FEVER IN SPAIN.—Private letters from Barcelona (quoted in the *Times* from the *Gibraltar Chronicle*) report the state of things there as mournful in the extreme; half the shops are shut, and a great portion of the place is no longer inhabited. The suburbs, on the contrary, are crowded, as are also the large camps which have been made on the neighbouring mountains for the poor. Those who are fond of coincidences will find a remarkable chain of them in the fact that in 1821, when the yellow fever last attacked Barcelona and its environs, it appeared on the same day as it did this year; it broke out at first in the same street, suddenly increased on the same day, and attained its *maximum* of victims on the same day. In 1821, it ceased on the 11th of November, and should, as is fervently to be hoped, a similar fate befall it when that date arrives this year, the series will be complete. On the 26th, the number of fresh cases amounted to 44, and the deaths to 22; in Alicante, they were 29 and 19 respectively; in Valencia, one case only. In Palma de Mayorca, four persons were attacked between noon on the 22nd and the same hour on the 24th, and eight died; on the 25th, the totals were 10 and 6. On the 27th, the numbers in Barcelona and Alicante showed neither increase nor decrease; Valencia had not a single case.

UNUSUAL RESULT ATTENDING VACCINATION.

SIR,—If you consider the particulars of the following case of sufficient interest to insert in your JOURNAL, you are at liberty to publish it. A healthy infant, six weeks old, was brought to my surgery this morning to be vaccinated. I did this from the arm of another infant about the same age, who had been vaccinated a week previously. I used a spear-shaped lancet, and made four superficial punctures over the deltoid of the left arm. Immediately after this was done, the child turned ghastly pale, and its breathing became almost suspended. Before the infant could be resuscitated, it was found necessary to employ stimulants and a warm bath. The above appears a singularly interesting case. The apparent syncope produced can only be explained by the law of reflex action, viz., by the punctures causing irritation to the cutaneous nerves of the arm, then acting on the nervous centres. The method of vaccination described is the one usually adopted by me; and out of many hundreds of cases in which I have performed this simple operation, no such annoying results have hitherto occurred in my practice.

I am, etc., SEPTIMUS B. FARR, L.R.C.P., M.R.C.S. & L.S.A.

Andover, November 8th, 1870.

MR. H. MORGAN begs to thank "M.R.C.S. 1826" for his reply to a question asked in the JOURNAL of September 24th, 1870.

R. H. C.—The practice varies in London hospitals. Where there is a special skin department, it is now usually attended by physicians. At the Skin Hospital the attendants are surgeons; and cutaneous diseases are a debateable ground.

DR. MACS. (Aberdeen).—The medal was founded by the late Sir Gilbert Blane, for the best report of cases by officers in the medical department of the Royal Navy, on the recommendation of the Presidents respectively of the Royal College of Physicians and Royal College of Surgeons, London, and of the Director-General of the Medical Department of the Royal Navy. These gentlemen are at present engaged in reading the several essays.

THE SYSTEM OF FAGGING.—Dr. Edmunds requests us to state that a £50 prize is offered by a lady for the best Essay upon the System of Fagging, as practised among Children at Public and other Schools. The essays will be adjudicated upon by Dr. Edmunds, of whom further particulars may be obtained by sending a stamped directed envelope to 4, Fitzroy Square, London, W.

FARADISATION IN CHLOROFORM ACCIDENTS.

SIR,—In the report of the proceedings of the Manchester Medical Society in your last issue, it is not stated with sufficient clearness that the credit of resuscitating my two patients from a state of asphyxia from chloroform is due entirely to Dr. Gumpert. I write now to put that matter right. Up to the time of the occurrence of the first accident reported, I was not aware of Ziemmsen's proposal to faradise the phrenic nerves in such cases; and had Dr. Gumpert not been better informed, there is little doubt that one, if not two more deaths would have had to be added to the number already occasioned by chloroform.

I am, etc.,

JAMES HARDIE.

SIR,—I wish you would allow me to add my testimony to that of Dr. Hardie, of Manchester, as to the immense value of the "faradisation" plans of Ziemmsen in restoring patients apparently dead from chloroform. I have seen, or have been now informed of, at least eight cases of these terrible accidents, where the immediate action of the faradisation-current proved effectual in saving the patient's life. Such patients were, as usual, without respiration or pulse, in that alarming state that terrifies the surgeon, dressers, visitors, etc., when the electric current almost at once set up that always welcome gasping respiration, followed by relief to the engorged right heart, and ultimate recovery. The plan has been found useful in two cases of apparent death from drowning. The chief difficulty one has to contend with in the London hospitals is, that a wrong impression prevails that electricity is of no value, because, when applied as it has often been, even at Guy's, to the region of the heart in such cases, it is without effect; whereas the obvious and great necessity is to wake up the phrenic and diaphragm.

Sackville Street, October 1870.

I am, etc., CHARLES KIDD, M.D.

SYPHILIS IN INDIANA.—Dr. Drysdale sends us a letter from Mr. Conway to himself, expressing a general impression "that there is less prostitution, wife-murder, and infanticide in Indiana, than in other States of America," which he attributes to facility of divorce, but regretting that he is unable otherwise "to back him up in a fight with his antagonists." We have already intimated our unwillingness to open these pages for a contest on these questions, which have been incidentally dragged into the discussion on the Contagious Diseases' Acts. We must ask Dr. Drysdale, therefore, to address the queries which he wishes to put to the editor of the *New York Medical Gazette*, directly to that periodical.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, Oct. 17th; The New York Medical Gazette, Oct. 29th; The New York Medical Record, Nov. 3rd; The Boston Medical and Surgical Journal, Nov. 3rd; The Madras Mail, Sept. 5th; The Shield, Nov. 12th; The Leicester Journal, Nov. 11th; The Liverpool Daily Post, Oct. 28th; etc.

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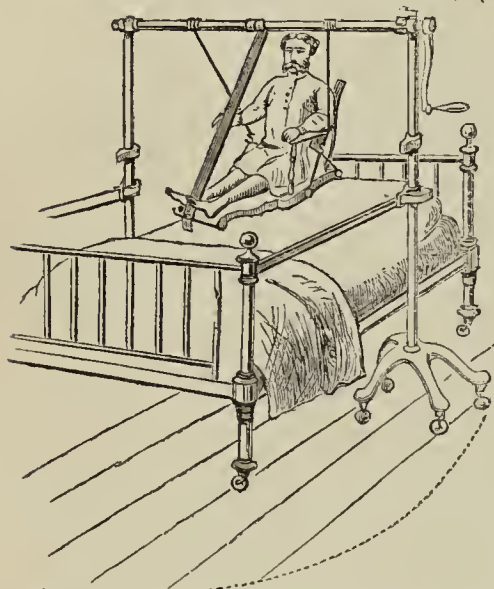
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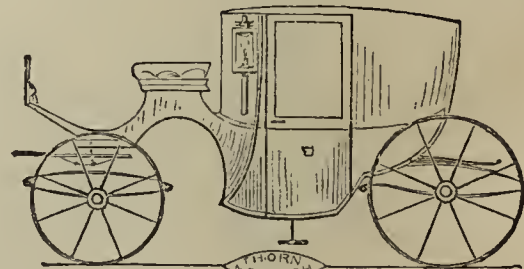
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ABSTRACTS OF LECTURES

ON THE

GEOGRAPHICAL DISTRIBUTION OF DISEASES IN ENGLAND AND WALES.

Delivered at St. Thomas's Hospital, London.

By ALFRED HAVILAND, Esq.

II.

Cancer in Females.—Sixty thousand one hundred and ninety-six persons died of cancer in England and Wales during the ten years 1851-60, 42,137 of whom were females, and 18,059 males, out of a mean population of 18,996,916. The difference in the mortality from this disease and its seat in the two sexes is so different as to necessitate a separate study of the distribution of cancer in females. In heart-disease it was found that the difference between the sexes in the mortality was not great, and that although more females died from this cause, it was improbable that the difference in sex was the origin of the difference in mortality; the organ affected—the heart—is the same in both sexes, and differs not either anatomically or physiologically. The principal seats of cancer, however, in females, are widely different, both in their structure and functions, from any organ to be found in man; these organs—the mamma and uterus—are, moreover, especially liable to be affected; thus these two important seats are superadded to all the others which woman has in common with man, such as the stomach, liver, gullet, lips, etc. We should therefore naturally expect, knowing, as we do practically, the susceptibility of the two great maternal organs to receive this disease, that the mortality would be higher among women than men. We see that it is more than doubly so. Cancer is a disease that does not spare either sex or age; and although the mortality from it is insignificant before puberty in both sexes, it rapidly increases after that epoch of life, until the decennium between 55-65 years, when the greatest absolute number of deaths takes place, and the decennium between 65-75, when the greatest relative mortality obtains. In females, the greatest absolute decennial mortality takes place between 45-55, and the greatest relative between 65-75. The great difference in the mortality between the sexes does not show itself until the decennium 25-35, when, as it were *per saltum*, the deaths among women treble those of the men. The relative average annual rate of mortality from cancer during the ten years 1851-60, was, among males, 2.0 to every 10,000 males living, and 4.3 to every 10,000 females living. During the decenniad, there died from *all causes* 2,072,179 females, so that cancer caused more than a forty-eighth of the whole mortality among this sex; it was more fatal than the diseases of early life, viz., scrofula and hydrocephalus; it was also more fatal than small-pox, which killed 19,655 females in the same ten years, whilst its ally, scarlet-fever, destroyed more than four times as many victims, viz., 82,122 females.

The Geographical Distribution of Cancer in England and Wales in the Eleven Registration Divisions.—If we colour a map of the eleven registration divisions of England and Wales according to the degrees of mortality from cancer, indicated by the different lines of red and blue, always remembering that the most intense blue is the sixth degree or highest, and the most intense red the first degree or lowest mortality, from which the shades lessen as they approach the average line, we shall at once be struck with the definite character of the arrangement that the mortality assumes throughout the country, when divided only into eleven great divisions.

From the west to the east we see four degrees of mortality. 1. The group of the *second* degree of low mortality comprehends the North Western Counties' Division (VIII) and Monmouthshire and Wales (XII). 2. The group of the *third* degree of the low mortality extends right through England from the Northern Counties' division (X) to that of the South Western Counties (V), between which we have Yorkshire (IX), the North Midland Counties (VII), and the West Midland (VI). 3. The blue group of the fourth degree of high mortality includes the South Eastern Counties (II), the South Midland (III), and the Eastern Counties (IV); and four degrees eastward by the last group lies the London division (I), coloured so as to indicate the fifth degree of high mortality.

When studying the distribution of heart-disease, we found that the mortality in the divisions gave us a clue, which we were able to trace through the counties, and, lastly, through the districts, in such a manner as to establish the remarkable coincidence which obtains between low mortality from this cause and proximity to the sea-coast, and free access

to the sea-winds; we had then to guide us the marked distinction between the mortality in the midland and the coastal divisions; in the case of cancer we have nothing of the kind, for midland and coastal divisions are coloured alike, and the exposed and sheltered coasts are seen to be of the same tints; we must therefore not expect that the same climatic influences which regulated the distribution of heart-disease are the causes of that of cancer.

If we take the extremes of mortality indicated in the divisional map, we shall be enabled to see what physical, geological, climatic, or social characters are coincident with the high and low mortality in eastern and western groups.

1. The lowest mortality group extends from Lancashire to Pembroke, and contains some of the most elevated country and the oldest geological formations; whereas the eastern group of high mortality is characterised by a comparatively flat country in the two divisions north of the Thames, the most recent geological formations, and an extensive double watershed, which, united, forms the Thames.

2. In the western group, on its coastal side, there are no great catchment basins, whilst the double watershed which forms the Severn is shared by both England and Wales. There is no great river system in western Wales; all the mountain streams seem to enjoy an independent course whilst wending to the sea, towards which they flow from the hard Silurian rocks that form the backbone of the principality. They bring little alluvial matter with them as a rule; and when they flood their banks, the waters quickly subside. On the other hand, the Thames receives its waters from the soft oolitic chalk and London clay hills which flow often in turbid streams and swell the river so as to flood its riparial districts, which, almost every winter, are saturated with water for several weeks together. This river Thames runs through the centre of the high mortality group of divisions, in which, as we have seen, lies embedded the first division, London having the highest mortality of the four groups.

It will be well now to subjoin a recapitulation of the above leading facts coincident with a high and low mortality from cancer, and add others which we know also to coexist with them.

1. With the *lowest* degree of mortality in the eleven divisions, we find coincident—1. An elevated site having a hard rocky foundation, like that of the upper and lower Silurian formation; 2. A single watershed, consisting of many distinct streams flowing directly to the sea, instead of combining to form an extensive river-basin; a comparatively scanty herbage, and a free exposure to the drying influence of strong winds.

2. With the *highest* degree of mortality we find a large tract of country having a low elevation, and a foundation of the more recent and softer formations from the oolitic to the eocene, and even alluvial; a *double* watershed, the streams of which form a large catchment basin, and, united, produce a considerable river, which seasonally floods its riparial districts, from which the extravasated waters do not readily subside, and a luxuriant herbage in the river-valley, which is protected on nearly all sides, as we have seen in describing the distribution of heart-disease, from the drying and other influences of the winds.

The Mortality from Cancer in relation to the Density of Population and the Annual Mortality from all Causes.—Of all the divisions, London (I) has the most dense population, but it will be well to compare its mortality with that of some other large towns when we are discussing the distribution of cancer in the districts.

Next to London, the most densely populated division is the north western (VIII), which in 1851-60 had .74 acres to a person as compared with the mean density of the eleven of 1.96 acres to a person. We have seen that this division belongs to the group of the *lowest* divisional mortality. The group of high mortality in the east, comprehending the divisions II, III, and IV, has a density of population much less than the mean of England and Wales; within this area there are 2.57 acres to every person living.

The division in which the mortality from *all causes* exceeds that of any other in England is the North Western (VIII), in which the annual mortality during the ten years 1851-60 amounted to 260 to every 10,000 living, the average for England and Wales being 220; this division has the lowest mortality from cancer, if we except Wales, throughout England, its greatest mortality—40 to every 10,000 living, being *above* the average. The group of high mortality to the east has an annual rate of mortality from all causes, even including London (I), of 210, or 10 to every 10,000 living *below* the average.

Recapitulation.—1. The mortality from cancer does not seem to bear any relation to the density of population, nor yet to the general mortality from *all causes*; inasmuch as it has been shown that, where the *least* mortality from cancer obtains, there the *greatest density* exists; and where the greatest mortality is returned, there the density is below the average.

2. In relation to the general mortality, the groups in which cancer proved most fatal, had an average annual mortality below the average; whilst, in the most unhealthy division, the deaths from cancer only reached the second degree of mortality.

The facts above mentioned have now drawn our attention to several important considerations as to the effect of the physical and geological character, and elevation of certain localities, as well as of the river-system of our country, on the geographical distribution of a disease, which hitherto has baffled all the skill of generation after generation of our professional brethren. To ascertain one point in the history of this disease will be important, and may lead on to others which have hitherto not been suspected. I shall now sift these facts through the division of England and Wales into fifty-three counties.

The Geographical Distribution of Cancer in the fifty-three Registration Counties.—We have just seen that the divisions indicated four degrees of mortality, the second, third, fourth, and fifth. The accompanying coloured map of the counties shows five degrees of intensity, the sixth, or that of the highest mortality, only being deficient. True to what was foreshadowed in the divisional map, we see all the counties on the western side of England, from Cumberland to Pembrokeshire, having the second or nearly the lowest degree of mortality. The characteristic features of these counties are elevated site, with few exceptions; distinct and numerous river-systems, each of which runs directly to the sea, without forming large basins; a free exposure to the drying influence of the winds, and, at the same time, to torrents, which subside as speedily as they rise, without flooding the adjacent land; the exceptions are the Eden, the Derwent, the Weaver, the Dee, the Conway, and the Dovey. To these exceptions I shall refer in the final analysis of the registration districts.

The next group of counties of the third degree of low mortality is semicircular—they are partly Welsh and partly English. Denbighshire contains the protected basin of the river Dee, Montgomeryshire the western sources of the river Severn, and Herefordshire and Brecknockshire the well-sheltered streams which form the river Wye. In the concavity of this group lies Shropshire, through which the Severn meanders from west to east through its red sandstone valleys, until at Coalbroke Dale it winds through the coal formation near Wenlock, the most northern extension of the old red sandstone in England, and travels to the south in the midst of the new sandstone and lias valley which contains the towns of Worcester, Tewkesbury, and Gloucester. When describing the distribution of heart-disease, I particularly drew attention to the fact that Shropshire was protected to the north and east by the hills which separate it from the watershed of the Dee, the Mersey, and the Trent; in fact, the valley of the Severn in this country is protected on all sides in the first part of its course, and on three when it turns southwards to join the Avon at Tewkesbury.

Sir R. I. Murchison has been led to suppose, from the geological character of the valley of the Severn, that it was once a channel of the sea, and that the Bristol Channel at that remote period commenced at the Breidden hills, near the borders of Wales; in fact, it is more than probable that the great Y-shaped new red sandstone valley of England was a part of the same channel system, the tail of which is formed by the Severn valley, from which can be traced its two prolongations, one which ends on the Cheshire coast, after passing uninterruptedly through the counties of Gloucester, Worcester, Stafford, Salop, and Cheshire; the other, the longer of the two, follows the courses of the Avon, the Soar, the Trent, the Yorkshire Ouse, the Swale, and the Tees, through the continuous counties of Worcester, Warwick, Leicester, York, and Durham. We shall find that this remarkable geological tract bears a most important relation, not only to the distribution of general health, but of some most important diseases. It will be referred to at a future time. Sir R. Murchison believes that as the Channel advanced southward it was bordered at its sides by the Malvern and Cotswold ranges; and Mr. Charles Frederick Cliffe, in his interesting *Book of South Wales and the Bristol Channel*, adds that "the bluffs of the Cotswold, which often resemble marine headlands, serve to give a popular character to this view." We all know that the Severn floods its banks at certain seasons, and the valley then resembles a channel more than a river. Mr. Cliffe tells us that, in consequence of the nature of the country through which the Severn and its tributaries flow—soft sandstone and marl—its waters are said to be charged with a larger amount of turbid deposits than any other river in Europe; in fact, Richard of Cirencester speaks of the *turbidum Sabrinae fretum*. The strait must have been reduced to the limits of the present Bristol Channel by some considerable elevation of land. Even now, however, the fall of the river between Worcester and Gloucester, a distance of nearly thirty miles, is only ten feet; the descent from Buildwas, in the district of Madeley (358), to Gloucester, seventy-two miles, is only 104 feet 3 inches; and on the authority of Mr. T. Fuljames, C.E., Mr.

Cliffe states that from Stourport to Gloucester (42 miles) the character of the stream is so continuously similar as to be without a parallel, the course being almost due north and south, and the width (150 feet) the same at either end. The Severn is subject, from its mountain origin and the number of its tributaries, to sudden and sometimes *very destructive floods*, which are not much to be wondered at when it is borne in mind that the superficial extent of the country which it drains down to Gloucester is 4,437 square miles. The flood of 1770 inundated the adjacent country to the depth of 6 feet 9 inches.

Coincident with the above facts, we find a death-rate from cancer in females *above* the average. This high mortality is coincident with the same physical, geological, and hydrographical facts which were indicated in the high mortality group composed of the I, II, III, and IV divisions, viz., a sheltered catchment basin, surrounded by heights which are composed of soft rocks affording abundant alluvium, seasonal floods, which, from the low elevation of the valley, do not readily subside, and ancient alluvial deposits which form the sites of the riparial districts.

The next high mortality counties are Gloucester and Warwick; in the former, the Severn and Avon join; and in the latter is the high mortality vale of the Gloucester Avon, which has many of the characters of the Severn. These two counties join Wilts, with its sheltered Avon and tributaries; and next in order is the group of counties, the rivers of which unite to form the catchment basin of the Thames. Thus we have Berkshire and the river Kennet, Buckinghamshire and the river Tame, Middlesex with the river Brent, and Hertfordshire and Middlesex with the river Coln and river Lea; Essex with the river Roding; Kent with the rivers Medway and Darent, and Wandle; and, lastly, Surrey with the Wey and the Mole rivers. Thus we find this group of six high mortality counties surrounding and joining the sheltered and fruitful valley of the Thames. Continuous with these last counties are those of Suffolk and Norfolk, which will be fully treated when the districts are analysed.

The next great high mortality group is that comprising the North and East Ridings of Yorkshire. Within these two counties are to be found the courses of the fully formed rivers which arise in the West Riding and the west part of the North Riding, and the sheltered river system of the Derwent and the Rye, which, like the Severn, run from north to south, and there joins the grand trunk of the Ouse; the river Hull falls into the Humber at right angles to its course.

All the Yorkshire rivers are liable to floods; the red sandstone and alluvial vale of York has a low level, and the waters which flow along it after heavy rains have much alluvial matter. The rivers of the vale of Pickering and Rye, where there is a stiff clayey and ironstone soil, frequently flood their adjacent districts during the wet winter months, and the country remains saturated for weeks together. The last high mortality county is Devon, with its soft Old Devonian and marly heights, from which so many streams flow to form the rivers Exe, Torridge, Taw, and Tamar; all these rivers run through well-sheltered valleys, as we have seen when discussing the distribution of heart-disease; frequent floods take place after heavy rains, or sudden thaws after a deep snowfall. The mortality from cancer in this county is higher than in any other; its river-system carries abundant alluvium when it swells, and the adjacent districts are often covered with water for a considerable time during the rainy season.

Thus have we seen that, in every county where there is a high mortality, the characters of their river-basins bear a strong resemblance to each other, which in recapitulation I may thus sum up.

1. In the counties having a high mortality from cancer, we find that the tributaries of the large rivers flow from soft marly or other easily disintegrated rocks into sheltered valleys, through which the main rivers flow.

2. These rivers invariably flood their adjacent districts during the rainy season, and have generally their waters coloured by the suspension of alluvial matter.

3. Those counties which are characterised by hard and not easily disintegrated rocks, such as the Welsh Silurian and the great carboniferous range, which forms the backbone of the northern counties to the north of the Mersey, and which are freely exposed to the drying influences of the wind, have coincident with these opposite characters a low mortality.

The Geographical Distribution of Cancer in the Six Hundred and Twenty-three Registration Districts.—If the facts, which we have noticed in the divisions and counties relative to the coincidence of low mortality from cancer and an unelevated site, and high mortality and catchment basins of rivers which seasonally flood their banks, are real and not apparent, we have it within our power, in the third process of analysis, either to establish their reality or to dispel the illusion altogether.

A line drawn from the source of the Tyne in Northumberland to that of the Kennet in Wiltshire, will cut through all the districts which lie on the back-bone of England, separating the eastern from the western watershed. Again, if we colour, according to their mortality, the districts along this elevated ridge, we shall find, with few exceptions, that they all indicate a very low mortality, especially along the northern portion, where the districts lie on the hard carboniferous limestone, and are fully exposed to the wind from both seas. The lowest mortality is to be found between Bellingham and the north of Staffordshire, the most exposed part of England.

From the north of Staffordshire another line may be drawn around Wales, which separates the coastal from the inland watershed: the latter includes the catchment basins of the Severn and the Wye. From one end to the other of this semicircular line is a continuous series of low mortality districts, all of which are the most elevated and most exposed localities in Wales, and their geological formation is the hard and unyielding Silurian rocks.

From Penzance to the South Foreland, another elevated ridge of an irregular course is seen; in the west of England it separates the northern from the southern coastal watershed, and in the east of England the south watershed of the Thames from the coastal river system. Along both these ridges we find again a continuous line of low mortality districts; and it is noteworthy that the most exposed, like those in Wales, have the lowest death-rate from cancer.

The ridge north of the basin of the Thames, which stretches from Warwickshire through Northamptonshire, Buckinghamshire, Bedfordshire, and Hertfordshire, to the north bank of the Thames opposite Gravesend, where the chalk appears, is again another instance of elevated site and a continuous line of low mortality districts. This ridge, with the southern one just described, and that portion of the central ridge of England in Wiltshire, entirely encompass the basin catchment of the river Thames and its oft-flooded valley. We have seen, therefore, that almost without exception the great ridges of England and Wales which determine the watershed of our country are the sites where the low mortality from cancer is almost invariably found. The most exposed, the most elevated districts, and those having a hard rocky foundation, are those where the very lowest mortality is to be found.

We must now turn our attention to the watersheds and river-basins and see what they indicate. In the first place, let us take the Severn and Avon, and the Wye included, within the main ridge of England and the circular ridge of Wales. Instead of districts coloured red, we find in all these rivers their courses are followed by high mortality districts; and that the most intense blue, or highest mortality, is to be found in those districts which, from the confluence of rivers within them, are most liable to be flooded. When a river cuts its way through a narrow defile in a hard obstructing rock, there we find the mortality lessened; the banks do not then admit of flooding.

Again, if we attentively look at the catchment basin of the Thames, we shall see how remarkably the high mortality districts group themselves along the course of the river and along those of its tributaries, forming the largest cancer field in England and Wales.

Going northward, if we trace the Trent and the great Yorkshire rivers, we shall find their courses characterised by high mortality districts, especially where they pass through a low and sheltered country, which offers facilities for flooding. Again, in Cumberland we have a remarkable group of high mortality following the rivers Eden and Derwent, and sheltered by the high ridges of the Northumbrian and Cumbrian hills.

Descending to the south, we see the Wiltshire Avon followed by high mortality districts; and the same is seen to be the case along the rivers of Devon and Cornwall, especially in the former county. Along Sussex and Hampshire, south of the ridge which forms the boundary of the Thames basin, the rivers there again are followed by high mortality districts, especially where the rivers are of any importance, and, from the nature of their courses, are liable to overflow their riparial districts.

Recapitulation.—We have seen that the analysis of the geographical distribution of cancer by the registration districts corroborates what was foreshadowed by the divisions, and more clearly defined in the counties: 1. That, geologically, the hardest and most elevated rocks are the sites where the least mortality from cancer is found; 2. That, along the river-courses which flood their banks seasonally, such as the Thames, the Severn, the Mid-Devon, and Yorkshire rivers, are to be found the districts in which the highest mortality takes place; and 3. That wherever, from the nature of the rocks forming the watershed, the floods are much discoloured by alluvium, and where from the flatness of the country the floods are retained and not easily drained off, there we find the greatest mortality from cancer among females.

RECOLLECTIONS OF WORK IN AN AMBULANCE.

By WILLIAM MAC CORMAC, F.R.C.S., Surgeon to the General Hospital, Belfast.

IV.

September 4th.—But few fresh cases were admitted on this day; and on this and the next few days we enjoyed a respite to a certain extent. The fatally injured had died, and we were able to discharge a good many—amongst whom were a few malingerers, fellows with trivial wounds of the hand and foot, who had contrived to elude our vigilance at the door. In consequence of this, the wards were not so crowded. We found time to number the beds, to assign them to different surgeons, to organise our nursing staff better, and to put our commissariat into good order. I devoted all the leisure time I could spare to taking short notes of the cases. These notes are, of course, very imperfect. It was very difficult to take them at all, on account of the little time there was available; and the difficulty was greatly increased by the patients being moved from one part of the building to another. My notes, too, do not include the cases of some patients who died during the first two days, when it was simply impossible for any record to be taken, as everyone was employed with other and more pressing work. Such as they are, however, the brief histories which I was able to take of our patients and of the nature of their injuries, is all that there is to form the basis of a surgical report of our work, and it is therefore a valuable record.

We tried to-day, for the first time, to get some letters conveyed to Belgium, in order that our friends might hear of our safety; and we sent off two of our corps to the Belgian frontier in order to go to Bouillon, the nearest post-town, where they were to post our letters and procure as much eggs, butter, fowls, vegetables, and other food, as they could. One of the gentlemen spoke French and German, the other neither. In place of going to Bouillon, they strayed into the road to Mézieres, and soon fell in with the Prussian patrols, who considered it very strange that, while proposing to go to Bouillon for supplies for an ambulance, they should be striking straight for Mézieres, a fortress, then as now, in the hands of the French. In short, they were looked upon as spies, and taken before the officer commanding. We only learnt, on the return of the party, how very great a risk they had run, for it appeared that one of the letters they carried contained matter tending to implicate a person in Paris as a Prussian spy. Only when about to be searched did our messenger recollect this document. He was certainly endowed with presence of mind, for, immediately feigning sickness and diarrhoea, he begged to see a surgeon, who administered a dose of laudanum. He got thirty drops, he said, though he would not have hesitated to swallow a hundred. He was then permitted to go aside, when he effectually disposed of what might have been the means of placing his life in very great danger. Our letters were afterwards given to an Englishman, an officer in the Prussian army, who promised to send them for us by an early opportunity; but up to the present time they have never reached their destination, and now, I suppose, never will.

During the day I took a walk for the first time. Standing on the ramparts just behind the hospital, we could see the late French positions for two or three miles. Dead soldiers and dead horses were still lying in great numbers on the field, and we could see a few burying parties at work. In the fosse at our feet and on the glacis the dead were lying in some places quite thick, and the heavy sickening odour that pervaded the air was very shocking. In the afternoon, Dr. Tilghmann and I rode over the battle-field. It was a sad, sad sight. For miles the ground was studded over with dead men and horses. Decomposition was setting in, which rendered the sight still more ghastly. In most instances the men were lying with arms and legs extended, generally on their backs, sometimes on their faces. Several soldiers had died preserving the last attitude they had assumed in life, with their arms raised, and as if holding a gun which they were about to fire. We passed the body of a poor officer who had died in a ditch after having had both legs amputated, and a dog watching the grave of his dead master. Next day I sent a person to find the dog and bring it to me, but my messenger failed to execute his mission—perhaps never tried. We passed along roads encumbered with guns and ammunition of all kinds, past houses burnt by the shells, went through gardens once beautiful—now a scene of utter ruin—everywhere the same desolation, and no life anywhere. The stillness during our ride that bright sunny autumn afternoon was oppressive; and the beautiful sky overhead formed a contrast to the earth beneath that afforded food for reflection. To-day I used the trephine in a case of depressed fracture with compression of the brain from effusion.

CASE XVIII.—This man had been struck at the apex of the occipital bone. He became violently delirious; the left pupil contracted to the size of a pin's point; the right was normal in size. The left side was completely paralysed, while the right arm and leg were in constant motion. After the depressed skull had been elevated, a quantity of grumous blood, mixed with portions of the brain, flowed away, and the patient became quite tranquil. But, as might be expected, the result was not very satisfactory. Of injuries of the head generally we have not many examples.

CASE XIX is interesting as being typical of the uncertainty both in diagnosis and prognosis often found in this class of injuries. Dupré, Captain of the 36th Regiment of Infantry, was struck by a ball which entered the crown of his kepi at one side, and, after making a *ricochet* off the vertex, came out at the other. There are the two holes in the cap in the flat oval disc which formed the upper surface of it, quite plain to see, as the cap was preserved. On examining the head, there was observed a contused wound at the middle of the sagittal suture. With the probe, the bone could be felt fractured and somewhat depressed. The patient was perfectly sensible, said he had no headache, and there was absolutely no symptom demanding interference. I thought it likely, from the oblique blow the skull must have received, and from the absence of any symptoms, that the fracture was not extensive, and that it would be wiser to let the patient alone. He got on quite well for ten days, never during that time suffering from a headache. Then he appeared to become stupid, and hiccough came on. On the 12th September, I made a crucial incision, through which were removed several loose pieces of the skull. I found the dura mater intact. This operation was not followed by any change for the better, and he died on the 18th September. No *post mortem* examination was made.

CASE XX forms a contrast to the last. It was one of simple scalp-wound, with exposure of the bone, received on September 1st. Neither fissure nor fracture was discovered in it; nevertheless, the right side of the body was completely paralysed. On the 10th September, the power of motion had partly returned to the arm, but the leg still remained paralysed. The man was discharged on the 22nd with imperfect use of the leg.

CASE XXI.—Chaumont received a small scalp-wound, exposing the bone. He died quite pyæmic, and with well marked trismus. I have not notes of any other cases of pyæmia following scalp-wound with injured skull; but it is a very frequent result in both military and civil practice. The principles on which to conduct the treatment of injuries of the head are so generally recognised as to need no allusion to them here. One point regarding which opinions vary somewhat is respecting depressed fracture, unaccompanied by symptoms, and with an external wound. When there is no wound, he would be a hardy operator who would cut down upon a depression in the skull, in the absence of any symptoms of compression. When there is wound, however, the case is different; but even here I question much if the surgeon should do more than simply remove loose fragments. Where depression of the skull and symptoms of brain-injury coexist, it may seem advisable to interfere. As a general rule, however, the largest proportion of good results will obtain amongst those cases where the amount of operative surgery has been at a minimum.

September 5th.—Every morning at six o'clock we hear the lively strains of martial music, with which the unfortunate French prisoners are daily marched out of Sedan, on their road to Germany. To-day I was annoyed to find that a cut I had received on the finger had become poisoned, and that the lymphatics up the arm were inflamed. I had a smart rigor, and felt very unwell for a day or two, but then I got quit of it; and, although I afterwards repeatedly jagged myself with needles, and had several cuts on my fingers, which were constantly dabbling in the offensive discharges from wounds, it seemed, strange to say, as if the first inoculation had procured for me future immunity, for I experienced no further trouble from that cause whatever. On account of the indisposition I felt, I went out for a walk towards Balan, when I first visited my amputation cases, which I had not seen since the battle. Dr. Blewitt had been taking capital care of them, and they were doing first rate. I then, with Dr. Frank, saw several of his most interesting cases. He had about one hundred and twenty patients, chiefly Bavarians, under his care, most of them at this time getting on well. They were distributed, part in the Mairie, part in the houses of the village; and it required Dr. Frank's and Dr. Blewitt's whole time (for they were alone) to attend to them. They just worked quietly all day long, and in that way succeeded in getting over their patients. They were at that time about to take possession of a beautiful château, belonging to the Comte de Fiennes—the château of Montvillet, in a lovely park, with nice old trees, an orangery, a splendid garden, and ornamental waters, round it. A more lovely spot I never saw. This château is at the now famous town of Bazeilles,

or rather what was once a town. When I saw Bazeilles, it was a heap of smoking ruins, with no living thing about. The sloping lawn of the château had been the scene of a fierce fight, and many were the wooden crosses dotted over it. Dr. Frank organised a hospital here, and the wounded soldiers treated there were in clover during their convalescence. It was beautiful autumn weather a good part of the time; and I saw them wandering about the orange-trees with their crutches or their bound-up arms or heads, or paddling about the lake in the pleasure-boat. Dr. Frank offered me the use of the place as a convalescent hospital for our secondary operations; but we found it impossible to manage it. Indeed, the country all round Sedan is very lovely, consisting of undulating hill and dale, with the Argonne mountains in the distance, and the Meuse meandering through the valley yet more than does the Meander itself. The natural beauty of the country serves only to throw out in blacker, more fearful relief, the horrible desolation of the battle-field.

CASE XXII.—That evening, before I returned to Asfeld, I assisted Dr. Frank to amputate the thigh of a poor *chasseur de Vincennes* named Lyon. He was only just brought in from the field, having lain in a trench, where he had been wounded, until that very day; and he said, I am sure with truth, that for two days before the battle he had not tasted food, and that he had had hardly anything since. He was struck by a Bavarian ball, which flattened itself out against the right femur a little above its middle, shattering the bone extensively. He said that for four hours after he fell he was under the hail of the *mitrailleuses*, whose fire passed just over him. The limb was greatly swollen and emphysematous in the neighbourhood of the wound; but his pulse was good, his face tranquil, and his courage prodigious. The first thing he demanded was a cigar; and this he continued to smoke until with reluctance he laid it aside in order to inhale chloroform. The operation was most beautifully performed by oval skin-flaps and circular division of the muscles. No blood was lost; and, although the amputation was through the upper third of the thigh, the shock was comparatively trifling. The first thing poor Lyon did, on rousing out of his chloroform-sleep, was to demand his cigar, saying that he might as well finish it whilst we were getting ready to cut off his limb. He went quite gaily to bed when assured that all was over; and, puffing his cigar the while, declared that he did not care how many of his legs we cut off. Such a man should have recovered, and every one was shocked and grieved to find symptoms of tetanus supervene on the fifth day. These increased in violence, and he soon died. No doubt the exposure and privations to which this gallant fellow was subjected, enough, as it were, to kill three men, were the important antecedent in causing the attack of tetanus.

Dr. Frank had two or three cases of perforating chest-wounds, in which, with marked temporary relief, he made counter-openings for the escape of fluid.

We had a very large number of wounds of the chest, about which there could be no manner of doubt that they were penetrating. As near as may be, half of them died, some from the immediate inflammatory consequences of the wound, some from mere exhaustion, and some from pyæmia. Two bullets were cut out of the back, as is elsewhere mentioned, in one of which a piece of clavicle was imbedded, while a portion of rib was found sticking in the other.

In three instances, the ball, which lodged in the lung, had traversed the centre of the deltoid muscle, and passed straight through the head of the humerus, before piercing the thoracic cavity. Of course, operative interference was not thought of under these circumstances. It would have been, I think, rather reckless surgery.

In some instances, the clavicle was fractured; in many, one of the scapular fossæ was perforated; and in one case both of these bones were fractured.

CASE XXIII.—Reyet, 3rd Chasseurs, was shot through the infra-spinous fossa of the right scapula. The ball passed forwards and upwards, smashing the centre of the right clavicle as it emerged. In spite of so extensive an injury, the man rapidly recovered.

CASE XXIV illustrates the tenacity with which life clings to some persons. Captain Founel was shot through the left lung, and through the pelvis on the opposite side, with implication of the serous sac of the peritoneum. He was also shot through the forearm. Notwithstanding great difficulty of breathing, and acute peritonitis, along with pneumonia, he lived till September 8th. The lung was, however, completely traversed several times; and it appeared to give rise only to the most trivial symptoms after the first day or two. There was seldom—never, I believe—any hæmorrhage from these cases of chest-wound. Invariably there had been profuse hæmoptysis and difficulty of breathing, lasting often two or three days.

I am sure the plan so unhesitatingly denounced in the Report of the Surgeon-General's of the United States Army, is a bad one, and

worthy of the censure with which it is stigmatised; viz., hermetically closing such wounds. On the contrary, the better practice would be to make free counter-openings, and let the collection of purulent fluid, almost sure to supervene, have a ready means of escape.

We had a considerable number both of shell and bullet-wounds which traversed the walls of the chest without penetrating the pleural cavity. I have seen bullet-tracks ten, and even twelve, inches long, not causing penetration, or even fracturing the ribs, whose elasticity and freedom of motion must, to some extent, protect them. In several instances we had one or more ribs fractured, always producing more or less serious symptoms, and sometimes even death. We had a remarkable case in which a bullet traversed the axilla from behind forwards. The points of entrance and exit were such as to make it seem impossible that the great vessels and nerves could escape. Yet there was no damage done to any important part.

Of penetrating wounds of the abdominal cavity we had but few, and those few all died rapidly of peritonitis and shock. We were not tempted, as suggested by an eminent German professor, to perform an operation, as if for ovariectomy, to find out the perforated stomach, intestines, or liver, as the case might be, sew the wounds up, clean out the cavity of all clots and foreign substances, close the external wound, and then hope for a favourable result. I fear the hope would have to be deferred for a very long time.

We had several instances of wounds of the abdominal parietes without penetration. There was little that was peculiar about them, and it is sufficient to cite one example.

CASE XXV.—Blondel was sent to us from another ambulance on the 14th September, having been wounded by a fragment of shell on the 1st. Dr. Clarke extracted two large pieces of lead-casing, which had lain embedded in the abdominal muscles all that time, causing very little trouble. The patient soon recovered sufficiently to leave the hospital.

We had two or three examples of extensive subcutaneous ecchymosis of the abdomen and thighs from a shell-explosion, which did not cause other mischief.

In connection with abdominal injuries, the following cases are of considerable interest.

CASE XXVI.—Jean Allary, 5th Regiment of the Line, was wounded on the 1st September. The ball entered the outer side of the left thigh, three inches below the great trochanter, and slightly anterior to it. The wound of exit, much smaller in size, was situated a little to the left of the fourth lumbar vertebra. When the dressings were removed, a large quantity of fluid *fæces* came away from both wounds, but chiefly the inferior one. The patient remarked that all he swallowed flowed the wrong way. When the abdomen, which was neither swollen nor painful, was pressed upon, the bowel contents could be made almost to jet out. In the course of a fortnight the wound in the loin closed. In three weeks exactly the *fæces* ceased for a time to flow by the lower opening. This wound re-opened for a short time; but when the patient left hospital, on October 8th, the discharge had ceased, and he was quite convalescent. Allary was lying down when he was hit, and the ball must have twice perforated some portion of the descending colon without opening the peritoneal cavity.

CASE XXVII.—Was also an example of double *fæcal* fistula. The ball entered near the apex of Scarpa's space on the left side, and emerged through the centre of the right buttock. In this example the rectum must have been wounded. It would be interesting to learn if any constriction followed upon recovery.

CASE XXVIII.—Hautefeuille, a young fellow of twenty-two years of age, a soldier of the 1st Marines, also wounded on the 1st September, was struck by a ball, which entered on the left side of the coccyx, traversed the rectum and bladder, and emerged just above the symphysis pubis. For a considerable time all the *fæces* passed by the posterior opening, while the urine flowed entirely from the anterior wound. He recovered without a single unfavourable symptom. Both wounds had closed by the 18th September, and remained so until his discharge from hospital on September 25th, when he appeared as if nothing had happened to him.

In a Belgian ambulance I saw two cases of urinary fistula recovering without a bad symptom. In one the ball had entered just above the pubic symphysis; and, as it had not made its way out, the patient will probably have to submit to a future operation for the extraction of the bullet, as had a soldier during the American War, in whose bladder a piece of shell lodged. In the other case the ball entered just above the tip of the right trochanter major, passed through the iliac bone, and emerged a little to the left of the symphysis.

There were several other cases of similar injury which I did not see, and which, I was informed, were doing well. *A priori*, one would certainly not expect that such serious visceral lesions would produce so little constitutional disturbance.

CASE OF OVARIOTOMY: TUMOUR TORN AWAY FROM THE PEDICLE WITHOUT HÆMORRHAGE; NEITHER CLAMP NOR LIGATURE REQUIRED.*

By RICHARD H. MEADE, F.R.C.S.,
Consulting-Surgeon to the Bradford Infirmary.

ON May 20th, 1870, I saw, in Halifax, with Dr. Synnott, a lady suffering from ovarian disease, which she was anxious to have removed by operation. She was a married woman, aged 48, who had had several children. Menstruation ceased four years before, and she had noticed the abdominal enlargement (which commenced on the right side) for about two years. Her general health was good, and the distention of the body was not so great as to cause much interference with respiration. On examination, the abdomen was found to be filled with a thin fluid (fluctuation being very distinct), but the walls were not so tense as to prevent a large hardish tumour from being felt at the lower part towards the right side. On percussion, resonance was met with in the epigastric region.

I recommended tapping, as a preliminary measure, before any other operation was decided upon. This being agreed to, I introduced a trocar, and removed two gallons of clear yellowish ascitic looking fluid. After this had escaped, a freely moveable tumour, as large as a child's head, four or five years old, could be plainly made out, apparently springing from the right ovary. No untoward symptoms followed the tapping, but the abdominal cavity rapidly filled again with fluid; so that in five weeks she was about as large as before. The patient being still anxious to have something more done, I operated on June 24th for the removal of the tumour.

The patient being under the influence of chloroform, I made an incision about four inches long in the lower part of the linea alba; carefully opened the peritoneum; and evacuated nearly two gallons of ascitic fluid. On enlarging the opening in the peritoneum to the same extent as the external wound, the ovarian tumour at once came into view. I now directed an assistant to compress the abdominal walls with his hands, one placed on each side, so as to press the edges of the wound backwards; while I endeavoured with my hands to draw the tumour partially through the opening. In doing this, the walls of several of the small cysts of which the tumour was principally composed (being very thin), were ruptured by the pressure of my fingers; and a considerable quantity of thick brown fluid, like dark-coloured linseed-tea, escaped. The edges of the wound were so well compressed that none of this ovarian fluid was allowed to enter the peritoneal cavity. The tumour was now found to be firmly adherent to the free extremity of the great omentum; these adhesions were carefully and slowly torn through, and the whole mass was then easily drawn through the wound. It was now found to contain a good deal of heavy solid matter; and, on turning it over to examine its attachments, the pedicle, which was small and thin, to my dismay and annoyance at the time, gave way, and the tumour tore itself loose from its connexions. Fearing hæmorrhage, I kept hold of the remains of the pedicle, but very little bleeding followed; and I could find no vessel requiring ligation.

I kept a large piece of softened sponge applied to the torn pedicle, as well as to the adherent portion of omentum (which was much thickened) for fully a quarter of an hour, the abdominal walls being well covered up with hot flannels; I also had the actual cautery in readiness; but all oozing soon ceased; so I left the pedicle without any fastening, and proceeded to close the wound. I inserted a number of thick silk sutures greased with carbolic ointment (made by melting one part of carbolic acid with seven of lard) deeply through the sides of the wound; but *not* through the peritoneum. The line of incision was then covered with a piece of lint, thickly spread with the carbolic ointment; and over this a sheet of cotton-wool and a flannel bandage were applied.

The patient took chloroform very well, but retched slightly before the incision was closed. After she was placed in bed, and before the effects of the chloroform had quite gone off, I injected a sixth of a grain of hydrochlorate of morphia under the skin of the arm. The pulse was now rather feeble, but not quick, and she looked pallid and felt cold; but upon my seeing her again in an hour and a-half, I found her with a moderately full pulse of only 80 in the minute, and comfortably warm. There had been no more retching nor sickness, but she complained of abdominal pain: so I injected another sixth of a grain of morphia. On leaving, I directed that she should swallow nothing but a little iced water, with a few drops of brandy in it, if she were faint.

* This paper was announced to be read at the last meeting of the British Medical Association at Newcastle-upon-Tyne, but the author was unable to be present.

On the following morning (fifteen hours after the operation) the pulse remained at 80; there was a plentiful secretion of urine, and she was very comfortable.

This patient recovered almost without a bad symptom; I let the sutures remain until the sixth day, when, on their removal, the wound was found to have united by the first intention. No suppuration occurred, except at one or two of the suture-holes, where a little ulceration had been caused by the pressure of the silk. On July 21st, less than a month after the performance of the operation, she was downstairs, and had been out of the house, able to walk without pain or inconvenience. She then looked rather pale and anæmic, but the wound was firmly healed; there was little or no abdominal tenderness, and no return of ascites; but a little deep-seated hardness remained on the right side. I heard through one of this patient's sisters that she continued well at the beginning of September.

Upon examination of the tumour after its removal, it was found that, in addition to the cysts filled with dark-coloured fluid, there also entered into its composition considerable masses of gelatinous colloid-looking matter, with others of a firmer consistence and brain-like appearance, containing clots of blood: showing, I fear, that the disease was of a malignant character.

It is difficult to account for the large quantity of ascitic fluid which was met with, unless there were some secondary deposits of cancerous matter on the peritoneum; but the history of the case would hardly lead to that supposition. The presence of a considerable amount of serous effusion in the peritoneal cavity has, however, one advantage in cases of ovariectomy; it seems to render the membrane less liable to take on acute inflammation, its delicate secreting surface having undergone some change; and after the removal of the ovarian disease it does not seem to be resecreted.

In some of the medical journals a case of ovariectomy has been reported (extracted from an American periodical), in which Dr. Julius F. Milner removed a very large ovarian tumour by enucleation, without using either clamp, ligature, or cautery, and without hæmorrhage. When I commenced the above operation I had no idea of imitating his proceeding, but when the tumour (to my horror at the time) enucleated itself, and there appeared to be no bleeding from the pedicle, I determined to follow his example, and leave the torn surface unsecured; thinking that the risk from hæmorrhage was less than that from inflammation from the presence of a foreign body in the peritoneal cavity. My case turned out successfully, and I think I should venture to repeat the proceeding in some special cases; for instance, where the pedicle does not appear to be very vascular, when the attempt might be made to tear the tumour gently from its connexions (in the same way as adhesions are generally separated); but a firm hold should be kept of the pedicle, so that it might easily be secured in case of bleeding.

MEDICAL AND SANITARY NOTES OF A VISIT TO THE MODEL MALE PRISON AT PALLANZA,* LAKE MAGGIORE, ITALY.

By DYCE DUCKWORTH, M.D., F.R.C.P.,
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INASMUCH as the subject of Italian Prisons attracted much attention in England some years ago, and led to the adoption of a better *régime* in these institutions, it may not be uninteresting to the readers of the BRITISH MEDICAL JOURNAL to learn something of the management of one of the largest and most important of them.

Pallanza is the chief town of the Italian district of Lago Maggiore, and has a population of four thousand. Its situation is perfectly lovely; and a convict prison is perhaps the most unlikely "lion" a traveller would expect to find in such a spot. On approaching the town from the lake, this establishment forms a prominent object; and its long dusky roof and lofty Etruscan-red walls, with square barred windows, are seen to tower above most of the other buildings.

Passing the sentries at the main gate, I was admitted, on presenting my card, to the Director of the Prison, who kindly sent an official to show me the various arrangements.

The building consists of a basement and two storeys, the latter being used by the prisoners, and containing workrooms and dormitories; the former is laid out with offices, and is employed by the various administrative departments. There were formerly female convicts, but these are now sent to Turin. The establishment is remarkable for the severity of the discipline which is maintained—the strictest, I was in-

formed, in any Italian prison; and only such convicts as are under long sentences are received. At present, there are three hundred and fifty in confinement; and of this number no fewer than one hundred and twenty have been recruited from the famous bands of brigands infesting the Neapolitan and Calabrian districts.

On arrival, each individual is placed in a cell, one of a group arranged in a semicircle, and isolated from the main building. Here he is cleansed, and remains for twenty days; he is then removed to his proper cell on one of the dormitory-corridors, and still further kept in confinement. Finally, he is put to some simple work, or commences to learn a trade. Absolute silence is maintained, any infraction of this rule being followed by punishment.

The men were mostly in large rooms, busily engaged with weaving, spinning, calico-printing, and shoemaking. As in other prisons, they are only known by their numbers. The workrooms are very spacious, lofty, and light. The most perfect ventilation and cleanliness prevailed everywhere. The dormitory cells, each one isolated, were in perfect order; and the common latrines were positively inodorous, owing to plentiful water-supply. Each man has a pallet-bed, mattress, and very clean sheets. Exquisite views are to be had from some of the small strongly barred windows; which, however, are higher than the occupants' heads. Many other windows only permit a view of the two outer walls, and the sentries perched on the inner one, leaning on their breech-loading muskets.

The convicts shave clean daily, and are closely cropped. I did not see a single man of fair complexion amongst them. They are mostly dark-skinned, with black hair. The physiognomical types were varied and interesting. Two ideas especially occurred to me in connexion with these men: first, that many of them appeared either partially imbecile, or as if suffering from melancholia; and secondly, that the very low animal type of face which prevailed seemed to indicate forcibly a distinct connexion between imperfect or degenerate development and innate tendency to crime. The depressed and melancholic condition of so many of these men is no doubt due to the continued influences of hard labour, monotony, silence, and confinement.*

The prisoners have two meals a day, consisting of soup and bread. Meat is served out twice a week to them. Further details are given on this head in the appended communication from the Director. Each workroom has an exercise-yard connected with it, in which a certain amount of recreation is permitted several times a day.

The hospital consists of a long corridor, with detached cells arranged on either side. There are no doors, but curtains are suspended in front of each opening. There is abundance of light and fresh air, and the patients appeared to be carefully tended. A specially instructed Sister of Charity acts as *farmacista*. The surgeon was making his visit when I entered, and politely afforded me all the information I sought.

The kitchen and other departments seemed to be in excellent order, and ingenious mechanical arrangements are employed to expedite the cooking and delivery of food.

At the junction of the two great wings of the building is situated the chapel. It resembles a lofty anatomical lecture-room more than an ecclesiastical structure. The prisoners are separated from the altar by a strong-iron framework; and, when they are all present at Mass, a detachment of troops under arms, and a strong prison-guard, are on duty on each side of the priests.

In no part of the prison, except in the *celle di punizione*, are chains employed. As a punishment, prisoners are kept upright all day, with hands manacled, and feet made fast. At night, they are only allowed to lie down on the bare floor, pinioned in the same fashion.

Owing to the extreme kindness of Signor Giuseppe Costa, the Director, I am enabled to append the following outline of the Sanitary Reports of the Prison for the last thirteen years. Several tables have also been furnished to me, but the most important points in them are brought out in the subjoined notes. Hence I only append a brief statistical one.†

GENERAL REMARKS.—The Penitentiary of Pallanza was opened in 1854. One portion of the fabric is new—viz., that which contains the dormitories and workrooms of the second and third storeys. The rest is an adaptation of a very old building which served till the days of Napoleon I as a State Prison, afterwards as Public Offices, subsequently became a Judicial Prison, and still later a Prison for Women. When it was opened in 1854, there were only two hundred cells and four workrooms; then by degrees the buildings were increased both in ex-

* These observations are of some interest, because attention is now being directed in England to the criminal classes as a subject for psychological study and investigation. Dr. Maudsley, in the Gulstonian Lectures this year, alluded to this matter, and also quoted some pertinent remarks of Mr. Thompson, Surgeon to the General Prison of Scotland.

† I am indebted to my brother, the Rev Robinson Duckworth, for assistance in this literal translation of Signor Costa's manuscript.

tent and in height, and now there is room for three hundred and seventy-five inmates. The workrooms had little light and little air, and these defects were quickly remedied by opening great windows. The water was far from good; and this evil was met by the erection of a conduit which comes directly from the mountains, serves for all domestic purposes, and at the same times carries into the lakes all the soil from the buildings; so that now there is a full supply of water, of fresh air, and of all that an establishment requires for health.

The cells are 1.97 *mètre* broad, 3.15 *mètres* long, and 2.80 high; so that every felon, when in his sleeping-cell, has a supply of 17.50 cubic *mètres* of air for the night.

The felons' food consists of brown bread, very nearly equal in quality to that of the private soldier, 750 *grammes* in weight; and two messes a day, one of rice, the other of macaroni, mixed with greens and beans, and weighing about 500 *grammes*, seasoned with butter, lard, and salt. Twice a week—viz., Thursday and Sunday—one of these messes has the addition made to it of 1½ *kilogramme* (about 5 ounces) of boiled meat, cut into little pieces. Besides this, the prisoners can spend in extra provisions two-tenths of what they earn, to buy milk, small portions of meat and vegetables, cheese, sausages, fruit, fish, and the like. Another one-tenth of their earnings goes to the maximum seven-tenths which the management retains to defray the expenses, and is handed over to the prisoners when set free. There are two hundred weavers, forty shoemakers, thirty printers of coloured stuffs, and a few tailors. The rest make shuttles, and perform duties of the house and of the workrooms, or are invalided, or in solitary confinement as a punishment or for other reasons. The management pays 78 *centimes* a day for every prisoner, including the keep of the warders (twenty-nine in number); and as, on an average, 25 *centimes* are earned by work, each prisoner costs about 53 *centimes* a day. The pay, however, of the *employés* and warders, which amounts to about 25,000 *frances* a year, is not included in this estimate.

Notes on the Sanitary Condition of the Prison during the last thirteen years.—In 1857 were observed a case of epilepsy with monomania, two cases of monomania, and three of hypochondriasis.

1858. The cold this year was remarkable, and the amount of atmospheric variation, which gave rise to a large increase in deaths from cachexiæ. The same diseases and the same causes predominated, but the latter with less intensity, on account of the wholesome effect of certain sanitary works which were then brought to completion. There were registered and cured four cases of monomania; one of monomania with ophthalmia, and one of epilepsy with monomania succumbed; one of hypochondriasis recovered.

1859. This year was favourable as regards the number of patients and of deaths. The disease which had proved most fatal in former years—viz., broncho-pneumonia with tubercles—only made its appearance in one instance in 1859. The predominant disorders were gastro-enteritic, almost all of catarrhal character. These were followed by monomanias, and with these, cerebro-spinal affections frequently occurred. There were thirteen cases of monomania, of which ten were subdued by therapeutic treatment, and three remained under observation at the end of the year. Onanism and the intense heat of the summer in this year contributed to the development of mental alienation, which, according to the sanitary official, was promoted by the penitentiary system. The hygienic improvements introduced into the establishment by the lowering of the surrounding walls, and by other works tending to increase the circulation of air, accounted for the happy sanitary results of 1859.

1860. It is to be remarked that the disorders which prevailed in 1860 proved to be for the most part of a lingering character. Diseases of "slow course" were of frequent occurrence, too, because we had to regret the introduction into the prison of subjects affected by marasmus and other mischiefs, which then affected our infirmary to such a degree as to threaten us with heavy mortality in the coming clinical year. As the prevailing diseases were still broncho-catarrhal, intestinal, diathetic, and those of the glandulo-lymphatic system, which, in a cold damp air like this, are wont to make havoc, we must remark on the necessity of continually improving the hygienic conditions, either by promoting drainage-works as much as possible, or by modifying the alimentary régime. In the year, six cases of monomania and two of hypochondriasis were cured, including the three remaining under treatment at the close of 1859.

1861. The forebodings of the sanitary officer were justified. The mortality of the year was greater than that of 1860, owing to the causes already specified. Besides, speaking generally, the same diseases prevailed in increased degree, with proportional increase of the same causes, both internal and external, tending to produce them. Only one case of monomania was observed, and one of hypochondriasis. Both yielded to treatment in the course of the year.

1862. There were great drought and excessive heat this year, followed by long continued winter-rains. Typhoid fever became prevalent in the neighbourhood, and manifested itself with some fatality in the establishment. Among the deaths was that of a prisoner killed by a sentinel.

1863. As usual, gastro-enteritic disorders predominated. Four cases of epilepsy were verified. The typhoid fever which made its appearance last year attacked three inmates, one of whom succumbed.

1864. Again, gastro-enteritic diseases were the most prevalent, complicated with typhoid fever. Diseases of the respiratory system, and scrofulous and tuberculous cachexy, were above the average. It is well to remark that in this year the establishment was enlarged; and the new population came almost entirely from the southern provinces, and in the depth of winter; so that nostalgia and change of climate were most potent causes of the increase of disease and death.

1865 and 1866 call for no special remark. The causes at work were the same as in the preceding years. Nostalgia and the difference of climate told upon the natives of the South, and caused two suicides, as well as two attempts at suicide, the victims of which died afterwards from the effects.

1867. The southern inmates begin to become acclimatised, and were no longer irritated by nostalgia. Among the deaths were to be noted a suicide, a murder, and a case of fulminant apoplexy. In the month of September there were attacks of cholera, causing three deaths.

1868. Thanks to the removal to other prisons of the more chronic cases and scrofulous patients, the mortality somewhat fell off. Among the deaths, moreover, a suicide is included. The population was again increased, and the maximum was reached which the building can contain.

1869. Nothing extraordinary was noticed.

Statistics in Tabular Form of Diseases and Mortality occurring between 1857 and 1869.

Year.	Population of the establishment.	Sick.	Cured.	Deaths.	Proportion per cent.	
					Sick.	Deaths.
1857	245	166	128	19	67.75	7.755
1858	269	169	145	30	69.50	11.152
1859	249	133	127	4	58.63	1.606
1860	247	149	148	6	66.40	2.429
1861	255	179	149	19	72.45	7.450
1862	252	155	143	13	61.51	5.158
1863	262	147	138	7	56.48	2.672
1864	399	221	192	18	55.39	4.511
1865	441	290	247	45	65.75	10.204
1866	417	275	239	43	65.94	10.341
1867	408	296	255	34	72.54	8.333
1868	452	222	209	19	49.11	4.203
1869	468	208	194	24	44.44	5.128
	4364	2606	2314	281		

THE EXHAUSTING NEEDLE-TROCAR: A MEANS FOR THE DIAGNOSIS AND TREATMENT OF TUMOURS AND EFFUSIONS.*

By PROTHEROE SMITH, M.D.,
Physician to the Hospital for Women, etc.

As our knowledge of disease increases, so does also the demand for aids both for diagnosis and for treatment. On the other hand, we often add to our knowledge of pathology and means of cure by the use of such aids. In accordance with this principle, since the experience of three years has proved the value of my exhausting needle-trocars, I have thought it desirable once more to bring them, together with some important improvements, before the notice of this Association.

Fine exploring trocars have been long in use, but, from their inability to evacuate viscid fluids, they have failed to accomplish the end intended, and, from their size, to be employed with impunity for puncturing deep structures. To attain these desired objects, I adapted needle-trocars to an exhausting air-pump or glass-syringe. The instrument can now be used without danger or difficulty, wherever acupuncture can be employed, for the purpose of diagnosing, evacuating, and treating tumours

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

and effusions of all kinds, whether of joints or cysts containing viscid fluid or otherwise, whether declared by fluctuation or only by the history of the case pointing to this probable issue; in abscess or in abnormal effusion in any of the serous cavities, and in extreme cases of retention of urine, without injury to the bladder. It is also equally efficacious in disengaging excessive collections of flatus, which often prove so distressing in tympanitic distensions of the intestines as to defy all other modes of relief. In the same way, without removing the instrument, remedies can be injected into cysts, abscesses, etc., without any risk of the admission of air. Only a few days since I operated at the Hospital for Women on two cases of ovarian cysts containing respectively ten pints and ten pints and three ounces of viscid fluid; also on a case of ascites, from which I withdrew sixteen pints and a half in less than half-an-hour, with complete relief, yet with no more pain than that of the prick of a pin, and leaving only the mark of the needle on the skin, and therefore requiring no after-treatment.

Three years and a half ago, Messrs. Mayer and Meltzer made me a set of these exploring needle-trocars, with exhausting glass-syringe attached, which I exhibited in August 1867, at the annual meeting of this Association in Dublin; at Oxford in 1868; and at Leeds in 1869; I also showed them to several eminent physicians in Paris in 1868, as well as to M. Robert, the instrument-maker, and successor of M. Charrière.

The instrument consists of very fine hollow steel needles, gilt, adjusted to a powerful exhausting glass air-syringe; or, as it has since been called in Paris, *aspirateur sous-cutané*, or "pneumatic aspirator". The syringe, by means of a double-action tap at its distal end, and a spring

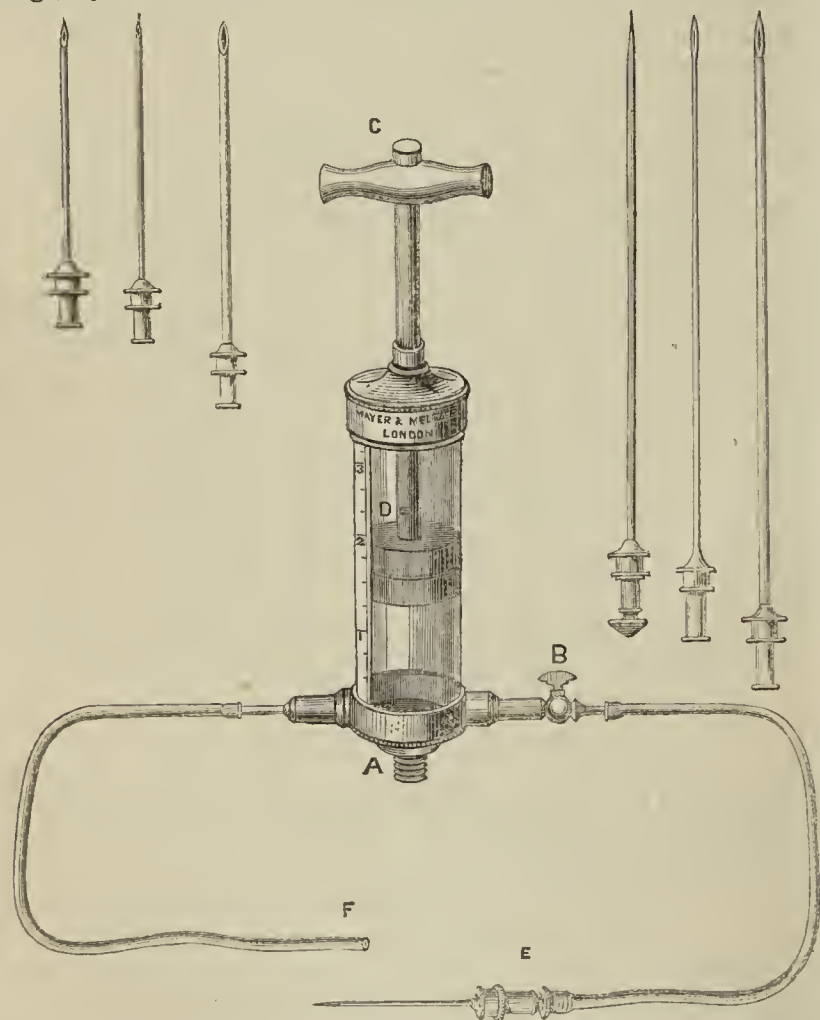


Fig. 1.—A. Screw for fixing the suction-valve to the pedestal. B. Tap on the suction-valve. C. The button, on pressing which, the catch D., used to convert the suction-pump into an exhausted cylinder, is disengaged. E. The needle-trocar. F. The waste-pipe.

stop on the piston-rod, forms an air-pump, and in action becomes an exhausted receiver, which enables the operator easily to withdraw or inject fluids. Finding, however, in cases when large quantities of fluid, as in ovarian cysts, psoas abscesses, etc., have to be evacuated, that there was some difficulty in manipulation and great labour in pumping, I suggested the important alterations which I now have the honour to exhibit. This, in place of the exhausting syringe, supplies a glass cylinder of one, two, or three quarts, or more, exhausted by a powerful air-pump, which, by a contrivance in its piston, has a double action of either expiration or inspiration, by which it readily imbibes or expels the evacuated fluid. By means of a long flexible gum-tube attached to the

receiver, and terminating, to the extent of three inches, in glass tubing, the cylinder is connected with the exploring-needle. This can now be used with perfect ease and at some distance from the receiver. There being stopcocks at each end of the glass-tube and trocar, as well as at the other end of the elastic tube, the nature of the fluid imbibed is at once detected by the glass portion, which also enables the operator to see the colour and character of the fluid as it rushes past to fill the cylinder. In like manner a small as well as a large quantity of fluid can be easily and rapidly evacuated, without distress to the patient or fatigue to the operator.

In conclusion, I have only to notice the extreme delicacy of the needle-trocars—some almost like bristles—to show the necessity of great caution in their use. They should be introduced—as the needles in acupuncture—by rotating them between the thumb and finger, and holding them as near as possible to their point.

Since reading the above paper at Newcastle, I have found that the large receiver with double-action cylinder, which I there exhibited, though useful in hospital practice, was too cumbersome for general use. I have therefore substituted a double-action glass syringe, which, by the ordinary process of pumping, affords an all-sufficient power, alternately of suction and of expulsion, by which means any amount of fluid may be readily withdrawn. It consists of the exhausting syringe before described; but, in place of a double action tap at its distal extremity, there are two valves placed one on each side. By one of these, when the piston is drawn out, the fluid is imbibed; and by the other, when the piston is depressed, it is as effectually expelled. On the inspiration or suction-valve is a tap, which, when turned off, converts the cylinder into an exhausted receiver, as required for the purposes of exploration and diagnosis. When, however, it is necessary only to evacuate fluid deposits and formations, the contents of a distended bladder, or the flatus of tympanitis, it is sufficient to use only the syringe as an ordinary pump. Further, to facilitate its use in withdrawing large quantities of fluid, a pedestal of thick wire, with stirrup-base for the foot, is supplied, which

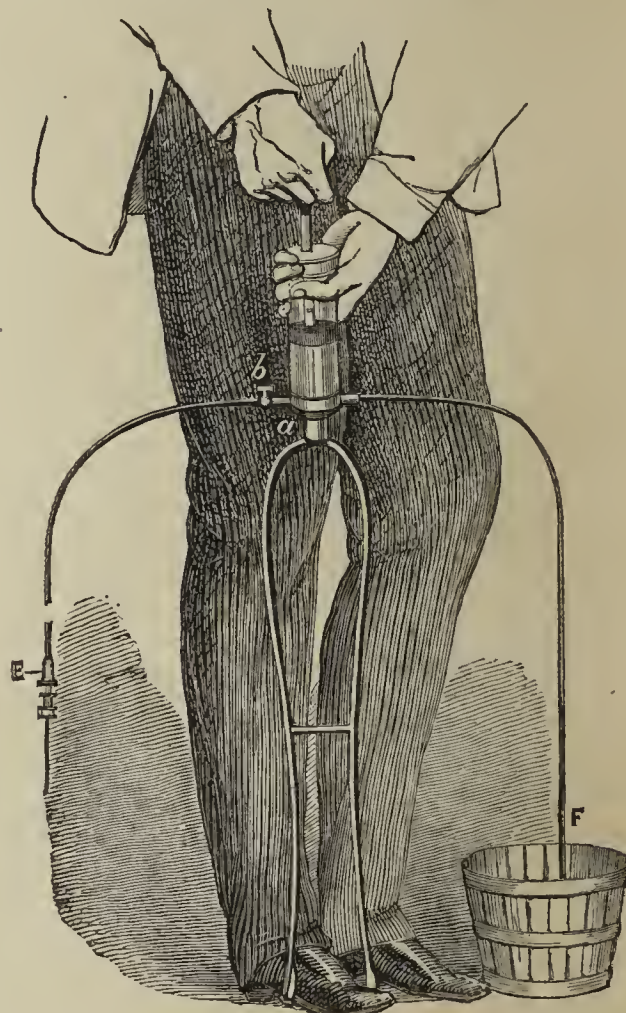


Fig. 2 shows the manner of using the instrument when it is attached to the pedestal.

can be easily attached to the syringe, so that, by its help, the operator can steadily hold and work the instrument, when necessary, without the aid of an assistant.

The extreme simplicity of management and portable size of this instrument, as well as the ease with which it may be used in explora-

tion for diagnosis or for the evacuation and injection of fluids, give it a claim to superiority of design and construction which heretofore has never been attained.

REVIEWS AND NOTICES.

ROBERT KNOX, THE ANATOMIST.*

It is not yet ten years since Robert Knox expired, poor, and hardly recognised in a suburban district of London. Had the death of this remarkable man occurred some thirty years before, when he was in the zenith of his fame, whether for good or for evil, it would have created no small sensation throughout the whole country. As a lecturer on anatomy, no one, either before or since, enjoyed the popularity accorded to him in Edinburgh; as a member of society, Knox was courted in the Scottish capital; as a man of science, he was respected, though rarely loved, by his fellow-labourers. Knox was a self-made man; he fought his way up to the pinnacle of fame by good hard work. For ten or fifteen years he distanced all competitors; and then, long ere he had reached the age when most men court repose, he sank mysteriously out of sight; he left the city wherein he had won his honours; and for the last twenty years of his life he was, more or less, a wanderer on the earth. He is fortunate, at least, in a biographer exceptionally eloquent and sympathetic, and of great skill in the literary craft. We confess, however, to a little disappointment in Dr. LONSDALE'S excellent biography; for we have searched in vain through its pages for the causes of Knox's downfall. Knox was never an idle man: from his first appearance in Edinburgh till the day of his death in London, he was ever at work. He was a temperate, healthy, and active man; he was idolised by his students; he had wondrous powers of language as a speaker; his lectures were not mere dry details, like the dreary discourses of the third Monro, but lively and attractive dissertations, not on anatomy alone, but on the cognate branches of our science.

Dr. Lonsdale seems to ascribe the downfall of his hero almost entirely to the Burke and Hare murders of the year 1828. He gives an excellent and a truthful picture of the terrible difficulties thrown in the way of the anatomical teachers of that day, by stupid legislation; how, on the one hand, the licensing bodies insisted on practical anatomy as part of the student's course, while yet the Government took no steps to facilitate the obtaining of bodies for dissection, but allowed the old law, rendering all such traffic illegal, to remain in full force. Hence arose the necessity of "body-snatching," as it was termed, where ruffians, the very dregs of society, must be dealt with by the lecturers to obtain the necessary supplies. We remember the time when we paid fifty shillings for the privilege of dissecting the arm and shoulder, and when each part of the body had to be purchased at a similar rate. In 1828 Knox's class, which was then very large, received an excellent supply of very fresh bodies. It was not often, indeed, then, that a perfectly fresh corpse was seen in a dissecting-room. The students themselves had little or nothing to do with the supply, except a daring few, who, for the sake of mere adventure, occasionally joined the resurrectionists in their midnight raids on the churchyards. We can safely assert, too, that the lecturers, and above all Knox himself, were perfectly free from any share in these transactions; they were generally attended to by the porter of the establishment. It may be said that more care ought to have been taken to find out how the bodies were procured, but we remember well that the general feeling was that, if any searching questions were asked, the supply would probably be cut off. No thought of foul play was ever entertained, of that we are certain; and hence we have no difficulty whatsoever in acquitting Knox absolutely of all blame in this terrible affair. Then came the awful discovery that Knox's rooms had, during the whole year of 1828, been supplied, in a great measure, with bodies obtained by the foulest murder. Poor Knox from that day was a marked man: he was banished from the good society of the Scottish capital. We remember at the time to have heard an Englishman of rank say: "Knox was a most charming companion; his stories at the dinner-table were wonderful; we listened delighted to his conversation, even if we did not believe what he said. But now," added he, with a significant shake of the head, "he is, of course, no longer admissible." Knox, who loved society, felt deeply the total estrangement of his old friends. It soured his temper towards the world, though to his death he retained his kind heart towards a few medical friends who had adhered to him; and from this time his tongue, never very guarded, was loosened against all who differed from him. Still, the students rallied heartily around him, and his joy was henceforth entirely in his lecture-room.

"He seemed to live to lecture, and enjoyed it more as a recreation than anything else. No charm in rural life, even the incense-breathing morn, was half so exhilarating to the mind of Knox as the air of his own amphitheatre, where a rapturous welcome hailed his presence. As the folding closed in upon the anatomist in his magic circle, all external Satanic influence was shut out, and with the passing hour all seemed serene in the lecturer's mind. Too often, however, the whole heaven of the man himself would ferment and rise up in hasty judgment upon his compeers and the world at large. It cannot be gainsaid by his most fervent admirers, that Knox was at times highly injudicious in holding up society to the glare of his bull's-eye lantern, and construing the professed verities of English life into worldly shams and hypocrisies; and, when disposed to be personal, stigmatising men of public character as readily as he would issue a philippic against his private foe" (p. 152).

Knox had other still more serious faults, of which his enemies took advantage. Dr. Lonsdale confesses—"That on matters of business involving a *bonâ fide* principle, Knox was prone to be evasive; while on matters of fact he was not always considered trustworthy. His prevarication at times was without any ostensible ground; at other times it seemed dictated by selfish motives; but under no circumstances whatever could it be held excusable; it bore upon personalities more than worldly affairs; but, oddly enough, looseness of statement was not manifested by him in his scientific walk. In that direction, to the best of my knowledge, he sought after truth" (p. 233).

Worse than all, perhaps, for himself, Knox did not even spare the dignitaries of the Scottish Kirk, and who that knows the state of the "religious world" in Scotland can imagine a more dangerous position? He "sate under no preacher," as it is termed, he scoffed at their bigotry and narrow-mindedness, and the godly ministers heaped curses on his recreant head. The ultra-religious party in Scotland contributed not a little to Knox's ruin. Their influence in the country parishes was unbounded; they, we suspect, prevented many a well-disposed youth from attending the excommunicated lecturer; they denounced him as a murderer, and we, more than once, have heard quoted as a serious truth the story which Knox used to tell in his playful moods, that when in Caffraria he never lacked a subject for his anatomical researches, as he could always take his gun and shoot down the first Kaffir that came before him!

It is natural that many parents objected to placing their sons under the tuition of a man on whose character there rested such grave imputations, while at the same time the enthusiasm of the students for Knox gradually cooled as the Burke and Hare excitement passed away. Another lecturer at this very time entered the field, who soon became eminently popular with the students. Many of these young men were only in straitened circumstances; their object in coming to Edinburgh was not to cultivate science, but to be qualified for practice as soon as possible. To such as these Alexander Jardine Lizars, a pure anatomical teacher, a fair speaker and an admirable draughtsman, proved a great attraction. Poor Knox used to sneer at Lizars as the Professor of the Pictorial School of Anatomy; but, though he drew beautifully on the board before the class, Lizars was most attentive likewise in the dissecting-room. From 1835 to 1840 the Edinburgh medical classes fell off terribly, probably in consequence of the rise of the London and provincial schools. Knox's class dwindled gradually away; he left Edinburgh; he sought employment in Glasgow and elsewhere. Scotland would not listen to him; and he crossed the border to seek his fortunes in the English metropolis.

Here, in Hackney, Knox closed his sorrowful but active life in 1862. As a teacher, we doubt if any ever equalled him; as a man, let us be blind to his faults, when we remember what he did for science. No one can read this most pleasing biography of his quondam pupil and colleague, Dr. Lonsdale, without feeling that in Knox were combined rare qualities of both mind and body; that he was a thoroughly scientific anatomist, and, in many respects, far in advance of his age.

NEW BOOKS AND NEW EDITIONS.

A GREAT deal of angry feeling has been excited by the tone given to the discussion on the Contagious Diseases Acts. These Acts, which have been supported as defensible and beneficial on moral and physical grounds by some of the most eminent dignitaries of the Church and most thoughtful of Christian theologians, are now denounced as loathsome, atrocious, and beyond description infamous. The advocates of the Act have hitherto for the most part maintained an attitude of moderation, which might be expected from men of education and professional training, under whatever provocation. We regret, therefore, to see a good deal of clear and sensible statement of fact in a statement *On the*

* *Life of Robert Knox, the Anatomist.* By Henry Lonsdale, M.D. London: Macmillan and Co. 1870.

Contagious Diseases Acts by MEDICUS (J. Roberts, Salford) somewhat marred by a sharp retort as to "disgusting filth" uttered by the ladies of the "Shrieking Sisterhood" who have joined the attack on these laws. Otherwise this is an able document, and states its side of the question well and fairly.

Observations on Fractures of the Sternal Extremity of the Clavicle. By ROBERT W. SMITH, M.D., Professor of Surgery in the University of Dublin, Surgeon to the Richmond Hospital, etc.—We hail with pleasure the appearance of this paper from the pen of so able an observer as the Dublin Professor of Surgery. The subject is one which has hitherto admittedly been involved in difficulty and obscurity, and Dr. Smith deserves every credit for having so thoroughly investigated it. Notes of five cases of fractures of the sternal end of the clavicle are given at length in the communication before us, and all of these are fully illustrated. In addition, the author alludes to five other cases of the injury which have been placed on record by various observers. From these, ten in all, Dr. Smith concludes that three displacements may accompany fracture of the collar-bone near its sternal extremity. These are, (1) forwards, (2) downwards, and (3) inwards. The first displacement, that forwards, was universally met with in the ten cases; the latter two were accidental, being sometimes present, and sometimes absent. From the intensity of the second, Dr. Smith was able to judge of the relative proximity of the lesion to the sternal end of the bone; the amount of displacement being in the inverse ratio to the nearness of the seat of fracture to the joint. The displacement forwards always affected the external fragment, the internal being held in place by the powerful costo-clavicular ligament.

HENRY SEWILL'S *Irregularität und Krankheiten der Zähne.* Deutsche von Dr. A. Kühne. Aug. Hirschwald. Berlin: 1870.—Whilst Mr. Sewill was at work at Briey with Mr. Arthur Norton, giving such assistance among the German hospitals as his surgical education well fitted him to give, a Prussian physician was reciprocating international civilities by translating into German Mr. Sewill's now well known collection of papers on Irregularities of the Teeth. This is always a high and sincere compliment; it is especially so in the matter of a special treatise, the first work of its author.

INVENTIONS, &c.,

• IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

CALVERT'S CARBOLIC PRODUCTS.

WE have recently investigated two new varieties of Carbolie Products which Dr. Crace Calvert, F.R.S., of Manchester, has introduced, with much advantage to sanitary and medical science—Carbolised Tow and Carbolie Soap. The carbolised tow we can recommend in decided and unqualified terms to the use of surgeons. It is a fine, long-fibred, soft, and clean tow, impregnated with definite quantities of carbolie acid. It has many advantages. Soft as a dressing, antiseptic, and deodorising, it may with advantage be used for most of the surgical purposes to which lint and sponges and cotton-wool are now applied. In hospital and dispensary wards, it, or something of the kind, will presently, we are persuaded, be indispensable; and we recommend its trial.

The Carbolie Acid Soaps are almost sufficiently described by their title. The medicinal soap contains strictly 20 per cent. of the agent, and has been warmly recommended by eminent dermatologists for use in many forms of skin-disease, in addition to its obvious sanitary uses. The carbolie toilet-soap contains 5 per cent. of carbolie acid, and any carbolie odour is here masked by a perfume. We use it always after handling wounds or the bodies of patients, and after operations. It will commend itself to the use of medical men in their consulting-rooms, to accoucheurs, and for use in the lying-in room. A carbolie shaving and tooth soap deserves attention as being a tooth-soap of which the use is refreshing, and which absolutely purifies the teeth and mouth, and tends effectually to the preservation of the teeth by the destruction of the organic matter which collects around their bases and in the dental interspaces. In shaving-soap, we think the presence of carbolie acid not advantageous or useful. It is not sufficiently known that a very minute dilution of Calvert's exquisitely pure "gold-label carbolie" makes a mouth-wash which is highly refreshing, which is flavourless, which removes all odour (as of tobacco-smoke) from the breath, and which may be perfumed at pleasure.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 26TH, 1870.

MEDICAL REFORM.

THE conferences now proceeding in Dublin among the Dublin medical authorities have arisen out of an invitation by the Dublin College of Physicians to Trinity College, the Queen's University, and the College of Surgeons, to confer together in order to agree on certain principles of action to be adopted in respect to medical legislation next year. Three delegates were named by each body; viz.: University of Dublin, Dr. Hart, Dr. Stokes, Dr. Apjohn; the Queen's University, Sir D. Corrigan, Sir R. Kane, Dr. MacCormac (Belfast); the College of Physicians, Dr. Banks, Dr. Beatty, Rev. Dr. Haughton; the College of Surgeons, Dr. A. Walsh, Dr. Wharton, Dr. Macnamara. The Report of the Committee of Conference is not yet settled; but certain principles of action have been all but unanimously agreed upon. It is understood that the only question on which serious difference of opinion exists, is as to whether the profession should be represented on the Medical Council by direct representation, or by Dr. Prosser James's scheme of indirect representation by extending the franchise of each corporation to all its licentiates. Considering the active and able part played by the Irish authorities last year, both within and externally to our Association—and the medical authorities now in conference in Dublin this year include in their number Sir Dominic Corrigan—the part taken by them in medical reform will probably be active and important.

The Colleges of Physicians and Surgeons of London have, as we have already intimated, taken the necessary steps for renewing the negotiations for the establishment of a Conjoint Board of Examination, which had already advanced to a forward stage prior to the introduction of the Medical Bill last session by the Government. The main provisions of this Bill tended to establish by law the proposed arrangements, which were then in course of negotiation by voluntary arrangement. They were, therefore, necessarily broken off. They are in course of resumption at the point at which they ceased. The main point of difficulty which then remained was connected with the functions which should be assigned to the Society of Apothecaries in the Joint Board. The representatives of the Colleges were willing to assign to the representatives of the Apothecaries' Society a full share in the examinations in Pharmacy, Chemistry, Toxicology, and Midwifery; but the representatives of the College of Physicians at least were unwilling to resign the exclusive right of examining at the Conjoint Board in Medicine. The representatives of the Apothecaries' Society were equally unwilling to accede to any arrangement in which they were not admitted to a share of the examinations in Medicine. It is heartily to be hoped that a middle course may be agreed upon, such as was then sketched, we believe, by Mr. Simon—a concession by the College of Physicians, and an agreement by the Apothecaries' Society that they would appoint members of their body who were also members of the College of Physicians. It would be very unfortunate if a scheme so important to the profession should be shipwrecked by a disagreement on this one point. The College of Physicians have throughout shown, on all main points, a very liberal and intelligent desire to further professional interests; and we have reason to believe that a majority of their delegates would not object to some such arrangement. The speedy establishment of a Conjoint Board of Examiners from the three bodies would be a great practical gain, and one important step in

medical reform. To add greater weight to the examinations of such a Board, it will be proposed, as before, to ask the chief Universities to send assessors to the examinations. The settlement of such a joint triune examining board for England will be a reform of the highest importance. The further steps which may be taken for a bill will need to be taken with great care and with an earnest attempt at something like general concord, otherwise all concerned may find their interests very sweepingly dealt with by a higher power accustomed to treat medical interests with little consideration.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

IV.

Some remarks on "Coaching", and on the encouragement given to this method of learning by Medical Examining Boards.

It is worth remarking (it is so evident as to be often forgotten) that the existence of "coaching", as the term is commonly understood, is evidence by itself of the badness of examinations, "coaching" being quite a different thing from "grinding"; the former, as I take it, being an endeavour to pass a second-rate article as of first-rate value; the latter being but an attempt—perhaps quite an honest one—to make a dull blade bright by extra rubbing. When "coaching" is made the means of acquiring real knowledge, it ceases to be "coaching", because it gives a real value to the article in process of being manufactured. And it is plain that, just in proportion to examinations being the tests of real knowledge, is the impossibility of the existence of "coaching"; inasmuch as, to show real knowledge, the candidate must have acquired it; and, whether it have been "ground" into him or not, is of comparatively small moment, so that it be there. For example, it might be well to make every man who presented himself for a medical examination, take a specimen of urine, test it before the examiner for albumen, sugar, and so forth, and then find out, also before the examiner, what microscopic objects were present in it; the whole process being carried out solely by the candidate himself. Now, this would be a test of real knowledge, because by no possibility could a candidate pass well such an ordeal unless he knew, to use a common expression, "what he was about". He might have been "ground" beforehand, but could not have been "coached", because, in what way soever his knowledge had been obtained, it would be real knowledge, and not something else, made by artificial polish to pass muster for it. In the same way, to use a former example, a man could not be "coached" to find easily and describe accurately an optic disc—healthy or unhealthy—with an ophthalmoscope; because, unless he were acquainted with the instrument on terms of familiarity, although, it may be, not of friendship, he would be helpless.

Nothing could illustrate better the difference between the right and the wrong examination, between that which is a test of real knowledge and that which is to be "passed" by means of "coaching", than a recent declaration by Professor Huxley. He is reported to have said: "It is a downright cruelty—I have no other word for it—to require from gentlemen who are engaged in medical studies the pretence—for it is nothing else, and can be nothing else, than a pretence—of a knowledge of comparative anatomy as part of their medical curriculum. Make it part of their arts teaching, if you like; make it part of their general education, if you like; make it part of their qualification for the scientific degree by all means—that is its proper place; but to require that gentlemen, whose whole faculties should be bent upon the acquirement of a real knowledge of human physiology, should worry themselves with getting up hearsay about the alternation of generations in the Salpæ, is really monstrous. I cannot characterise it in any other way."

Now the instance quoted by Professor Huxley is not an instance at all of an examination to test the candidate's knowledge of comparative anatomy; it is only a test of a student's power of expressing in words certain mental abstractions, which he has "coached up" for the purpose

previously. And the wonder lies, not in the Professor's denunciation of such examinations, but that he should be able to assume, apparently with some confidence, that anybody disagreed with him. But is he prepared to assert that comparative anatomy, taught and learnt really—taught, for example, as he himself teaches it, and learnt in however small amount after the fashion that he learnt it—is an undesirable subject of study for medical students? To say that it is not concerned directly with their proper business—the healing of the sick—is not a sufficient argument; the same objection would hold good for five-sixths of human anatomy, and about nineteen-twentieths of what is called human physiology; and as to the quantity of chemistry really requisite for the "doctor", it is like the chemical atom itself, "inconceivably minute and incapable of further subdivision". The object of all allied studies, whatever the profession to which they belong, is presumably to be a means of training the mind in ways not too narrow; to give a broader basis to superstructures of thought. And surely no study might be more profitably allied for these objects, as well as for others, to the studies proper to the medical profession, than that of comparative anatomy; only, the study of this science must have for its object real, howsoever elementary, knowledge, and not the getting up of words and phrases which have no actual representation in the mind of those who are made to repeat them.

The chief reason for making the study of comparative anatomy compulsory for students of medicine during the medical school period of their career, is because the machinery for learning and teaching is then ready to hand; and at no other period can the incidental difficulties of the study be so readily overcome—those difficulties which interfere so much with the study of comparative anatomy by all others than those broken in to attendance in museums and dissecting-rooms. To relegate comparative anatomy entirely to the arts education, or to the general education, or to the education for a degree in science, would be probably to make its study as unreal by necessity as it now is by reason of the faults of examining bodies.

But there need not be much fear of medical education wavering in its aim, or becoming barren in its purpose, in consequence of the recently expressed opinion of the late Examiner in Physiology at the University of London. The possible harm will be more than counteracted by the doctrines of the author of *A Liberal Education, and where to find it*.

It has been already mentioned that more certainty as regards the requirements of Examining Boards is desirable, because, in the uncertainty now prevailing, the student endeavours hopelessly to master all that *may* be demanded of him, while the examiner passes him because he knows how vain is the struggle and impossible the attainment. Of course this expresses only in part the truth of the matter; but that it does so express it to a very considerable degree cannot be denied. Professor Huxley has practically acknowledged this, with regard to the examination in physiology, at the University of London. He says in the address before quoted, and with reference to the want of exact knowledge on the part of the candidates: "What has struck me, then, in this long experience of the men best instructed in physiology from the medical schools of London is, with the many and brilliant exceptions to which I have referred, taking it as a whole, and broadly, the singular unreality of their knowledge of physiology. Now, I use that word 'unreality' advisedly; I do not say 'scanty'; on the contrary, there is plenty of it—a great deal too much of it—but it is the quality, the nature of the knowledge, which I quarrel with. . . . I declare to you, gentlemen, that I have often been expected to be told, when I have asked a question about the circulation of the blood, that Professor Breithkopf is of opinion that it does circulate, but that Professor Langkopf is of opinion that it does not circulate, and that the whole thing is an open question." And yet, in a letter replying to Dr. Pavy, he remarks: "Out of one hundred and fifty-six candidates who came up for the entire examination in the five years 1865-69, only *one* was rejected for his want of knowledge of physiology, when he would have passed in all the other subjects." (*Lancet*, June 25th, 1870.)

So we are bound to believe that the examiner, although he finds candidates very deficient in the kind of knowledge which he would have them possess, is too just a man to reject them on this score. Wherever the fault lies, he acknowledges that it is not with the students; and, as he believes it to be with their teachers, and evidently thinks vicarious punishment wrong, he administers justice in the quarter where he supposes it to be required.

But it must be remembered that the case does not lie only between teachers on the one hand and students on the other. There are two other parties in the transaction. One is the examiner as such, and the other the corporation, of which the examiner is the representative. Now, in this particular instance which we have ventured to quote, it is clear from Professor Huxley's statement that the examiner, as an examiner, is not to blame, at least as regards the administration of justice. But it is not quite so clear that part of the fault does not lie, say, somewhere between the corporation and its examiners. By whose fault is it that students are not made aware that such and such kind of knowledge is required of them, and no other? Surely, if they knew what was wanted, and were plucked if they had it not, they would get it. It is quite right, as matters stand, to pass them, stuffed with the wrong kind of knowledge. They have taken it innocently and advisedly, and have striven hard to digest it. But why not say publicly to them beforehand, "You will be required to have this or that, and if you fail in the test you will be rejected". It will be of no service to the cause, as Professor Huxley advocates with so much earnestness, if he alone, or with a few others, examine men for real, not artificial, knowledge. It may have been long known to some that the University of London demands, through its examiners in physiology, proof of possession, on the part of candidates for its degrees, of practical knowledge rather than of knowledge derivable from books only. But this fact is among those not generally known to the majority of students, and is one which cannot be too loudly proclaimed. Professor Huxley's public declaration of what he considers the right kind of work to be demanded of candidates will do more good of the sort he desires than all his efforts to discover signs of real knowledge in men whom, though not finding that they possess any, he nevertheless passes.

Professor Huxley does not stand alone in vituperation of medical teachers. The Royal College of Surgeons has lately made an announcement, and denouncement also. The College, however, has this advantage over the Professor, that it can make compulsory regulations for medical schools; and we doubt not that it was with a sort of relish, like that of a well-aimed retort, that it has altered its regulations in order to compel teachers to teach practical, not "bookish", knowledge of physiology and surgery. And far be it from anybody having an interest in medical education to hail with other than delight anything which tends to make men learn the substance of things instead of the semblance. But, granting that in some instances the new regulations will tend to the production of this effect (and even this is a gain of no mean value), the students for whom legislation is most required will no more get practical knowledge of any worth from *instruction* only, and from the necessity of attending a course of practical instruction instead of a course of lectures, unless the instruction is complemented fully by a practical *examination* on the part of the Board of Examiners, than they will learn the construction of a steam-engine by riding in a railway-carriage.

But, it may be asked, "What reason is there for believing that a regulation of the kind will fail in producing the desired effect?" and the reply may be made in the form of another question, "Was any regulation of any kind that was not enforced ever much attended to?" Reference has been already made to the advantage of demanding a proof of a candidate's having studied pathology; and, in proportion to the demand, exactly has been the supply. But, to use the same instance from another point of view, how many men of the class for whom law making is necessary can, at the time of receiving their diploma, make a *post mortem* examination decently, or describe with accuracy any dozen ordinary pathological specimens taken haphazard from the dead-house? The regulations regarding instruction in pathology are

all well; the opportunities of getting practical knowledge are great; the formality and confinement of a lecture are absent; the variety of objects of interest is infinite; all may experience, if they will, the charm of using their own senses for confirmation of what is professionally told them. All in vain! The average student takes but little interest in pathology, and it is very unlikely that he ever will do so under the present system of allowing him to do as he likes in the matter. That anybody should suppose that an ordinary student, not a working man, would interest himself in a subject of this kind unless he knew that his knowledge would be afterwards tested, is rather curious; but probably nobody does think so; only it seems a good plan to make a teacher sign his name to the assertion that the student has attended practical demonstrations of pathology, and of course the teacher would not sign unless the student had very diligently attended; and if he diligently attended, why of course he must have learnt something, and why not a great deal?

There is one other matter in relation to this subject of testing men for real and not spurious knowledge, which may be here mentioned—the apparently easy, but in fact difficult, acquirement of a real as distinguished from an artificial idea of a subject. It is often assumed that, if only teachers taught properly, the first knowledge which a student would gain of a subject would be real in the sense just referred to, and that on this foundation he might continue to build, so that at the end of a given period—say a year or two years—he might be fairly expected to possess a good deal of knowledge; and all of it, whatever the quantity, of a clear and practical kind, not dimmed by theories of doubtful stability. Moreover, that it is much easier for a learner to gain real and practical than unreal knowledge, if only the means of acquiring it be at hand. Also, that if the chance be given them, men will choose practice rather than theory; that they will prefer to gain a knowledge of, say, the action of the heart, by looking at the organ, handling it, and seeing how its different parts are arranged for a given end, than evolve an idea of the same from their inner consciousness and the descriptions of others. *Ergo*, here again teachers are at fault—not pupils, who are open-mouthed, and eager enough for fruit of the tree of knowledge, if only they were not getting always its mere counterfeit.

A little inquiry discovers that this is not altogether the truth. The real and practical acquaintance with a subject, supposed by some to be the thing first learnt, must be often the crowning part of the whole structure, not the foundation; and it is infinitely more difficult of attainment than any quantity of theory unrectified by substance and fact. Before a thorough and true notion of a subject in hand has been acquired, there must exist an idea of the matter in some mentally tangible shape or other; and this first-formed idea is almost invariably a false one, more or less, because the chances are much against it being evolved at first accurately and truly. The process by which knowledge grows is, of course, the replacement of the one more or less false idea by another somewhat less false, and so on, each mental representation being made a holdfast for seizing the next; the idea which represents the truth being the last, the highest, and the most difficult, step of all. This will be probably acknowledged to be true enough; but the conclusion amounts to this, that, in expecting in a student's mind, at an examination, a faithful representation of realities, we are expecting a very extensive knowledge of the subject in which he is being tested; and it is because it is impossible that real and true knowledge of all the subjects demanded of candidates at medical examinations can be got in the limited time of preliminary study, that one would urge the narrowing of the demand to what it is possible for the student to bring. It would appear to be sometimes forgotten that the studies connected with the profession of medicine, in so far as they are required to be learnt from observation of actual things and events, and not as in the case of many other studies, as mental abstractions, are by so much the more difficult of appreciation in short periods of time, and are not, as is often supposed, made more easy thereby.

THE HARVEST AND THE GRANARY.

THE intellectual activity of the provincial Branches of the Association is well reflected by the reports of the meetings of Branches which appear to-day in our columns, and those which we have recently published. The endeavour faithfully to record the scientific proceedings of these meetings, and of the principal Societies of Dublin, Edinburgh, Birmingham, Liverpool, Manchester, and other large centres, at the same time that we keep pace with the active movement of medical work in the metropolis and in foreign theatres of research, makes draughts so large upon our space and upon editorial judgment in selection, and, if necessary, in abbreviation, that it becomes impossible to avoid frequently trespassing upon the indulgence of contributors, who naturally ascribe a special importance each to his own work, and desire early and full publicity. The mission of this journal is, however, obviously to fuse into a common stream the products of the political and scientific thought of medical workers in all parts of the kingdom, without giving undue prominence to any one; and although the steady increase in the number of workers—and the number of medical constituents of the journal is now enormous—makes the task more laborious, it makes it also more grateful. By presenting a constantly richer mass of material, and a continuously increasing number of readers, correspondents, and contributors, it insures the value of the result, and tends constantly to enable the journal to assist more largely and effectively in fulfilling the scientific and social objects of the Association. The opening of new Branches, such as the new Northern and Gloucestershire Branches, and that to-day proposed in South Wales, and the multiplication of sections of Branches, such as has been effected in Birmingham and in the South Eastern Branch, are important means of quickening the scientific and political life of the Association: they also furnish most valuable matter for our pages. In giving prominence to them, and in cultivating every week closer relations and a fuller scientific and general representation of the opinions and labours of our colleagues in Ireland and Scotland and throughout the English and Welsh provinces, we consciously incur a continuously increasing labour; and, by cultivating more thoroughly this great field, run the risk of being unable to garner in time the crops which spring up. But this is a pleasant responsibility; it is one in which we can confidently rely upon the generous appreciation of our members, and which we are far from being without expansive resources to meet: thus, while asking from our correspondents indulgence in case of unavoidable postponements, and urging on them the excellent virtues of careful condensation, we by no means deprecate remonstrance in case of special reasons for early publication or of apparently tedious delay. A flood of correspondence affords the life-blood of a vigorous journal, and unexpressed grievances stand little chance of redress.

DR. T. BALLARD will read a paper, at the next meeting of the Harveian Society on December 1st, on Apoplexy.

WE hear with great pleasure that Dr. Keith, of Aberdeen, who had taken a long sea-voyage to recruit his health seriously exhausted by over-fatigue, has returned entirely restored and reinvigorated.

PROFESSORS Carlo Maggiorani and Corrado Tommasi Crudeli, of Palermo, have been appointed to chairs of clinical medicine and of pathological anatomy in the University of Rome.

AT a public meeting convened by Dr. Clapham, the late Mayor of Devizes, and held lately at the Town Hall, it was resolved to establish a Cottage Infirmary in that town; and a considerable amount has already been promised as annual subscriptions and donations.

A LADIES' medical college is announced in process of organisation in Chicago. There are not fewer than fifteen professors in the faculty, and one of them is announced as "Professor cinctus," before the first lecture is given.

WE welcome the first number of a new "contemporary", the *Epsomian*, a journal whose purpose it is to provide utterance for the voices of school-life in the College. It affords evidence of intellectual activity which is of the highest promise, and we hope it may be destined for a long and useful career.

GOVERNMENT INQUIRY ON THE TREATMENT OF LEPROSY.

WE understand that the Government have applied to the authorities at the London College of Physicians, to nominate to them a physician who should proceed to Trinidad to report on a mode of treatment of leprosy of which favourable reports have been received from colonial authorities. Dr. Gavin Milroy has consented to undertake this mission at the request of the College, and has accordingly been nominated to the Government.

EPIDEMIC SMALL-POX.

THE large amount of small-pox unhappily prevalent in London at this moment has, we understand, completely filled the wards of the Small-pox Hospital, and rendered it necessary to refuse admission to some patients who have applied. There is a hospital building at Hampstead fitted up to receive ninety patients, which was erected under the auspices of the Asylum Board when the epidemic of relapsing fever overstrained the resources of the Fever Hospital. This building ought unquestionably, as has been suggested by Mr. T. H. Hills, to be immediately utilised for the reception of small-pox patients in the present emergency. About thirty parish patients are, we believe, now occupying beds in the Small-pox Hospital. An equivalent number of beds of the temporary hospital might therefore properly be temporarily employed for the use of other than pauper patients.

THE ROYAL SOCIETY.

THE annual election of the Council and Officers of this Society will take place as usual on the 30th instant, when the following gentlemen will be balloted for; viz.—*President*: Gen. E. Sabine, K.C.B.; *Treasurer*: William Spottiswoode, M.A. *Secretaries*: William Sharpey, M.D.; G. G. Stokes, M.A. *Foreign Secretary*: Professor W. H. Miller, M.A. *Other Members of the Council*: George Burrows, M.D.; Heinrich Debus, Ph.D.; P. M. Duncan, M.B.; Sir P. de M. Grey Egerton, Bart.; Professor G. C. Foster, B.A.; Francis Galton; J. P. Gassiot; J. D. Hooker, C.B., M.D.; William Huggins; Professor G. M. Humphry, M.D.; J. G. Jeffreys; Sir John Lubbock, Bart.; C. W. Siemens; Professor A. J. S. Smith, M.A.; Professor John Tyndall, LL.D.; and Professor A. W. Williamson, M.D. The Fellows whose names in the above list are printed in *italics* were not members of the last Council.

STUDENTS OF THE DAY.

THE remarks we made upon this subject last week, though referring directly to Oxford, apply in many respects to Cambridge. In Cambridge, however, owing probably in great measure to the increased amount and vigour of the teaching at Addenbrooke's Hospital and in the Medical School, and the improved opportunities for the pursuit of human anatomy, there has been a considerable addition to the number of medical students; and the necessary expenses of college life were already so moderate that the introduction of the "non-collegiate system", as it is called there, was not expected to furnish any especial attraction, or to be viewed with much favour by the medical profession. The report of the Board for the superintendence of non-collegiate students informs us that "it has been proved by experience that it is possible for an undergraduate to live in Cambridge as cheaply as in many other towns", and that "in one case the whole cost of board and lodging (including washing, cooking, and all attendance) has averaged not more than one guinea a week during residence", while the University fees are very small. The expenses in College are necessarily somewhat greater; but it will be readily understood that expenses of a University course, like that of student-life elsewhere, are mainly regulated by the habits and disposition of the undergraduate, and that it will be found to

make no very great difference in this respect whether he be a member of a college or not. He may spend quite as much if he be non-collegiate as if he join a College, the inducements to extravagance being about as great in one case as in the other. Moreover, members of all religious persuasions—Mahommedans, Jews, and nonconformists of all kinds—find themselves upon the College boards without experiencing any embarrassment. It was therefore scarcely to be expected or desired that the medical students should forego the social and other advantages of College life. The pecuniary inducement to do so is not adequate; and accordingly we understand that almost all those intending to pursue the study of medicine have enrolled themselves in one or other of the Colleges—chiefly at Trinity, St. John's, Caius, Christ's, and Downing. Far from discouraging them, the several Colleges offer them many attractions—some giving lectures on medical or allied subjects, some building laboratories for their use, and some with a liberal hand offering scholarships, which are open to all the world, and which have the effect of drawing away every year one or more of the best students from the London schools, whereby a very important leavening influence is maintained. Only this year Trinity College has, by its munificent foundation of a free lectureship of physiology, and the establishment of a physiological laboratory, attracted Dr. Michael Foster to its staff of teachers, who has begun in earnest, and has, we hear, already a class of thirty students, whose attendance is quite voluntary. If the Colleges continue to proceed in this spirit, and go on to throw open more of their Fellowships to students of medical and natural science as these prove themselves worthy, there will be no need of a non-collegiate system to render Cambridge great as a school of medicine. We write this without the least hostility to the non-collegiate system; on the contrary, we think it a desirable if not a necessary appendage to the University. It gives latitude and variety, a freedom from the restraints and some of the expenses of College life; and last, not least, it may exercise a wholesome stimulus upon the Colleges; but at present the superior attractions of the latter will continue to draw the students, and there is not, perhaps, any reason to regret that it should be so.

FRENCH MEDICAL MEN AND THE WAR.

WE are requested to state that the Committee of the Medical Club have resolved to receive, as honorary members *pro tem.*, medical men who have been obliged to leave France on account of the war and reside in this country. Gentlemen who wish to take advantage of the offer are invited to send in their names, etc., to the Secretary at the Club, 9, Spring Gardens.

RESIGNATION OF PROFESSOR SKODA.

PROFESSOR SKODA has determined on resigning his chair in the University of Vienna. We regret to learn that his reason for taking this step is the impaired state of his health, which for several months in the year prevents him from performing his duties as teacher. He is sixty-five years of age. His duties will terminate at the end of the present session.

MORTUARY POLICE IN ITALY.

THE Minister of the Interior in Italy has issued, under the title of "Mortuary Police and the Hygiene of Cemeteries," a series of instructions to guide municipal bodies when they have to provide new cemeteries or to enlarge those already existing, and to settle the regulation of the mortuary service of the respective communes. The instructions are accompanied by a circular letter to the prefects, recommending them to press them on the attention of the municipalities, and to use their utmost endeavours that, in the progress of this important branch of the sanitary service, all those cautions may be observed which science recommends for the safety of the public health; to which, the circular adds, the Government also will give that earnest attention which the importance of the subject imperatively demands. The publication of the instructions, says *L'Imparziale*, comes very opportunely for Florence, where the municipality is contemplating the formation of a new cemetery.

A PROFESSIONAL CLUB.

WE are asked to call the attention of our readers to the Allied Universities' Club, which was opened in April for the accommodation of the members of the learned professions, and for which all members of the medical profession are eligible. It is a proprietary club, so that no pecuniary liability attaches to any of the members, and the premises in Grafton Street are among the best situated in London, the internal arrangements being those of a first-rate London club. They are under the supervision of a committee, which includes two medical men, Dr. Joseph Lavies and Alexander Thompson, Esq., M.B., Aberdeen.

THE NEMESIS OF TOBACCO.

WE doubt whether the sad consequences of inveterate smoking have ever been set forth more graphically than in the following, for which we are indebted to Dr. Embleton of Newcastle. It is the ninetieth observation of Theodorus Kerckringius, M.D. (*Spicilegium Anatomicum*, Amsterdam, circa 1670), and describes the *post mortem* appearances of an inveterate smoker.

"Too greatly, now, alas! in Europe, prevails that *cacoëthes* of sucking up the smoke of the herb tobacco, as they call it, through tubes actually manufactured for that special purpose! In consequence, what a perversity of morals has arisen they must have noted whose duty it is to attend to the public morality, whether they be politicians or theologians. How noxious it is to the health of those who indulge in the habit of sacrificing so often to Vulcan, or rather to Charon, I shall not here explain. Let it suffice, that I adduce the case of a man whose body I opened before the Faculty. He, inordinately given to these fuliginous delights, had scarcely ever engaged in any kind of work, as it appeared, without inhaling this fatal juice. When, however, at length, Nature, assailed by frequent attacks, began to fail, and to give way to disease, he rejected for so long a time, a black-looking matter, both upwards and downwards (*per utrumque gutturem*), that at last he vomited forth his dusky soul; which to accompany in its visit to the realms of Pluto would be far from agreeable, for, I suspect, it would greatly, and that from habit, have preferred those black lakes, steaming with the bubbles of Stygian vapours, to the lucid stars of heaven, inasmuch as it had long been fed, though not nourished, by smoke; the abode, however, it had relinquished, I visited and examined by the aid of the scalpel of the anatomist. What did I observe, you ask? It appeared to me that I was passing into the very house of Pluto himself; even the entrance-doors were tinged of a black colour, and the tongue, imbued, as it were, with the poisonous juice, was in a state of tumefaction. What as to the windpipe? It was like the inside of a chimney, coated completely with black grime. The lungs were dry, sapless, and scarcely at all friable. The liver, as if it, beyond all the other organs, had attracted the fire, was altogether inflamed; from the flames of this fire not even the bile in its receptacle had been safe, for its colour had changed from purple to green (*ex purpureo virescentem*). In the intestines, however, the drains of the body, the carbonaceous matters from the whole combustion had become concentrated, for they were full of a black substance which exhaled no milder stench than that of Hell itself. Such, of this frequent suction, are the medicinal fruits!"

A LESSON IN FEVER.

A CALAMITOUS outbreak of enteric fever at Stcvington, Bedfordshire, is the subject of an instructive report by Dr. Robert Prior of Bedford. Out of a population of 600 to 700, 170 persons have been attacked. The village is poor and overcrowded. The importation of the disease in March, and its steady extension by contagion is clearly traced. In one house six fatal cases occurred; in another, the entire family of nine took the disease in succession. The sanitary arrangements throughout the village "are a shame to civilisation." The disease "has affected more particularly the poorest and dirtiest of the population, and the dirtiest and most crowded cottages," and "has been most virulent in the most crowded cottages, in which they store potatoes, apples, and vegetables under the beds." What is meant here by overcrowding in its extreme instances is explained by two cases quoted. In one house were six men lodgers (navvies) sleeping on the floor in one room about twelve feet square, and low—these had to pass through a room where a young woman lay ill of the disease, and died subsequently; one at least, if not more, of these navvies took the disease. "In the house where the whole family of nine took the disease, there is only about

1150 cubic feet of air for the nightly wants of the entire family; escape from a contagious disease operating through such a poisonous and confined atmosphere is hopeless. The case of a poor family in such circumstances (says Dr. Prior) is indeed most wretched and pitiable." The evidence as to poisoning of water-supply from drains does not appear, from Dr. Prior's report to be complete. But, after pointing out the appropriate measures of disinfection, isolation, and precaution as to water-supply, he concludes by an appeal to the liberality of the Bedford Board of Guardians, which is not at all overstrained. He specially points out that good food and medical comforts aid rapid convalescence, and suggests that in such an exceptional case the Board should provide quinine. If the provisions of the Sanitary Act would include compensation for destroying those "stores of potatoes, apples, and vegetables under the bed," it would relieve some qualms which will arise in reading of them. Altogether such a state of things is shocking, and such a report is a bitter and distressing satire upon what we call "our sanitary laws." This particular stable of filth and nest of disease will be cleaned out, but many more remain to invite zymotic pestilence. No doubt the Board will—they unquestionably ought to—also adequately recognise, by a handsome addition to his salary, the dangers, labours, and anxieties of their medical officer in such a crisis.

THE UNIVERSITY OF LONDON.

WE are urged to represent certain opinions that the usefulness of this body would be greatly increased were the authorities to hold two instead of one examination a year. Now that the number of candidates has so greatly increased, it would, we apprehend, be possible to make arrangements which would render the change proposed a matter of no great difficulty. Many unhappy men are, by the present arrangement, forced to present themselves at examinations for which they feel ill-prepared; and it is trying to men who have failed in one or two subjects to be thrown back one whole year. Were the examinations held twice a year, the former would generally delay and give themselves more preparation; the latter would much more speedily retrieve their broken fortunes. At the College of Surgeons, in the polite phraseology of the Registrar, Mr. Stone, gentlemen "are referred to their studies" for three months only. The University, a more exacting body, might be satisfied with a six months' purgatory.

ALGIERS AND TANGIER FOR INVALIDS.

No small number of English persons are interested, chiefly from reasons of personal health, in ascertaining the actual state of Algiers. The following reaches us from a medical correspondent who is staying at Algiers.

It is quite true that Algeria is in a very disturbed state. There is, indeed, little fear of any rising from the Arabs: it is in the city itself that the disturbance is greatest. Most of the officials in the place were Imperialists, and would not recognise the Republic. There is a large democratic party amongst the people. The old authorities were overpowered; some imprisoned, and others fled. The moderate Republican party are now in power; but the Reds are constantly holding meetings, and make no secret that, when another regiment or two has been shipped off to France, they will make a determined effort to arrange matters according to their ideas. Part of the garrison is generally under arms. There are two men-of-war in the harbour; and last week a regiment of marines was marched through the town with rifles loaded, bayonets fixed, and a full supply of cartridges. For the last six weeks the town has been almost in a state of anarchy. At the same time, there is no ill-will towards the English; and if only the French arms are successful for a time, this excitement may calm down without bloodshed. There is no reason why any one need stay away except those who are weak and nervous. Those who come will avoid a week or ten days' quarantine by coming through France. There were a few cases of cholera here and at Oran in the autumn, so that vessels arriving here from Algerian ports were ordered five days' quarantine. Although Gibraltar is and has been quite healthy, the polite Frenchman returns the compliment by giving all arrivals from Gibraltar seven to ten days' imprisonment without hard labour. We have just done *our* week: it was by no means pleasant. I paid a visit to Tangier from Gibraltar, and was surprised to find there a small colony of phthisical invalids. The town is situated at the western end of the Straits of Gibraltar, and looks east, so that it is quite open to the Levanter and north-east gales;

but, from its proximity to the Atlantic, the rainfall is much greater than at the towns further east. During November and December, the rains are very heavy. The soil is sandy, so that it is not damp. The water in the town is hard and brackish—said to cause diarrhoea; but those who can send for it can get good mountain water at a little distance. The stench of Tangier excelled any I ever came across: refuse of all sorts is thrown into the streets, where it rots in the sand and sun, covered by swarms of flies. In the immediate neighbourhood are tanyards, where morocco leather is made. To judge from the smell, animal decomposition plays an important part in the Moorish process of tanning. There is no attempt at scavenging or drainage; hovels, stables, and privies, were all foul. *Plain* living is cheap; everything else must be got from Gibraltar or Cadiz. I do not think there is a doctor. I had been there but a very short time before I was called upon to exercise my profession. The country round abounds in game. There are splendid hunting and coursing. Partridges, rabbits, hares, wild boar, etc., are plentiful. The scenery in the Atlas mountains is magnificent. For those who can ride, shoot, live plainly, and do not require constant medical attendance, it is a good place to winter; but I cannot think that many phthisical patients could stand it—certainly none but very slight or very chronic cases. For those who like sport, open-air exercise, and primitive living, with as little banishment from friends as possible, this is the place. Steamers run from Gibraltar two or three times a week at least, and letters reach England in six or seven days. Certainly some invalids I saw in Tangier had made a mistake, and would have been far better off in Malaga or Algiers. If things are tolerably quiet, we shall be here for a month or so; then on to Tunis and Malta. We have had really cold weather here during the last week; strong south-west winds from the Atlas mountains, the peaks of which we can see covered with snow, and heavy storms of rain and hail: it is just like a north-east wind at home.

SULPHUROUS ACID.

THE value of sulphurous acid gas as a disinfectant has been established by many and crucial experiments, and is generally admitted. This agent is specially recommended by medical officers of health. There is a want of convenient methods of applying it, and especially of applying it in a limited space and to a definite and measured degree. Mr. John Gamgee has called attention to the convenience of employing it as disengaged from an alcoholic solution. Cold alcohol will, he states, take up three hundred times its bulk of sulphurous acid gas; and where, for example, it is desired to saturate a box of clothing with this gas, it is sufficient to drop a certain quantity of its saturated solution of alcohol into the floor of the box, and a large definite quantity is set free by the evaporation. The suggestion is one of importance, and seems to us worthy of attention. The solution of sulphurous acid in alcohol could easily, and probably with advantage, become a general article of pharmaceutical commerce for medical and sanitary use.

A WHOLESOME WARNING.

MR. BRUCE, one of the Leeds magistrates, has lately given some offenders against sanitary law a warning which they will not soon forget, and which will go to convince the people of the town that there is a determination on the part of the authorities to protect, when driven to extremities, the life and health of the inhabitants. Two women, named McGregor and Askham, were charged before Mr. Bruce with having exposed for sale, without previous disinfection, two mattresses which had been used by a person who died from typhus fever. The charge was fully proved; and the inspector said that, as this was the first of the kind that had been brought into court, he did not press for a heavy penalty, but so much infected bedding was taken away in a similar manner that it rendered useless the endeavours of the sanitary authorities to check the disease. Mr. Bruce, having been informed by the inspector that the woman McGregor was a nurse, gave her a severe reprimand, observing that "it was really awful that a whole neighbourhood should be infected by women like her for the sake of making an extra penny", and fined her forty shillings and costs, or one month's imprisonment. The woman Askham was fined ten shillings and costs, or seven days' imprisonment. The magistrate remarked that if they had been richer persons he would have fined them each £5. A similar case met last week with more severe punishment at the Marylebone police-court.

A LONDON EPIDEMIC CAUSED BY MILK.

THE facts adduced by Dr. Michael Taylor of Penrith, and Dr. Bell of St. Andrews, have shewn how scarlet fever may be diffused through carelessness in distributing milk. A valuable account of a violent outbreak of typhoid fever in Islington in July last, which is traced very clearly by Dr. Ballard solely to the infection of the milk from a particular dairy, is given in our report of the proceedings of the Association of Medical Officers of Health.

BIRMINGHAM ELECTIONS.

WE hear from Birmingham that the election of an additional physician and surgeon to the General Hospital takes place on Friday (to-day). There is no application for the post of physician. Three candidates were in the field for the surgery—Mr. Lawson Tait, Dr. Savage, and Dr. Jolly. The first-named has made only a nominal canvass. The contest has been between the latter two; but Dr. Jolly having obtained a very large majority, Dr. Savage has retired, so that of course Dr. Jolly will be elected. He has been for five years a very active and valuable house-surgeon to the Queen's Hospital, where he has obtained golden opinions by his devotion to the clinical instruction of the students. The election is conducted by voting-papers, and requires no personal attendance of the governors.

SCOTLAND.

FEMALE STUDENTS.

AN Edinburgh correspondent writes:—This week the question as to the education of female students in medicine has assumed a serio-comic aspect. A few of the younger and more hot-headed male students had expressed their views as to the question of opening the doors of the class-rooms to women, by shutting the school-gates in the faces of the present representatives of the sex; and, to their discredit and the delight of the populace of the old town, a small students' row was the result. Any recurrence of such unseemly and unacademic conduct is being guarded against in various ways, and in one most comical way, by the formation of a female protective brigade, who guard the ladies to their homes in a chivalrous, and, I was about to say, manly manner, some, I understand, offering a protecting arm. Strange stories are current as to the bellicose propensities of a certain newspaper editor of the spasmodic and imaginative school having been roused by what he saw and heard, almost to the pitch of inflicting or receiving personal violence; but students' tales, like those of some war correspondents, border on the marvellous. There is reason to doubt whether the females ought to fear their friends or their foes most, but the most has been made in the daily newspapers about the students' conduct. Only a very few of the younger and more headstrong spirits take any part on either side. The more sensible ones are satisfied with what has been already done, in showing their objection to mixed education, and are now disposed to let the matter drop and await the subsequent developments.

THE UNIVERSITY CLASSES.

UP to the present date (Wednesday) 1613 students have matriculated at the University. In the Faculty of Medicine, the first year's students now number 183, against 169 at the same date last year. This year there are 154 second year's students, while in 1869 they numbered only 96. There are thus about 60 more second year's students than last year; and this is accounted for by keeping in mind that the first year's students of 1869 were largely in excess of those of 1868. There is a further advance of 14 in the first year's students of the present session. On the whole there are about 80 students in the Faculty of Medicine more than last year. The study of practical physiology is so popular that it is found necessary to enrol a class in the winter session as well as in summer, in which term it is most largely and most conveniently studied. During last summer, 69 students attended this class, and 40 have joined it for the present winter, making a total of 109 for the whole year. The

class being an optional one, and not necessary for the curriculum, this must be regarded as an interesting fact. I hear that there is an unusually large number of first year's students at the College of Surgeons. Dr. Matthews Duncan's class has survived the presence of the females, and his class-room is again comfortably full. Dr. Keiller has postponed his course till the summer session. Dr. Wyville Thomson, the recently elected Professor of Natural History, announces that he will begin his course of lectures after the Christmas holidays.

UNIVERSITY OF ABERDEEN.

ON the 18th instant, Mr. Grant Duff was installed Lord Rector of Aberdeen University for a second period of three years. In the speech which he delivered on the occasion, he referred to the adoption by the University of the reforms which he had advocated during his previous term of office, and told his audience that they would now have a far better chance of competing successfully with their contemporaries in the battle of life than if the unique educational traditions of their district had still remained in force. His own task had been to dethrone the study of Latin prose composition from the exaggerated position which it held in preparatory schools; and he hoped that one of his successors in the rectorial chair, reforming in the same direction, would direct his attention to the claims of natural science study in schools. The study of geology and botany, he said, was well fitted to engage the faculty of observation—a faculty which was paramount in early life; and those two sciences could be pursued with the greatest ease in country schools. As to classical education, the real end of that was that the student might get access to the ideas of the ancient world. He despaired of Aberdeen students ever reaching this goal, so long as they had to surmount the philological difficulties of the classical languages; and he avowed his intention of introducing to the consideration of his colleagues in the University Court a scheme, whereby the student might come by his knowledge of ancient society and literature by means of lectures and text-books written in the English language. He predicted much opposition to this scheme. After expressing a hope that the Universities of this country would one day, as in Germany at present, take the lead in shaping public opinion—a work which was now relegated to journalists and statesmen—he concluded by thanking the students for again placing him in an office which gave him no inconsiderable opportunity of advancing what he very earnestly believed to be the true interests of the University of Aberdeen and of north-eastern Scotland.—The students assembled in the quadrangle of Marischal College, and marched, headed by a piper, to the Music Hall, where the installation took place. A small section of them, occupying the front seats, made themselves very obnoxious to the meeting, and prevented a great part of the Rector's speech from being heard.

IRELAND.

“THE *British Pharmacopæia*” has been selected by the Council of the Apothecaries' Hall of Ireland as the subject for the annual prize to be competed for by apprentices to apothecaries of Ireland on the first Monday and Tuesday in May next.

MEDICAL HIGH SHERIFF.

THE Lord Lieutenant of Ireland has appointed Dr. Henry Pomeroy Truell, of Clonmannon, High Sheriff for the County Wicklow for the ensuing year.

SUPPLY OF MEDICINES TO POOR-LAW UNIONS.

THE Commissioners have ordered the appointment of an apothecary who shall purchase drugs, compound them, and distribute them to various unions. Besides securing pure medicines, it is thought that the expenditure, now reaching £32,000 yearly, may be considerably diminished. The salary is £500, and the election is vested in the hundred and sixty-three Poor-law Boards which exist in Ireland. The staff should include an analytical chemist.

THE DUBLIN MEDICAL SOCIETIES.

THE Pathological Society opens on Saturday. On the same evening, the Obstetrical Society begins the session at the College of Physicians; and the Surgical Society will hold the first meeting on Friday, December 2nd.

NOTES OF THE WAR.

STRASBURG AFTER THE SIEGE.

THE *Medical Gazette* of Strasburg, which has just resumed its publication, has the following painfully suggestive announcement as to the re-opened anatomical school. "Students are scarce, but bodies for dissection are abundant. There are just now in Strasburg facilities not to be found elsewhere for anatomical studies, for practice in operative surgery, and for the observation of disease. Unfortunately, there are but few young men who are allowed by the existing circumstances to profit by these facilities." It makes no other reference, directly or indirectly, to recent events. Its principal *feuilleton* discusses the therapeutics of the Greeks and Egyptians, and is from the pen of a deceased contributor, who sent it some years ago.

DISTRESS NEAR METZ.

THE last report, says the *Wiener Medizin. Wochenschrift*, of the Basle agency for the relief of the sick and wounded, commences with the observation that all the committees are complaining of exhausted stores and empty coffers. In all the lazareths and depôts there is an urgent demand for surgical instruments, while material for dressing is, on the whole, fairly abundant. A great want of ice prevails; and as each wagon of it costs about four hundred *francs*, this item weighs heavily on the funds of the aid-societies. The cry for flannel, warm clothing, and stimulants, is still pressing. In confirmation of the lamentable description which it gives, the Basle agency publishes the report of a Swiss physician, Dr. Burckhardt, stationed at Tremery near Metz. He writes: "There is a want of everything here. Among two hundred inhabitants, we have more than three hundred sick and wounded; and two or three new transports arrive daily. Every barn and shed is filled; in every hayloft, without any covering or only with a single wet cloak, lie the poorest, begging earnestly for dry stockings and drawers, and especially for dry linen, as a protection against the cold. We have nothing to offer them. My diarrhoea and typhus patients are in a hayloft without windows, and with large holes which are dangerous enough even for a person in health. Long trains of wagons are coming in the heavy rain, filled with patients, for whom we can only with trouble get beds of straw. Even the church-benches are used for making coffins."

REPORTS OF SOCIETIES.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

SATURDAY, NOVEMBER 19TH, 1870.

R. DRUITT, M.R.C.P., President, in the Chair.

THE CHAIRMAN introduced to the notice of members samples of various articles of sanitary utility. Among these were samples of Antiseptic Fuel invented by Dr. J. Dewar of Kirkcaldy, made of vegetable fibre strongly impregnated with carbolic acid, and intended to be used either for disinfecting clothing or medicating the air of a sick-room; also a species of Sanitary Tow. The Chairman also passed round some samples of Calvert's Carbolic Soap for purifying the hands. He used it himself, and thought it beneficial. Samples were likewise distributed of Spiking and Co.'s Malt Biscuits for babies; also the same made into powders, and another kind of biscuit containing steel, prepared by the same firm.

The use of Chloralum, introduced by Mr. John Gamgee, was to have been reported on by Dr. Stevenson; but that gentleman was prevented from attending through indisposition. As Mr. Gamgee was present in the room, the Chairman invited him to address the meeting.

Mr. GAMGEE explained what had led him to the consideration of the subject, and the various experiments made by him, assisted by Dr. Dewar and Mr. Wanklyn. In the course of his researches, he found chloride of aluminium to be a capital antiseptic. He exhibited a bullock's foot, ten months old, which had been steeped in chloride of aluminium. It had no smell, retained its colour, and was unassailable by parasites. He found this new agent as powerful as sulphurous acid, and yet without its destructive properties. He had tried it for surgical

and medical purposes, and found that in every possible way it arrested the germs of putrefaction.

The CHAIRMAN thanked Mr. Gamgee in the name of the meeting, and hoped to hear him again when Dr. Stevenson should bring up his report on chloralum.

Dr. E. BALLARD, Medical Officer of Health for Islington, read a paper on a Localised Outbreak of Typhoid in Islington in July 1870. This was the first event of the kind which had happened in Islington during the fifteen years of Dr. Ballard's sanitary administration in that parish, and it was so unexpected and curious as to have demanded a special investigation. Within less than a semicircle of a quarter of a mile radius, 168 cases had occurred within ten weeks; and he found it impossible to explain this on the ground of local miasma, bad drainage, or water-supply. Most of the cases occurred in the houses of the wealthy, and some while the families were in the country for their summer holiday. Several suggestions were offered by local practitioners which he disposed of *seriatim*; the last of which was, that the outbreak was due to the distribution of milk from a particular dairy. At first he thought little of this; but as the inquiry progressed, he was driven to adopt it as the true explanation. The evidence adduced was most convincing. Out of 140 families supplied from the dairy, no fewer than 70 suffered from typhoid, and 30 deaths occurred, being at the rate of 17.1 per cent. of the cases. Twice as many cases of typhoid deaths occurred in the limited district referred to as in the whole of the rest of the parish. In confirmation of his inference, he stated that it was remarkable how the typhoid picked out the customers of this dairy in separate streets and squares; it attacked females and children, who are the largest consumers of milk, out of all proportion to male adults; and he adduced some curious instances in which in several families the only persons attacked were those who took this particular milk. At the same time, he did not altogether absolve local miasms from all participation in super-inducing the outbreak, since the disease first entered those families among the customers of the dairy, where such local causes were found existent. The author next entered upon the question how the contagion entered the milk. He arrived, by the process of exclusion, at an underground tank on the premises of the dairyman. He was assured that this water was never added to the milk. On opening the tank, however, he found that it was constructed of wood which had rotted, and in part given way, and that from this spot there were several rat-burrows, through which water rapidly ran off into some old drains discovered on deeper exploration. The probability was great, that the admixture of water with the milk was the source of its contamination. Charitably giving credit to the statements made to him, he suggested that possibly, as the water was used for cleansing the milk-cans, enough might still remain to poison the milk without any intentional admixture with it being practised.

Dr. BUCHANAN thanked Dr. Ballard for his masterpiece of medical logic, worked out with amazing industry and accuracy.—Mr. HOLLAND also expressed great satisfaction with the paper, and hoped it would be published.—Dr. HARDWICKE wished to know Mr. Gamgee's opinion as to whether there could have been anything in the secretion of the cattle to account for the typhoid.—Mr. GAMGEE had seen nothing to show that typhoid fever spread from cattle to man, although it was certain that the concentration of animals in the midst of a crowded population was injurious to the public health.—Mr. LORD was highly pleased with the paper.—Dr. GLOVER said that, as a medical practitioner in Islington, he was quite satisfied with the conclusions arrived at. He hoped one result would be that something would be done to put a stop to the adulteration of milk.—The CHAIRMAN complimented Dr. Ballard on the unflagging interest of his paper up to the final *dénouement*.—The meeting was unanimously of opinion that the paper should be printed and published by the Association.—After a brief reply from Dr. Ballard, the meeting terminated.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 14TH, 1870.

JOHN GAY, Esq., President, in the Chair.

THE PRESIDENT exhibited some transparent Elastic Tissue, Oiled Silk, and Gutta Percha, for dressing purposes. These were said not to be affected by heat or moisture; they could be washed and used again.

Dr. ALTHAUS brought forward a girl, aged 16, who had Rheumatic symptoms, followed by Paralysis of the Right Arm. Sensation and motion were lost, but there was no atrophy of the limb nor change of temperature. The interrupted current had no effect on the arm, but the continuous current was followed by muscular contraction, and sensation was restored after four applications. In three weeks she was able to move her wrist. The progress ceased when the treatment was suspended.

on the girl going into the country, but on the treatment being renewed a cure resulted. The fact that the muscular paralysis was not affected by the interrupted current, and its gradual inversion and limitation were against its cerebral origin; the absence of paralysis of the intercostal muscles was against its being a spinal paralysis. There was no evidence of hysteria or of lead-poisoning; and the absence of nutritive change was against paralysis of the cervical sympathetic. Dr. Althaus believed the paralysis to be due to a rheumatic affection of the right brachial plexus.—Dr. WILTSHIRE had seen this case at the West London Hospital. He had treated the patient with alkalies, iodide of potassium, and nux vomica, but no medicine did any good; and he, therefore, sent the girl to Dr. Althaus.

Dr. ALTHAUS shewed a very neat and portable Machine made by Gaiffe, of Paris, for applying the Interrupted Current; also a Battery of 50 cells of zinc and platinum for applying the Continued Current. This battery was contained in a box; and, when closed, the plates were kept free from contact in vulcanite cells below. By opening the lid fully the cells were raised, and, the liquid being thus brought into contact with the plates, action of the battery commenced—the battery was very durable, and gave off no noxious fumes. It was made by Weiss, of the Strand.

Mr. TEEVAN showed a Calculus of the size of an almond, which he had removed from the Ischio-rectal fossa of a patient. The man was aged 40, and had been cut for stone when he was five years old. Recently he had suffered from an escape of urine from the cicatrix; and on examination Mr. Teevan found a hard body, which he removed by incision, and which proved to be a calculus having facets; so that, doubtless, it had been at one time in contact with other calculi in the bladder.

The PRESIDENT showed a Calculus which he had removed from the bladder of a very rickety boy 12½ years old. It weighed 2¼ ounces. He performed the operation a few weeks ago, and found it very difficult owing to the contracted state of the pelvis. The lad was very feeble, and sank some days after the operation.

Mr. JOHN D. HILL read a paper on an Analysis of 140 Cases of Urinary Stricture. Of these, 20 had been submitted to Syme's operation of perineal section, and 120 to Holt's operation of forcible dilatation. The cases were classified as—1st, single stricture; 2nd, multiple stricture; 3rd, complicated stricture. In these three classes Holt's operation was performed. A fourth class comprised cases of cartilaginous non-dilatable stricture, usually the result of injury; and these were treated by perineal section. The strictures were described as nodular and bead-like to the touch, or as fusiform and elongated. Holt's operation was performed in 69 cases of stricture on the bulbo-membranous portion of the urethra; 31 cases of multiple stricture were also cured by the same operation. In the 120 cases there were but two deaths, from congestive pneumonia. The bladder, urethra, and kidneys of one of these fatal cases were shown. No laceration had taken place where the stricture had been split by the instrument. The patients were usually discharged at the end of a week or ten days, with instructions to pass a No. 11 catheter occasionally. Cases where no instrument could be passed through the stricture, as well as those of stricture where the passage of an instrument was followed by rigors, were treated after Syme's plan. The loss of blood was small in the operation, and rarely did any unhealthy action occur in the wound. If there were any relapse, a second operation was performed. Mr. Hill laid great stress on preparatory treatment.—Mr. B. HOLT said that the first class of cases were simple and easily cured. The real value of the operation was proved in cases that had been condemned as incurable. An officer from India had come under his care with stricture and fistula in the perineum, the buttock, and the groin. He had to sit over a large pan whenever he passed urine, as it came from him as from a watering-pot. This man's stricture was split; the fistula gradually treated; and he quite recovered. In another case the patient was aged 76, and for years he had laboured under a stricture, which was so tight that no instrument could be introduced. By accident, however, Mr. Holt was enabled to pass a very small instrument, and was then able to split the stricture. In three days the patient was enabled to go into the country relieved of his stricture. Mr. Holt considered his operation applicable in all cases where an instrument could be introduced, but it was hazardous in cases where the kidneys were diseased. He very nearly lost a patient who had fatty heart and diseased kidneys, after operation. The man had a very dense stricture, and after it had been operated on he had a rigor; next day he was cold and pulseless, and the secretion of urine had ceased. It was only by great care that he was brought out of his precarious state, as for some time he had all the symptoms of uræmic poisoning. When Mr. Holt's directions were followed, relapse never took place, and he believed, from the few opportunities he had of making *post mortem* examinations, that in his operation the mucous membrane was not torn;

hence there never was infiltration of urine. Mr. Holt never left the catheter in the bladder except in cases of traumatic stricture.—Mr. TEEVAN said he preferred the French method of gradual dilatation by the bougie olivaire, as used by Mercier. With this operation a bad result never occurred; and the cure was usually complete in from six weeks to two months. He alluded to a paper read by him on Stricture at the British Medical Association at Leeds. In the discussion there Mr. Stokes, jun., said that he had seen cases of rupture of the mucous membrane after the splitting operation. After fourteen days such a rupture of mucous membrane would probably have healed, and so not be found at a *post mortem* examination.—Mr. HILL thought that, with due care, laceration of the mucous membrane need not occur.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, NOVEMBER 11TH, 1870.

EDWARD CLAPTON, M.D., President, in the chair.

Dr. CARR read a paper on Purgatives: their Good and Evil. In his opinion purgatives, when given with judgment, were of great value, notwithstanding their almost universal condemnation at the present time, and the evil which they were capable of doing in the hands of the unskilful. After briefly reviewing the anatomy and physiology of the various organs engaged in alimentation and assimilation, he passed on to consider the proper food of man, taking his teeth as a guide. He was of opinion that proper dietetic and hygienic measures were capable of effecting a great deal, and gave a very full account of the different aliments useful in habitual costiveness, dwelling especially on the power of habit in producing a daily or bi-daily evacuation, failing which, he considered that no individual could be said to enjoy health. The various purgative drugs were reviewed, and the different diseased states in which they were of service pointed out, preference being given to laxatives, saline aperients, and enemata. Dr. Carr enumerated the cases in which purgatives should not be given, and expressed a decided opinion that they should be carefully avoided in acute constipation with severe abdominal pain and sickness, where there is a *rise of three or four degrees in the temperature*. Reliance in these cases should be placed on opium, combined with belladonna.—A discussion ensued, in which Dr. Gooding, Dr. Thorowgood, Dr. Clapton, Mr. Lockhart, Dr. Purvis, Dr. Creed, etc., took part.

Dr. GOODING exhibited under the microscope several interesting specimens of Pediculi.

A vote of thanks was unanimously accorded to Dr. Carr and to Dr. Gooding.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, NOVEMBER 16TH, 1870.

J. HUGHES BENNETT, M.D., President, in the Chair.

Mr. ANNANDALE showed the following preparations. 1. A Knee-joint which he had to amputate after excision had been performed. 2. The parts after Excision of the Hip. The patient died of exhaustion from constant discharge. 3. Specimens of Caries and Necrosis of the Os Calcis. 4. A Tumour of the Lower Jaw. 5. The parts in a case in which he had performed Tracheotomy for Croup. Death had occurred in forty-eight hours rather suddenly.

Dr. CADELL showed the Apparatus used by Bonnet of Lyons in cases of Club-Foot; and another by the same surgeon for cases of Fibrous Anchylosis of the Knee-joint.

Dr. CHIENE read an account of a case of Obturator Hernia. After a short notice of previously recorded cases, he described and showed his own. He had found it in the dissecting-room in a female patient whose death was registered as from ileus. The patient had previously been operated on for a femoral hernia of the right side with success. The obturator hernia was on the left side; the sac was as large as a pigeon's egg, and lay beneath the muscles. It projected through the obturator canal, and had the artery behind and the nerve in front. It contained a portion of the Fallopian tube, and about two inches of ileum—gangrenous—which had allowed fecal extravasation. The sac was found to be formed from the peritoneum of the broad ligament. Two smaller obturator herniæ were present on the right side; one of these was empty, the other contained the Fallopian tube, but no bowel.—Dr. JOSEPH BELL remarked on the interest of the case as to the points bearing on the diagnosis of obturator hernia during life. He strongly advocated an exploratory incision in the middle line of the abdomen in cases where the symptoms of internal obstruction were well marked, and when no hernia could be found at any of the ordinary seats. The experience of ovariologists had shown that incision of the peritoneum was not necessar-

ily fatal, or even in itself very dangerous.—Dr. MATTHEWS DUNCAN remarked on the importance in such and similar cases of inquiring into an anatomical explanation of the occurrence of protrusion, and stated that he believed a real scientific inquiry into the causes of hernia was still to be made.—Mr. ANNANDALE remarked on thigh-pain as a diagnostic symptom of obturator hernia.—The PRESIDENT advocated strongly Dr. Bell's suggestion as to operation in doubtful cases; and alluded to cases which he had met with where *post mortem* examinations showed that the operation would have been easy and successful, one especially, in which he had asked a distinguished surgeon to operate, and he had refused.—Dr. CHIENE and Dr. GRAINGER STEWART agreed in the above.

Dr. GRAINGER STEWART showed a well marked case of the Pseudo-hypertrophic Paralysis of Duchenne de Boulogne. The loss of muscular power coexisted with greatly increased thickness of the limbs, depending on development of cellular tissue, along with atrophy of the true muscular fibres. He also showed a case of Aneurism of the Aorta in a living patient, which was interesting from its pressure-effects.

Dr. ARGYLL ROBERTSON read a paper on Albuminuric Retinitis, in which he drew the distinction between it and Uræmic Retinitis. He recorded five cases, four of which had died.—Dr. MATTHEWS DUNCAN and Dr. GRAINGER STEWART made remarks on the importance of the Ophthalmoscope as an agent of diagnosis. The eye-affections often gave the earliest indications of commencing kidney-disease.—The PRESIDENT spoke of the great want of exact observations as to the microscopic changes in the retina itself in these and similar cases.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS, IRELAND.

WEDNESDAY, NOVEMBER 16TH, 1870.

J. T. BANKS, M.D., President of the College, in the chair.

THE PRESIDENT read a paper on some cases of Muscular Atrophy. In the first case, that of a man aged 34, whose parents and family generally were healthy, the earliest symptom was the occurrence of pains in the right arm. These afterwards became general, and a weakness in the right thumb was established. The left arm next lost power, the head began to fall forward, and the posterior portion of the right deltoid muscle, together with the latissimus dorsi and serratus magnus on the same side, became much atrophied. A noticeable point was the coincident disappearance of the pains with the establishment of the atrophy. The patient was treated by the local application of electro-magnetism, and by the internal administration of the phosphates of iron, quinine, and strychnia. The disease has now lasted about twelve years, and the patient is apparently dying from the supervention of a pneumonic attack. A second case occurred in a lady, aged 25, and commenced three years and a-half ago, the left hand and arm being first affected. Up to the present the disease has made fearful ravages, the power of deglutition being much impaired, and the voice being almost lost. Slight hyperæsthesia has occurred at times. In a third case some connection seems to have existed between the muscular atrophy and the occurrence of intermittent fever. This patient has perfectly recovered. Dr. Banks then spoke of some cases which had been placed on record by Dr. MacDowel, Dr. W. D. Moore, etc.

Dr. STOKES read a paper on Some Requirements in Medical Teaching in Dublin. The discussion was postponed until the next meeting, on December 16th.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE second meeting of this Branch for the session 1870-71 was held in the Midland Institute, Birmingham, on Thursday, November 10th; Present: THOMAS UNDERHILL, Esq., President, in the Chair, and sixty-eight members and visitors, including Mr. A. Haviland of London and Surgeon-Major Manifold.

New Members.—Dr. Greenway of Coscley and Mr. Standish of Cradley Heath were elected members of the Branch.

Communications.—1. *Mitral and Tricuspid Stenosis.*—Dr. BALTHAZAR FOSTER showed a Heart in which both the right and left auriculo-ventricular orifices were narrowed by endocardial inflammation. The patient from whom the specimen was taken had been admitted into the General Hospital with well marked signs of mitral obstructive disease. The murmur at the apex was purely presystolic. A few days before

death, a murmur preceding the first sound was detected at the right edge of the sternum, and the tricuspid stenosis was diagnosed. The autopsy revealed a funnel-shaped mitral valve, with an orifice only admitting a goose-quill. The tricuspid orifice only allowed the top of the middle finger to pass; the segments of the valve were agglutinated, and the edges of the orifice studded with recent vegetations. The dyspnoea and other urgent symptoms had been remarkably relieved for a long time by the hypodermic use of morphia.

2. Mr. SOLOMON demonstrated to the members a Cysticercus in the Anterior Chamber of the Eye. The patient was under his care at the Birmingham Eye Hospital.

3. Mr. FURNEAUX JORDAN read a paper on the Effects of Congenitally Small Urinary Meatus in the Male. He said that cystitis is one of the most frequent of surgical diseases. At the same time, it is perhaps invariably the result of some preceding pathological condition. The commonest causes are those which tend to impede the urinary flow. Such an impediment, which is commonly overlooked, although it occurs not infrequently, is a congenitally small meatus. The lower part of the meatus is closed. Over the closed part there is sometimes, but not always, a line of depression. The opening which is left is often not a third or a fifth of the size of the normal meatus. This small aperture is alone a sufficient cause of cystitis; but, added to gleet, or acid urine, or vesical atony, or perhaps slight paralysis from spinal disease, or enlarged prostate, it very frequently gives rise to cystitis, which otherwise would not occur. In such cases, cutting the meatus with a director or bistoury removes the bladder-symptoms. Mr. Jordan then referred to certain other ill effects, especially simulated stone in the bladder in children with congenitally small meatus. After alluding to Mr. Paget's views on "stammering of the bladder", the paper closed with this question: In certain cases of slight but persistent and obscure cystitis, may there not be a congenital narrowing of the vesical orifice of the urethra?

4. Mr. ALFRED HAVILAND demonstrated to the members his Maps of the Geographical Distribution of Disease, especially of heart-disease, cancer, and phthisis. A cordial vote of thanks was passed to Mr. Haviland for his interesting communication, and for his kindness in coming from London to explain his views to the Branch.

5. Mr. VINCENT JACKSON exhibited a large Fatty Tumour, removed that morning in the Wolverhampton Hospital from a girl aged 13. It was suspended from the left gluteal region, and measured circumferentially nineteen inches, and across twelve inches. The weight after removal was one pound and ten ounces. It had been noticed twelve years.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

THE annual meeting of the section was held on October 28th. Present: FURNEAUX JORDAN, Esq., in the chair, and thirty-one members and visitors.

The Report of the Secretaries, as published in the JOURNAL of July 2nd, was read and adopted.

The Treasurer's Report, which showed a balance of £7:6:9 in favour of the section, was adopted and ordered to be entered on the minutes.

Officers.—On the motion of Dr. WADE, seconded by Mr. C. A. NEWNHAM, it was resolved unanimously,—That Mr. Alfred Baker be elected Chairman for the ensuing year. Mr. Furneaux Jordan was re-elected Treasurer; and Dr. Foster and Mr. Vincent Jackson (Wolverhampton) were re-elected Secretaries for the ensuing year.

Vote of Thanks.—It was moved by Mr. C. A. NEWNHAM, seconded by Mr. S. A. BINDLEY, and carried by acclamation:—"That the most hearty thanks of this section are hereby given to Dr. Heslop for the earnest and able manner in which he discharged the duties of first Chairman of the Pathological and Clinical Section."

Mr. A. BAKER then took the chair.

Communications.—Dr. HILLIARD exhibited a specimen of Hypertrophy of the Tongue, due to nævous growth, which was removed from an infant aged fourteen months, who died of diarrhoea. The disease dated from birth. Microscopical sections showed plainly the large lacunæ filled with corpuscles; blood-pigment in different stages of degeneration; and the papillæ much hypertrophied.

Mr. SOLOMON exhibited a healthy girl, aged 16, with a Cysticercus in the Anterior Chamber of the Right Eye. It lay at the bottom of the chamber; its body, which was apparently of the size of a large hemp-seed, being placed in a line with the vertical meridian of the eye-ball. The patient's attention was first attracted to her eye six months ago while using a looking-glass, when she saw something like a little grub

of the size of the head of a pin moving about in the organ. She had suffered two or three attacks of irido-choroidal irritation. This was the only case of cysticercus within the eye-ball which had been seen in Birmingham.

Mr. BARTLEET showed a Cyst partly Ossified, which was discharged in the secundines of a mare. It appeared to have lain close against the dorsal vertebræ of the foal, where there was a hollow to receive it, the hollow being formed by a lateral curvature of the spine, or by partial absorption of its bones. The cyst, which well showed the process of ossification in membrane, contained a little sero-sanguineous fluid, and presented no trace of vascular connection with either foetal or maternal structures, or yet of any appearance that would suggest its being an abortive foetus. Microscopic sections of the bony wall of the cyst were also shown, which proved the tissue to be true bone.

Mr. FREDERICK TURTON (Wolverhampton) showed a specimen of Hypertrophy and Dilatation of the Stomach removed from a chlorotic-looking girl, aged 19, who had been subject to occasional attacks of dyspepsia, but had in other respects appeared well until June 16th. On that day, after retiring to rest, she was seized with flatulent pains and rapid distension of the abdomen. At 3 A.M. she was sitting upright in bed, apparently in great pain, with tympanitic abdomen, but no tenderness, nor any constitutional disturbance. The tympanitis continued to increase very rapidly, and the breathing became laboured from the pressure upon the thoracic organs; the pain became most intense; and at about 6 P.M., or sixteen hours from the commencement of the attack, she died. On making a *post mortem* examination, about eighteen hours after death, the trunk, from the upper part of the chest to the pubes, was found enormously distended. On opening the abdomen, the stomach presented itself, extending from the level of the nipples to midway between the umbilicus and pubes. On allowing the gaseous contents to escape, the organ was found to contain a mass of black, odourless, homogeneous matter, of about the consistence of putty, which was found, on removal, to weigh $7\frac{1}{2}$ pounds. There was no peritonitis, no adhesion anywhere, no obstruction to free passage along the whole of the intestinal canal. The stomach was of natural appearance as regarded its internal lining membrane; the walls were excessively thick; and the weight of the organ was $18\frac{1}{2}$ ounces. The stomach and contents were referred to the Microscopical Committee, with the addition of Mr. Turton.

Mr. BENNETT MAY exhibited a dissection of Congenital Flat Foot, from a man who had suffered amputation of the leg for compound fracture, showing the falling of the arch of the foot, with great tension and yielding of the internal lateral ligament, and of the tibialis posticus. The tendon of this muscle was elongated over the sustentaculum tali, and the muscular tissue had become atrophied and undergone fatty degeneration. The astragalus was considerably displaced in its relation to the other tarsal bones. The calcaneo-scaphoid and cuboid ligaments were lengthened.

SOUTH EASTERN BRANCH: EAST KENT DISTRICT MEETING.

THE thirty-eighth meeting was held at the Fountain Hotel, Canterbury, on November 10th; E. GARRAWAY, Esq., in the chair.

The next meeting was appointed to be held at Folkestone in March, and Dr. Bowles was elected Chairman.

Papers.—I. Mr. GARRAWAY (Faversham) read a paper on a Case of Obstructed Colon. The patient was a lady aged 40. The seat of constriction was at the junction of the transverse with the descending colon. Pain and dragging had been experienced in this region ever since some violent muscular effort two years previously. The symptoms came on in a moment, and were at first supposed to be dependent upon the passage of calculi. A hot bath with opiates speedily removed the pain; but, the bowels refusing to act and the abdomen enlarging, the usual measures were had recourse to. Injections with O'Beirne's tube always brought away a little granular detritus, as if rubbed off a solid crust. It was twelve days before the obstruction was overcome and a natural motion obtained. During all this period the ascending and transverse colon could be felt in a distended state. After the first two or three days no medicine was given by the mouth, the bowels being solicited from below; the abdomen was also frequently kneaded, fomented, and rubbed with laudanum and atropine. Meanwhile, the patient's condition appeared well-nigh hopeless; the pulse was 130, the tongue glazed, and vomiting and hiccough were frequent. Diarrhoea now set in; incredible quantities of gelatinous pulpy material, mingled with bloody striæ of a most foetid odour, coming away ten or twelve times in the day. This state continued about twelve days more, the treatment consisting of occasional doses of castor-oil and the injection every night of a drachm of laudanum into the rectum. There were still the quick pulse, the glazed

tongue, great emaciation, and large sloughs on the nates; fluid nutriment in every shape was taken and retained. Whenever the action of the bowels was restrained for a few hours by the opiate, the ascending and transverse colon became dull on percussion and doughy to the feel; when diarrhoea recurred, they became resonant. The patient ultimately recovered sufficiently to bear removal in the course of three months, but is still under medical supervision. With respect to the pathology of the case, Mr. Garraway considered that there was adhesion of the colon to the abdominal wall, with puckering up and diminution of its calibre, the result of subacute peritonitis. Enormous distension of the gut behind the stricture took place, and subsequently, when the viscus was emptied, enteric inflammation ensued, and afterward paralysis. Neither strychnine nor electricity appeared to be of any service. Although O'Beirne's tube had been introduced in this case to the extent of eighteen or twenty-four inches not fewer than twenty or thirty times, the writer believed he had never passed the sigmoid flexure, and questioned its possibility.—Dr. LOCHÉE thought such passage was rarely accomplished, but believed he had twice achieved it.

2. Dr. WILKS (Ashford) read a paper on the Administration of Sulphurous Acid in Typhoid Fever, which he was unanimously requested to offer for publication in the pages of this JOURNAL, and which will appear in next week.

The members present afterwards dined together.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETING.

A MEETING of the East Sussex District of the South Eastern Branch was held on November 10th, at the Sussex County Hospital, Brighton. Present: Dr. ORMEROD in the chair, and nearly fifty members and friends.

It was made the occasion of inaugurating the new library and museum, recently constructed to the east of the hospital, after plans by Mr. Edmund Scott, a local architect. This building has an Italian elevation, and contains, besides the two commodious rooms devoted to the purposes of a library and museum, a dissecting-room, etc. Altogether, including the books and collection of physiological and pathological specimens, it forms not only a valuable feature of the hospital, but one of which the town and county may reasonably be proud. The existence of this large accumulation of books and specimens is the result, not only of the skill and attention of the medical staff, but of their also having liberally foregone their rights to the pupils' fees, and appropriated them to this use.

A good collection of microscopes was exhibited, under the superintendence of Drs. Kebbell and Hallifax, and Mr. Wonfor.

The medical officers conducted the members through the various departments of the hospital. This is well situated on open and rising ground, with a southern aspect, commanding a view of the sea; it is liberally conducted, and makes up about one hundred and forty beds. Some of its more striking features might be imitated by other hospitals. Its large and airy wards have a remarkably comfortable appearance, dependent, in some measure, on the bedsteads not being, as usual in hospitals, of the "stump" kind, but "half-testers," with a curtain on each side at the head; these, as also the coverlet, are of cotton print, and consequently are easily washed, and give a uniform and very tidy look to the whole. All the wards have bath-rooms, etc., adjoining them. Children's cribs are scattered here and there, amongst the adults' beds: not only in the general wards, but also in the fever wards. The wards of the fever-department accommodate patients of both sexes. The beds have an extra space allotted to them, compared with that in the general wards; and, as no wall is without either windows, door, or fire-place, the ventilation is most complete. This department is so distinct, having its own entrance, staircase, laundry, etc., as to be like a separate hospital.

There are also a laundry for the general wards, a commodious chapel, and a kitchen detached from the main building, with a skylight ventilator.

In the planning of the out-patients' department, great care has been bestowed. There are spacious and well-lighted consulting-rooms for physicians and surgeons, with doors for both the ingress and the egress of the patients; the waiting-rooms being arranged for the sexes separately, so that a current of one sex only passes through the consulting-room at a time. Adjoining each consulting-room is a retiring-room, with a couch and other clinical appliances for the more thorough examination of difficult cases. After having been seen and prescribed for, the patients, in applying for their medicines at the dispensary department, wait in compartments distinct for the two sexes. There are baths, etc., in this department.

The members and their friends, to the number of nearly forty, afterwards dined together at the Old Ship Hotel.

CORRESPONDENCE.

MONMOUTHSHIRE AND SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—It is the intention of some of the members of the Association resident in Monmouthshire and South Wales to make an effort to re-suscitate and reorganise the Branch which once flourished in that district. In furtherance of that intention, it is proposed to hold a meeting at either Cardiff or Swansea (the two largest and most convenient towns in the district) early in the month of December, at which it is hoped, and indeed expected, that there will be a large attendance and influential representation of the profession. The business of the day will be the discussion of the merits of the proposed effort; and, if these are established, to proceed at once to the election of the officers of the Branch.

In order to save time and trouble, and to ensure also that all members of the Association interested in the movement may have due notice, I take the liberty of making use of your columns, and of adding this request: that all who are already members of the Association resident in Monmouthshire and South Wales, and desirous of giving their help, and who have not already intimated to me their wishes, will kindly favour me with a line at their earliest convenience, expressing their preference for one of the towns proposed. I would suggest that the choice should thus be decided; and that the meeting, wherever held, should be fixed for such an hour as will allow most, if not all, the visitors to return home by train the same night.

I am, etc., ANDREW DAVIES.

Russell House, Swansea, November 19th, 1870.

MEDICAL NEWS.

PROVINCIAL STUDENTS.

THE annual return of the number of gentlemen pursuing their professional studies at the provincial schools has been made to Dr. Cursham, the Government Inspector, from which it appears that, although there is a *decrease* at some of the schools, there is an *increase* in the gross number over those of last year, as will be seen from the following:—

1. Manchester Royal School of Medicine and Surgery	...	98
2. Queen's College, Birmingham	...	76
3. Liverpool Infirmary School of Medicine and Anatomy	...	58
4. Leeds School of Medicine	...	46
5. Bristol Medical School	...	30
6. University of Durham College of Medicine, Newcastle-on-Tyne	...	35
7. Sheffield Medical Institution	...	14

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Showing an increase of 27 over the number of last year. It should be distinctly understood that there may be several gentlemen at the different provincial schools whose names have not been returned, in consequence of their being already members of the College of Surgeons, and preparing for the Fellowship of that institution. Others, again, may be attending the schools who, not having yet passed examinations in arts, etc., are not recognised as pursuing professional studies.

THE REGISTRAR-GENERAL now receives returns of population and mortality from Bombay, Vienna, and New York. The returns from Berlin and Paris have been discontinued in consequence of the war.

THE RICHMOND INFIRMARY, SURREY.—The collections in the churches and chapels of Richmond and the vicinity made on Sunday, the 13th instant, were devoted to the support of the Richmond Infirmary. The sums realised amounted to £140. Last year the total was £217; but, owing to the appeals for help for the sick and wounded in the war, and for the *Captain Relief Fund*, some of the collections have been postponed till the beginning of next year, and the collections have all been smaller than last year, owing to the same reason. It is to be feared that our home institutions will suffer for want of the funds which have been so liberally bestowed upon our foreign neighbours.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 17th.

Branfoot, Arthur Mudge, Kennington Park Road (Guy's)
Browne, Thomas Llewelyn, Bodvari, North Wales (University College)
Coombe, George Augustus, Burnham, Essex (Guy's)
Eager, Wilson, Guildford (Guy's)
Griffith, Robert Poole, Port Madoc (Dublin School)
Harris, Arthur George Rawson, Staines (St. Mary's)
Hill, Thomas, Souldern, near Banbury (St. Bartholomew's)
Huggins, Samuel Tillcott, Banbury (St. Bartholomew's)
Jotiffe, John, Shepherd's Bush (Guy's)
Paget, William Smith, Liverpool (Liverpool School)
Parsons, Sidney, Wells, Somerset (University College)
Rees, Howell, Maesteg, South Wales (University College)
Rodwell, Thomas Harry Bate, Loddon, Norfolk (Guy's)
Waller, Walter Augustus Ewen, Bedford (Guy's)
Warner, Francis, Highbury Crescent (King's College)
Wilder, the Rev. H. B., the Rectory, Sulham, near Reading (Westminster)

Admitted members on November 18th:—

Buchanan, Walter, Chatham (Guy's)
Bunting, Janus, Tottenham (Guy's)
Button, Horace Gooch, Bermondsey (Guy's)
Cooke, Edliston Harvey, Jamaica (St. Bartholomew's)
Crackle, Thomas Arthur, Nottingham (Guy's)
Evans, Alfred Henry, Stanley, near Derby (Guy's)
Hind, Henry, Stockton-on-Tees (St. Bartholomew's)
Lacey, Thomas Warner, Loughborough, Leicester (Guy's)
May, Thomas, Bicester, Oxon (Westminster)
Palmer, Charles De Montmorency (Dublin School)
Perrigo, James, Montreal, Canada (Dublin School)
Turner, Henry Crockford, Lewes, Sussex (Guy's)
White, Barrington Syer, Laverham, Suffolk (King's College)

Out of the 99 candidates examined, 16 were rejected in surgery and medicine, and 10 in medicine alone.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, November 17th, 1870.

Archer, George Ernest, Feltham, Norfolk
Kay, Thomas Valentine, Bakewell, Derbyshire
Russell, Ebenezer Geer, Pool, Cornwall

The following gentlemen also on the same day passed their first professional examination.

Dunstan, Robert, Guy's Hospital
Jackson, James, St. Thomas's Hospital
Matcham, Alfred, Guy's Hospital
Turnell, Alfred Pythias, University College
Wallis, Edward Darley, University College

MEDICAL VACANCIES.

THE following vacancies are announced:—

BIRMINGHAM AND MIDLAND EYE HOSPITAL—Dispenser: applications, 30th.
BRAMLEY UNION, Yorkshire—Medical Officer and Public Vaccinator for the Armley Township: 28th.
CENTRAL LONDON DISTRICT SCHOOL, Hanwell—Surgeon.
CRAIGNISH, Argyshire—Parochial Medical Officer.
DONCASTER GENERAL INFIRMARY AND DISPENSARY—House-Surgeon: applications, Dec. 1st.
EVESHAM UNION—Medical Officers and Public Vaccinators for District No. 3, and the Parish of Pebworth: applications, Dec. 12th; duties, 26th.
FARRINGDON DISPENSARY, Bartlett's Buildings, Holborn—Resident Surgeon: applications, Dec. 3rd.
GUISBOROUGH UNION, Yorkshire—Medical Officer for the Danby District: Dec. 13th.
INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, Margaret Street, Cavendish Square—Visiting Physician.
KING'S COLLEGE, London—Demonstrator of Chemistry.
LINCOLNSHIRE COUNTY LUNATIC ASYLUM, Bracebridge, Lincoln—Assistant Medical Officer: applications, Dec. 3rd; duties, 17th.
LIVERPOOL SOUTHERN HOSPITAL—Physician: applications, 29th; election, 30th.
MANCHESTER CLINICAL HOSPITAL AND DISPENSARY—House-Surgeon: applications, Dec. 3rd.
MANCHESTER TOWNSHIP—Resident Medical Officer at the Workhouse Infirmary, New Bridge Street.
POPLAR HOSPITAL—Surgeon to Out-patients: applications, 29th; election, Dec. 7th.
POPLAR UNION—Medical Officer for the West District: applications, Dec. 1st; election, 2nd.
REETH UNION, Yorkshire—Medical Officer and Public Vaccinator for Muker District: applications, Dec. 1st; election, 2nd.
ROMSEY UNION—Medical Officer for Districts Nos. 2 and 5.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, Charing Cross—Surgeon: Assistant-Surgeon: Dec. 1st.
ST. BARTHOLOMEW'S HOSPITAL—Professor of Chemistry in the Medical College: applications, Dec. 9th.
ST. MARYLEBONE, Parish of—Medical Officer for St. John District: applications, 26th.
SOUTHEND, Argyshire—Parochial Medical Officer.
STAFFORDSHIRE GENERAL INFIRMARY, Stafford—Surgeon.
STOCKPORT INFIRMARY—Assistant House-Surgeon: applications, Dec. 1st.
UNIVERSITY COLLEGE HOSPITAL—Assistant Special Professor of Clinical Medicine.

WESTERN GENERAL DISPENSARY, Marylebone Road—Physician: applications, 28th; election, Dec. 7th.
 WEST DERBY UNION, Lancashire—Assistant Medical Officer to the Workhouse at Walton: applications, 29th.
 WISBEACH UNION, Cambridgeshire—Medical Officer and Public Vaccinator for the No. 12 or Upwell and Outwell District, Norfolk: applications, 30th; election, Dec. 1st.
 YORK COUNTY HOSPITAL—Surgeon. !

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*ANDERSON, William, Esq., late House-Surgeon to the Derbyshire Infirmary, appointed Surgical Registrar to St. Thomas's Hospital.
 PRIESTLEY, Henry, Esq., L.S.A., appointed Assistant House-Surgeon to the Sheffield General Infirmary.
 *WARING-CURRAN, J., Esq., appointed Medical Officer of the Mansfield Woodham District of the Mansfield Union, *vice* J. Macnamara, Esq., deceased.

BIRTHS.

MARTIN.—On November 18th, at Portsmouth, the wife of *J. H. Martin, M.D. of a son.
 MURRAY.—On November 18th, at Green Street, Grosvenor Square, the wife of G. C. P. Murray, M.D., of a daughter.

MARRIAGE.

BURCH, Sampson R., Esq., Surgeon, to Mary A., eldest daughter of R. H. ROBERTSON, M.D., of Birchanger, Essex, on November 16th.

DEATHS.

BRABANT.—On November 19th, at Bath, aged 88, Elizabeth, widow of R. H. Brabant, M.D.
 *DOW, John, Esq., Surgeon, of Newgate Street, at Keith, on November 21st.
 FRANKS, Moses, Esq., Surgeon, at Caversham Road, aged 68, on November 16th.
 *GRIFFITH, Wm., M.D., late of Belgrave Road, at Brighton, on November 15th.
 HANKINS, Thomas, Esq., Surgeon, at Clapham, aged 56, on November 17th.
 LIVINGSTONE, Charles H., Esq., Surgeon, at Buckhurst Hill, Essex, aged 33, on November 19th.
 MORISON.—On November 17th, at Johnsburn, Balerno, N.B., Margaret, eldest daughter of the late Sir Alexander Morison, M.D.
 PICKEN.—On November 19th, at Sheerness, aged 9 months, Algernon Hoyland, son of R. Picken, M.D., R.N.
 ROBERTS.—On November 19th, Elizabeth Anne, wife of *D. W. Roberts, M.D., of Manchester Street.
 ROBERTS, William Lloyd, Esq., Surgeon, of Festiniog, aged 26, on November 9th.

VACCINATION.—Mark Fooks, a newspaper editor, was summoned to the Darlington Police Court on Monday for non-compliance with the Vaccination Acts. The defendant said he was not an ultra-opponent of vaccination; but having seen, as he believed, ill effects, and even death, result from it, he had determined to await the result of the Government Commission of Inquiry, when, if the evidence should be sufficiently convincing as to the benefits and safety of vaccination, he would comply with the Act. He was, however, fined five shillings and costs.

BEQUESTS, ETC.—“G. H.” has given £1000 to the East London Hospital for Children.—Mr. C. T. Holcombe of Ilford, Essex, has bequeathed £1100 to the London Hospital (£1000 for a convalescent establishment and £100 for general purposes) and £100 to each of the following institutions:—St. Mary's Hospital, Royal Free Hospital, King's College Hospital, and the Hospital for Diseases of the Chest, Victoria Park, and the Essex Hall Asylum for Idiots.—The last-named institution has also received £500 under the will of Mrs. H. R. Wright.—Mrs. Lavinia Schneider, of Bryanstone Street, Portman Square, has bequeathed £250 to St. George's Hospital.—Miss Amelia Alston of Leamington has bequeathed £100 to the Birmingham General Hospital, and £100 to the Birmingham General Dispensary.—The Royal London Ophthalmic Hospital has received £58 : 17 : 9 per A. L. Mumford, Esq., being the proceeds of a concert and ball held on the premises of the London and North Western Railway at Wolverton.

TESTIMONIAL.—Dr. Jolly has been presented with a gilt timepiece bearing the following inscription. “Presented to Robert Jolly, M.D., F.R.C.S.E., M.R.C.S.L., by the officers and men of the Edgbaston Division of Police as a mark of their esteem on his retiring from the office of House-Surgeon to the Queen's Hospital, Birmingham. November 18th, 1870.”

BOOKS, ETC., RECEIVED.

St. Thomas's Hospital Reports. Vol. I. London: 1870.
 A Report on the Microscopic Objects found in Cholera Evacuations, etc. By T. R. Lewis, M.B. Calcutta: 1870.
 The Wasting Diseases of Infants and Children. Second Edition. By Eustace Smith, M.D. London: 1870.
 Lecture on Protection from Contagion, delivered at Penrith, by Professor Gamgee. Liverpool Medical and Surgical Reports, October 1870.
 The Medical Works of Villalobos. By G. Gaskoin. London: 1870.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
 WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
 THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Casual Communications; Mr. Spencer Watson, “On Squint, with an Analysis of 119 Cases.”
 THURSDAY—Harveian Society of London, 8 P.M.—Linnæan Society.—Chemical Society.—Royal Society.
 FRIDAY—Western Medical and Surgical Society of London, 8 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

To the recently published List of Members of the British Medical Association should be added:—

Blanchard, Thomas Collyer, Linares, Andalusia, Spain.
 Cuddeford, Thomas, Port of Spain, Trinidad, West Indies.

THE following papers read at the Annual Meeting were received at this office on Nov. 18. “On the Health and Meteorology of Newcastle and Gateshead during the years 1868 and 1869.” Dr. G. H. Philipson.—“A Chapter of Difficulties in applying Sanitary Laws.” Mr. L. Armstrong.—“A Note on Entire Wheat Flour.” Dr. Tilbury Fox.—“On Intemperance in its Medical and Social Aspects.” Dr. Eastwood.—“On certain Circumstances which contribute to Impede the Progress of Scientific Surgery and Medicine.” Dr. D. Campbell Black.—“Objections to the Contagious Diseases Act, 1866-69.” Dr. Drysdale.—“On the Transmission of the Infective Germs of Fevers by means of Fluids.” Dr. M. W. Taylor.

AN ASSOCIATE.—The plan of collecting together in one part of the JOURNAL the special correspondence, is artificial and objectionable. The letters of our Liverpool correspondents, and of our special correspondents in Dublin and Edinburgh, were included last week in the leading columns under the head of “week”. The communications of our special correspondents from Berlin, as to the state of the Prussian armies, and from Paris, were published under “Notes of the War”, to which they related. We think this a preferable method. We shall be pleased to receive our correspondent's letters, but shall prefer to place them under the heading best indicated by their contents.

PROFESSIONAL REMUNERATION.

C. J. H., referring again to this question, says: “I beg to submit that, whenever it is deemed necessary to urge any fresh duties, however small, on the members of the medical profession for the good of the public at large, the duty of the public and the Government towards the profession should be always urged and pointed out. We want vigilance and boldness on the part of those who profess to represent our rights, and we ought not to sign a certificate for the good of the country without the country paying us liberally for the information required, just as they pay lawyers and others for any and everything they do.”

These are opinions which will receive general concurrence. At any rate, they have our hearty assent. It is not wise, however, to put too much upon leaders. Our Association is a general council framed with a broadly democratic constitution, and privates in the ranks may, upon occasions and upon such subjects, do great service by supporting their official leaders, and, by calling timely attention to particular instances or facts, which afford opportunities for putting these doctrines into action. Opportunity is a great element in success in such matters, and each man knows where and when the shoe pinches him. He cannot do better than cry out in the columns of this JOURNAL, which are always open to such utterances, and where he will find a large, powerful, and sympathetic audience. C. J. H. cannot devote himself to a more useful subject.

POSTAGE OF THE JOURNAL.—In consequence of the alterations in the rates of postage and conditions of transmission of newspapers, the postage of the *BRITISH MEDICAL JOURNAL* will be one halfpenny; which must be paid each time the *JOURNAL* is retransmitted by post. In order to retain the privileges of a newspaper, the *JOURNAL* must not be stitched.

NAVAL MEDICAL SERVICE.—The following questions were submitted to the candidates at the recent examination for Assistant-Surgeons in the Royal Navy.

Anatomy and Physiology. (Mr. Busk.) Monday, November 7th.—1. Enumerate the muscles and describe their respective actions, by which the deformity witnessed in the following fractures is probably caused: *a.* Intracapsular fracture of the neck of the femur; *b.* Fracture at the lower end of the femur immediately above the condyles; *c.* Colles' fracture of the radius; *d.* Fracture through the surgical neck of the humerus. 2. What spinal nerves enter into the formation of the cervical and sacral plexuses? Describe the general arrangement of the nerves in each plexus. State also what muscles, and what extent of surface are supplied by the branches of each plexus. 3. Mention the various excretions, and point out the principal constituents of each, and the sources whence each of these constituents is derived. 4. Give a full account of the anatomical and physiological relations of the pneumogastric nerves. 5. Describe the membranous portions of the urethra and the muscles and other parts in immediate relation with it.

Surgery. (Mr. Pollock.) Monday, November 7th, 2 to 5 P.M.—1. Describe the symptoms of fracture of the neck of the thigh-bone within the capsule, the treatment to be adopted in such a case, and the probable result of the injury. 2. A patient accidentally pushed his arm through a pane of glass, and lacerated his wrist and hand in several places; from one of the wounds there was arterial hæmorrhage: what treatment should be adopted in such a case? 3. A man received a kick from a horse in the left lumbar region, and it was diagnosed that the kidney had been ruptured: state the symptoms which would be present under such circumstances, the prognosis, and the treatment. 4. Describe the symptoms of gonorrhoeal ophthalmia, and the treatment to be pursued. 5. By what symptoms would hydrocele of the tunica vaginalis be distinguished from hæmatocele: and what should be the treatment in the latter condition? 6. Describe the symptoms of rupia, the usual cause of the eruption, and the treatment for its relief.

Medicine. (Dr. Parkes.) Tuesday, November 8th, 10 A.M. to 1 P.M.—1. Contrast the symptoms of intermittent, relapsing, and enteric fevers, and give minutely the morbid anatomy of the last-named disease. 2. What do you mean by locomotor ataxy, and progressive muscular atrophy, or wasting palsy? Describe the symptoms and pathology in each case. 3. Describe a typical case of pulmonary emphysema, giving the symptoms, causes, and effects. Describe the treatment of a case complicated with acute general bronchitis. 4. What are the chief causes of ascites? Enumerate the diseases which may be confounded with it, and describe the operation of paracentesis. 5. In the case of a pregnant woman, near her full time, what symptoms would lead you to diagnose the death of the child? How would you treat the case; and supposing there was much decomposition and foetid discharge, mention the dangers you would apprehend and the precautions you would take? 6. What are the chief medicines supposed to act as diuretics? What are the reasons for supposing they do so act, and in what diseases are they given?

Natural History, etc. (Dr. Thomson.) Tuesday, November 8th, 2 to 5 P.M.—*a.* Zoology. 1. Give the distinctive characters of the five classes of vertebrata. 2. Describe the principal modifications of the respiratory apparatus in the invertebrata. 3. Give a sketch of the geographical distribution of mammals.—*b.* Botany. 1. Describe the structure of the stem of an exogen and of an endogen. 2. Describe the development of a moss from the spore. 3. Give the essential characters of the order *Compositæ*. 4. Define *exosmose* and *endosmose*, and explain the circulation of fluids in plants.—*c.* Physics, etc. 1. What is the composition of the atmosphere, and its physical characters? 2. Explain the structure of the common pump. Why is there a limit to the height to which it will raise water? 3. What is a glacier? How is it formed, and how does it move? 4. Give an account of the area occupied by the chalk-formation in Great Britain; and state the mode in which it has been formed.

The title of Dr. Sankey's paper on the Pathology of General Paresis was accidentally omitted from the table of contents last week.

THE SOUND OF THE LETTER "I".

SIR,—Might I ask you to act as arbiter in the following questions. Is the penultimate of "phthisis" to be pronounced as phthi or phthe? and is the *i* in the corresponding syllable of words terminating in "itis" to be pronounced as *i* or *e*? I should feel extremely obliged if you would give us a decision in this matter in your issue of next Saturday; and, trusting you will excuse my troubling you,

Dublin, November 19th, 1870.

I am, etc., V. RETSROF.

* * It is strictly correct to pronounce the *i* as the English *e* in the words to which our correspondent refers. In those localities—such as England—where it is the custom to give the diphthongal sound to the *i*, it would perhaps be pedantic to say phthisis and pleuretis; but where national custom as to the pronunciation of *i* as *e* obviates the possibility of any charge of pedantry, the *e* sound should be used without hesitation.

TREATMENT OF CONSTIPATION, ETC.

SIR,—The to me deplorable experience, that very few have suffered so much as I have from hæmorrhoidal disease and its concomitants, makes the letters of Dr. Spender and the Rev. Dr. Bell interesting to me; and I feel it a duty to give my experience.

My first attack of piles suddenly surprised me, in an otherwise fair state of health, twenty-five years ago, when in a state of great anxiety and business difficulty, with irregularity of the bowels. I laid the strangulated pile open, took medicines according to my lights, and got well again; and, notwithstanding constant horse-exercise, both in work and sport, suffered for six or seven years from dyspepsia and irregularity of the bowels. I thought I had found a sovereign remedy in an alkaline decoction of aloes, with myrrh and ammonia and citrate of iron, and preached my doctrine to my medical friends, who all, when they tried it, were fully satisfied as to the efficacy of the treatment on the liver and other viscera. But man is born to trouble; and trouble came on me again very strong, and that brought the piles; and altogether my sufferings were frightful. I was compelled to lay myself up, and was confined some time and operated on again, and, after weeks of suffering, crawled about again with the most agonising little ulcers, re-

quiring a magnifying-glass to be seen. I recovered again in a fashion, and kept going for a year or two, when further anxiety laid me low again, and the amount of protrusion was so great that I was compelled to go through a more serious operation, and after that struggled up again, never knowing an hour's ease. I could neither walk nor sit at ease, having a troublesome fissure, and the bowels always a trouble. I found, at last, that the only suitable medicine was a pill very like seven grains of compound rhubarb pill, with three of Castile soap, daily before dinner. The exact prescription is as follows for a mass.

R. Powdered rhubarb ʒiv; aloes ʒiij; myrrh ʒij; Castile soap ʒiiss; cajuput oil ʒj. Five or ten grains to be taken as a dose before meals.

Whether it was the soap, or the oil, or more particularly the taking before dinner or food, I cannot say; but certain it is that nothing gave me permanent relief till I fortunately dropped on this remedy. I had an ample stool always the following day, and by the help of a pessary the fissure healed. Ever since, now fourteen years, I have been free from my old enemy, although still having more than a fair share of anxiety and trouble. My experience of the efficacy of the medicine has been very large among literary and business men and delicate women. I solemnly say, this simple treatment has never failed; and I have known a small dose of ten, eight, or even five grains, to sufficiently regulate the bowels, and never fail, for ten years together, in patients previously accustomed to take peristaltic persuaders in doses of aloes, etc., of three or four times larger quantities. The same has cured hundreds of delicate women. But I have often found that with them a dose, or two, or three, of castor-oil is required, or they have colicky pains, from the fact of their often having large accumulations of hardened feces in the bowel, which are antagonistic to the persuaders.

Anyone using this practice, should carefully attend to the preparation. Chemists' work is very different from ours; at least, I find it so. The rhubarb and aloes should be rubbed together first; then the myrrh; then the oil. All should be well rubbed and mixed, and then the soap added, which should be real Castile soap—not the trumpery New Pharmacopœia stuff. The mass should be kept in well stoppered bottles. For use, only a very small proportion of rectified spirit is required to make a splendid pill-mass. It may seem surplusage to write this; but I know by experience that any divergence from the directions alters the efficacy of the remedy. It is comparatively useless to use it at any other time than before a meal; and that meal may be the one that leads to the most convenient hour for having the bowels moved next day, experience showing how many hours after taking are required.

I am, etc.,

F.R.C.S.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE portraits of the late Professors Syme and Simpson, Sir James Clark, etc., published in the *BRITISH MEDICAL JOURNAL*, together with their obituary notices, seem to have found considerable favour. We find them reproduced in the *Canada Medical Journal* and in the *New York Medical Journal*.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Indian Medical Gazette, Oct. 24th; The New York Medical Gazette, Nov. 5th; The New York Medical Record, Nov. 10th; The Boston Medical and Surgical Journal, Nov. 10th; The Madras Mail, Sept. 12th; The Shield, Nov. 19th; The Bedford Times, Nov. 15th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Charlton, Newcastle-upon-Tyne; Dr. Sansom, London; Dr. A. Marshall, Preston; Dr. C. Muirhead, Edinburgh; Mr. F. Waterhouse, Pontypridd, Glamorgan; Dr. Syson, Manchester; Dr. Chambers, London; Mr. Southam, Manchester; Dr. Woodman, London; Dr. W. D. Williams, London; Dr. Matthews Duncan, Edinburgh; Mr. W. Fairlie Clarke, London; Mr. Steele, Bristol; Dr. R. A. Warwick, Richmond; Mr. J. P. Purvis, Greenwich; Dr. A. Crespi, Oxford; Mr. C. J. Denny, Malvern Wells; An Occasional Correspondent, Dublin; Dr. Wilks, Ashford; Mr. Garraway, Faversham; Mr. Johnston, London; Mr. A. B. Steele, Liverpool; Dr. Rutherford, London; Mr. Pittock, London; Dr. Taylor, Penrith; Mr. G. C. Coles, London; Mr. C. Hazard, London; Mr. W. M. Baker, London; C. H. J., London; Dr. W. H. O. Sankey, Cheltenham; Dr. D. Thomas, Ystalyfera; Mr. W. Anderson, Derby; Dr. Heslop, Birmingham; Mr. Bewley, London; Mr. W. Stokes, Dublin; Dr. Sieveking, London; Dr. H. Thompson, London; Dr. A. P. Stewart, London; Mr. Wheelhouse, Leeds; Messrs. Cowan and Sons; Mr. B. J. Vernon, London; Dr. John Roberts, Chester; Mr. J. B. Curgenvin, London; Dr. Stanley Haynes, Edinburgh; etc.

LETTERS, ETC. (with enclosures) from:—

Mr. W. D. Husband, York; Our Dublin Correspondent; Mr. J. M. Bryan, jun., Northampton; An Occasional Correspondent, Cambridge; Dr. Protheroe Smith, London; Dr. W. MacCormac, Belfast; Mr. A. Haviland, London; Dr. T. Clifford Allbutt, Leeds; Mr. J. C. Wilkinson, London; Dr. Whitmore, London; The Honorary Secretary of the Croydon General Hospital; Dr. W. C. Arnison, Newcastle-upon-Tyne; The Honorary Secretaries of the Association of Medical Officers of Health; Mr. T. E. Jones, Tyn Twell, near Conway; Mr. T. Leary, Castlederg; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Mr. Waring-Curran, Mansfield; Dr. A. Ransome, Manchester; Dr. Dyce Duckworth, London; Mr. R. H. Meade, Bradford; Dr. Embleton, Newcastle-upon-Tyne; Dr. George Johnson, London; R. M. P.; A London Man; Mr. A. Davies, Swansea; Dr. Whythead, Hastings; Dr. Drury, Sunderland; Dr. J. Bell, Edinburgh; Dr. A. Meadows, London; Mr. Bolton, Newcastle-upon-Tyne; F.R.C.S.; Dr. Tilt, London; The Secretary of the Pathological Society; Dr. Waters, Chester; Dr. E. Symes Thompson, London; Our Edinburgh Correspondent; The Secretary of the Clinical Society; Mr. T. W. Williams, Birmingham; Dr. White, Southport; Dr. Wolfe, Glasgow; Dr. Balthazar Foster, Birmingham; Mr. S. Rossell Henson, Hull; Mr. H. A. Adamson, North Shields; etc.

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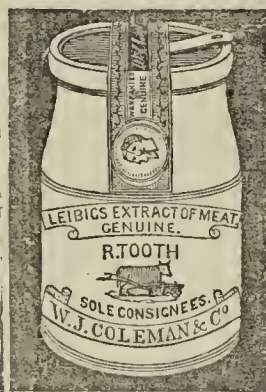
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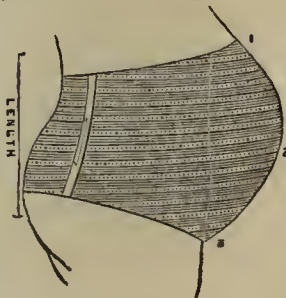
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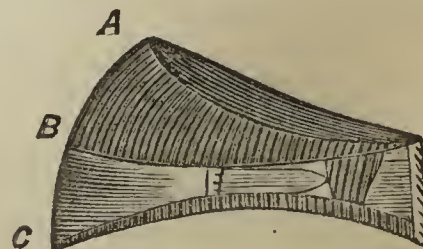
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STATISTICAL REVIEW

OF

TEN YEARS OF DISEASE IN MANCHESTER AND SALFORD:

BEING AN ANALYSIS OF THE WEEKLY RETURNS OF HEALTH AND METEOROLOGY ISSUED BY THE MANCHESTER AND SALFORD SANITARY ASSOCIATION DURING THE YEARS 1861-1870.*

BY ARTHUR RANSOME, M.D., M.A. Cantab., Manchester.

RETURNS of health and meteorology have been made by the Manchester and Salford Sanitary Association every week for the last ten years. These returns contain a record of about 700,000 new cases of disease coming under treatment at the chief public institutions—Poor-law, charitable and corrective—of Manchester and Salford. During the same period, meteorological tables have also been published, from both urban and suburban stations, from the Manchester Royal Infirmary, the Salford Observatory, and from several private gentlemen residing at different distances from the town.

Throughout the whole of the time no alteration has been made in the character of the disease-returns, except a slight change in the list of diseases, introduced in deference to the wishes of the British Medical Association, and in order to produce returns which would be uniform with those from other places; but from first to last the returns have been made from the same institutions, and from the same districts. No contribution has been discontinued, and no fresh institution has been entered upon the records. They are thus homogeneous in every part, and suitable for comparison from one period to another.† Moreover, these returns are singularly complete, notwithstanding the voluntary character of the agency, for they are collected by a voluntary association from twenty-eight or twenty-nine unpaid but willing contributors, yet in the course of the ten years they have now run, scarcely a single return has been missing. Omitting the first few months, before the organisation was complete, in the first year two returns only out of 1456 were not sent in, and since then not a single contribution has been lacking. These facts ought surely to have some weight with those who are now hesitating about the possibility of obtaining a National Registration of Disease; and I submit them to this Association as a proof of the excellence of the scheme of registration which they have adopted.

It must be noticed that, apart from the collective value of these returns—a value which I hope to be able to prove very great—they have also had a most important office to perform throughout the course of their production. Each week they have constituted a report upon the health of the districts to which they refer. Each return, as it has issued from the office of the Association, has been published in the local papers, and has given distinct and reliable information as to the good or bad health of the district. It has thus either served to disperse groundless fears and to calm the public mind in times of anticipated pest; or it has reported the first onset of an epidemic, and has both declared the time of its origin and indicated the part of the town which has first suffered its attack. An instance of the good offices of the publication in this respect may be found in an incident of the cotton-famine, at the time of the lamentable distress in Lancashire caused by the American civil war in the years 1862 to 1864. Much fear was felt lest the privations to which the people submitted so bravely should produce diseases of ill-nutrition, and especially typhus or famine-fever. It was then pointed out that this pest usually made its appearance in force not at the very time of the famine, but one or two years later; and, although there was then no sign of disease proceeding from deficient nourishment, the warning was uttered to prepare for an outbreak in the future. Notwithstanding this statement, however, the alarm was not subdued, and it was soon afterwards increased by the fact that an unfavourable report upon the health of the district was presented to the Privy Council by one of its medical inspectors. By the aid of its weekly returns, however, the Committee of the Sanitary Association were able to refute the charge at that time, and to show that the cotton-distress had, at that time, in no way caused any deterioration in the health or strength of the operatives.

* Read in the Public Medicine Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

† The only alteration that has been made was one of arrangement, in the week ending April 17th, 1870, when the Regent Road Poor-law District was divided into two.

Typhus fever and the other forms of fever did not, in fact, show themselves in force until the autumn of 1865; and then the Committee were able at once to give notice of its increasing prevalence, and to urge the importance of the speedy isolation of cases. It is probable that, owing to the prompt adoption of this course in several unions, many valuable lives were saved and the progress of the disease was checked for a time.

This incident shows only some of the useful functions performed by the returns. They have served many other purposes. Thus, they not only tell of the degree of prevalence of any disease, but, when read together with the death-column, which gives the deaths occurring amongst the diseases recorded, they show the fatality or virulence of the plague. Again, when these deaths, happening amongst the poorer classes (*i.e.*, paupers and those seeking charity), are compared with the total deaths of the whole population, the mode of incidence of the disease is displayed; the tables indicate the classes of the community upon which falls the chief burden of the disease. It was from these sources that, in 1863, Dr. Morgan, then Honorary Secretary to the Sanitary Association, was able to mark the gradual spread of scarlet fever, small-pox, and typhus fever, and to show that “the word ‘outbreak’”, as applied to these epidemics, conveys an idea opposed to the truth”; that “they do not fall suddenly on the population like some destroying blight, but by little and little wellnigh felt their way, as though courting the adoption of measures opposed to their spread”. Later, again, he could illustrate from the returns the operation of contagion, and could show, first, that these diseases made their way from one or more centres of infection; and, secondly, that their progress was in great measure independent of mechanical conditions of health; that “in many districts of Manchester—second to none as regards the attention bestowed on the drainage or the purity of the water-supply”—even here scarlet fever especially had taken a highly malignant form, and that the proportion of deaths to seizures proved unusually high.

The greater malignancy of these epidemics in certain quarters of the town, and at certain periods of their progress, was also clearly marked by the weekly record; and it was interesting to learn from them the mode in which the different scourges affected different classes of the population—that scarlet fever was most fatal to the rich, and that measles and whooping-cough found victims only amongst the poor.

The extreme prevalence of constitutional syphilis in Manchester and Salford has several times been shown from the returns, and has been made an important argument for preventive measures. Thus it has been calculated (again by Dr. Morgan) that “in the course of only two years, about 6000 of the poorer inhabitants of Manchester suffered from well-marked symptoms of syphilitic infection”; and these cases constituted but a small proportion of those which occurred among the remaining classes of the population.

The meteorological tables supplied to the Sanitary Association have also had their use. They have served to mark the action of the weather upon such diseases as are affected by climate—notably diarrhoea, bronchitis, catarrh, and kindred affections—and they have enabled their editor to note the remarkable differences existing between urban, suburban, and the different kinds of rural climate.

These are a few only of the advantages accruing to a community from the publication of such returns of disease. I would commend them to the attention of those who are seeking to improve the sanitary condition of the poor; and to those who desire to learn more of the natural history of disease, I submit that the constant and valuable information given by these records would amply reward those who would take the trouble and expense of collecting them.

It is to be hoped that at some future time the Government may see the importance of establishing a National Registration of Disease. Our country is even now, perhaps, foremost in the excellence of its vital statistics; and these returns would prove a most worthy addition to the national records. In the meantime, however, voluntary associations similar to that in Manchester might with great advantage be formed in all the chief towns of the kingdom, and thus much valuable information might be obtained.

Apart from the details which have been enumerated, we might look for distinct evidence of the diseases peculiar to a district, and might learn the influences most favourable to those diseases—the influence of climate, of different trades, manufactures, and other circumstances, peculiar to a district. The advantages in the cure of ailments, now supposed to be due to “change of air”, might be found to arise from “change of earth”; and we might be able to select the residences most suited to certain temperaments. As Sir Thomas Browne says, with quaintness: “He is happily seated who lives in places whose air, earth, and water, promote not the infirmities of his weaker parts, or is early removed into regions that correct them. He that is tabidly inclined were unwise to pass his days in Portugal. Cholical persons will find little comfort in Austria or Vienna. He that is weak-legged must not

be in love with Rome, nor an infirm head with Venice or Paris. Death hath not only particular stars in heaven, but malevolent places on earth, which single out our infirmities and strike at our weaker parts" (Letter to a Friend. Sir T. Browne's *Works*, vol. iv, p. 38. Pickering: 1835). It is, however, as a historical picture of the course of disease in Manchester and Salford during the last ten years that these returns are now especially interesting. In these volumes, collected with such care by the self-imposed labours of many medical men, we have the sum of all the evils which have afflicted for a decade the poorer portions of the population of our city. Here they are all displayed.

Coherent in statistical despairs,
With such a total of distracted life....
To see it down in figures on a page—
Plain, silent, clear, as God sees through the earth
The sense of all the graves: that's terrible
For one who is not God, and cannot right
The wrong he looks on.

Aurora Leigh, p. 54. Eighth edition, 1866.

The period embraced in these returns, of which I am giving an analysis, is one of unusual interest. It includes the "hard times" of the cotton famine, the cold winters of 1864 and 1867, the excessively hot summers of 1865, 1868, and 1869, the periods of drought of 1868 and 1870, and the wet season of 1866. We may hope, therefore, to find many interesting connections between the variations of the climate, the social condition of the populace, and the course of different diseases.

In a paper read before this Association, at the meeting at Oxford, "On Epidemics studied by means of Statistics of Disease", I have already ventured to trace in the curves of diseases in St. Marylebone and Manchester the connections between epidemics of different places at a distance from one another—the power of contagion, the wave of epidemic disease, the singular succession of epidemics, endemic influences, and the predisposition to epidemic disease. The conclusions given in this paper, however, were drawn from monthly returns, and therefore could not show the operation of atmospheric changes so clearly as weekly records. I propose, therefore, at the present time to attempt to trace the action of meteorological phenomena. To this end we will examine the course of each disease, and attempt to discover whether it receives any modifying influence from climatic elements. The sources of error to which we are exposed in making use of these records are few and generally easily ascertained.

1. There might be in times of distress an unusual number of persons receiving poor-law relief, if only for medicines: this happened largely during the cotton famine; but it was easily checked by a reference to the returns of the Poor-law Board, and allowance was made for the fact before any conclusions were drawn from the tables.

2. There might be an increased run upon the charitable and other institutions supplying the returns from some cause not necessarily connected with a real increase of disease. This case again occurred once during the period of registration. In 1866, owing to the presence of cholera in France and the Netherlands—cases of this disease also having appeared in London and Liverpool—a sudden panic seized upon the inhabitants of Manchester. Extraordinary means for the treatment of bowel-complaints were provided by the Boards of Guardians; and, as a matter of course—perhaps in order that good physic should not be wasted—there was an extraordinary number of applicants for it. The trifling nature of the majority of these cases was at once shown by the fact, that in the week ending September 1st, when the disease was apparently at its height, only four deaths occurred from this complaint in the public practice of the whole of Manchester and Salford.

3. A third source of error is more important; but it is one which has, I believe, very slightly, if at all, affected the Manchester returns, and it has been guarded against to the utmost in preparing the scheme: I allude to the imperfect diagnosis of some of the cases.

Any specimen of the returns would show that the schedule of diseases comprises only those most easily recognised, and no attempt is made to obtain any elaborate classification of disorders, even in the case of the different forms of continued fever—typhus, typhoid, febricula, and relapsing fever. A general heading has been left for those cases which have not been at once distinguished, and this column is now frequently used.

There are three principal directions in which we may seek for the manifestation of an influence of meteorological changes upon disease.

1. We may discover the seasons of greatest and least prevalence of the disease; and, if these are similar in each year, we may note the concurrence of the meteorological phenomena at those times. 2. We may notice the direct action of any extreme variation in temperature or in some other element in checking or promoting disease; and 3, it may be possible in some cases to find that there is a direct accordance between the fluctuations of disease and even the lesser variations of the weather. It is obvious, however, that this last observation will very seldom be made, except in the case of the most obvious climatic dis-

orders, such as bronchitis and catarrh, diarrhoea and dysentery. I will first, therefore, speak of these disorders.*

Bronchitis and Catarrh.—There was an almost exact correspondence between the variations in prevalence of these complaints and the variation of temperature. The highest point of the disease-curve in each year always corresponds with or immediately follows the lowest depression of the degree of temperature; and the fewest cases of these complaints occur when the temperature is highest. Again, in the ten years, the lowest points of the disease-undulations are found in the hottest seasons. Thus, in 1865, in the week ending August 19th, there were 95 cases; on the 11th August, 1866, 91 are noted. In the hot summer of 1868, the lowest number is 83, in the week ending August 8th. In the other years, the number of cases rarely sinks below 100. There is, however, some evidence of the occasional epidemic nature of these affections. The largest number of cases recorded in any year was in the week ending November 22nd, 1862, when 677 new cases applied for relief; and the curve representing the disease has the regular rise and fall of most of the ordinary epidemics. In this week and the two adjoining weeks the temperature was certainly low, the lowest in the year; but the weather was much warmer than it was afterwards in 1864 or 1867, when the number of cases of disease was much less. There does not seem to have been anything peculiar in the degree of humidity to account for the rise. It is much more probable that there was at this period some peculiar epidemic constitution present; and, as Sydenham remarks, "the condition of the atmosphere which favours epidemic diseases is less a manifest than an occult condition" (Epistle 1, *Epidemic Diseases*, paragraph 6.)

Diarrhoea, on the other hand, it is not necessary to say, is essentially a summer-disease. It is, however, only when the mean temperature is very high (above 60 deg. for the week), and when it remains for some time at this point, that the complaint becomes very prevalent. A mean temperature below 60 deg. is unfavourable to its progress. These propositions were affirmed in 1860, from the returns of the London General Board of Health; but they are fully supported by the returns before us. The largest number of cases took place in the summers of the years 1863, 1865, and 1866, when the temperature rises for several weeks above a mean of 60 deg. In the hottest summer of all, also (1868), the disease attained a higher number of seizures (373) than in any other year, with the exception of the panic year of 1866.

Rheumatic Fever has also been usually considered a climatic disease; and to some extent the returns for the three years bear out this opinion. It is most common in the winter; but it seems to be a very capricious complaint, its curve leaping up and down in an unusual fashion. One week, a large number of cases has been recorded; and the next, although there may have been no increase in the temperature, the disease-wave sinks down to a very low ebb. All that can be said is, that the highest points of its curve are found in the winter or early spring, the lowest in the warm summer weather. Sydenham's accuracy is thus thoroughly proved by his observation that "the disease may come on at any time; it is commonest, however, during the autumn."

The chief difference in the influence of the weather upon the truly climatic diseases, and upon epidemics, seems to lie in the fact that it can be traced every year in the former class, and only occasionally in the latter. Epidemics unquestionably proceed from something more than atmospheric sources. An epidemic poison may be altogether absent for several seasons; but, when it is present, we may generally discover that the weather has some influence upon it; and I think that this conclusion will be fully supported by an examination of the remaining curves.

Scarlet Fever.—During the ten years given on the chart, there were two distinct epidemics of scarlet fever; the first attaining its height in October 1863, the second in October 1868. The disease, however, never entirely disappears; and in each year it attains its maximum in one of the autumnal months—September, October, or November. In 1861, its highest point was in the week ending October 5th; in 1862, November 15th; and in 1863, October 17th, when nearly 100 new cases came under treatment. In 1864, the epidemic of the previous autumn was declining throughout the spring and summer; but it again rose to a maximum in the week ending September 17th. In 1865, there was scarcely any difference throughout the year; the two highest points being 17 cases in the week ending January 14th, and 15 in the week ending September 23rd. In 1866, the highest point was in the week ending September 15th; in 1867, the largest number of cases was in the weeks ending October 12th and 26th and December 21st; in 1868, in the week ending October 10th, 88 cases being the maximum. In 1869, with the exception of the declining curve in the spring, the highest point was in the week ending September 11th. On the other

* Diagrams were exhibited, showing the degree of prevalence of the different diseases in each week.

hand, the lowest readings are nearly always in the warm and dry summer months.

From these facts, as I have before ventured to observe,* it appears probable that a large amount of aqueous vapour in the air greatly facilitates the formation and action of the scarlatina poison; and I believe, also, that this is especially the case when there are sudden fluctuations in the pressure of the atmosphere, as shown by the barometer; a diminished pressure being favourable to the disease.

Small-pox also displays two distinct epidemic waves; the first occupying the early part of 1863, and attaining a maximum in the week ending June 6th; the second occurring in the winter of 1864, and continuing throughout the first half of 1865: its highest point was in the week ending November 19th, 1864. There was also a general increase in the prevalence of this complaint in 1869 and 1870. This disease does not appear to be subject to any atmospheric influence. We can only say that, during the ten years observed, it was never high in the autumn.

Measles is essentially a disease of winter and spring—never very high in the summer, except in the year 1868, when it reaches its maximum in the week ending June 27th. It is also much less regular in its progress than the two diseases first described. Dr. Mühry has recorded his opinion that measles in the temperate zone experiences no change with the temperature. Dr. Donnelly and Wilde remark its prevalence in spring; and, on the other hand, Sydenham classed it amongst epidemics which set in early in January, and reach their height in March, then decline and disappear as midsummer approaches. This statement is thus in accordance with our statistics. (*Medical Observations.*)

Whooping-cough apparently visited this city every two years with great regularity in winter and in spring; the epidemic of the winter of 1863 alone being less distinct than those of 1861, 1865, 1867, and 1869. This exemption of the winter 1863 may, perhaps, be accounted for by its unusual mildness; but the same observation does not apply to the winter of 1866, which was unusually cold, and in which there was no epidemic of whooping cough. From observations upon the weekly returns of the General Board of Health I ventured in 1860 (*op. cit.*) to remark that whooping-cough seemed to be much influenced by extremes of heat and cold, the curve, on the whole, rising with the fall, and sinking with the rise of temperature. The two years' cycle observed by this disease is very singular and needs explanation. It is almost perfectly regular. There were very few cases in the winters of 1860, 1862, 1864, 1866, and 1868; but in the intervening cold seasons the cases were abundant, showing that, although climate may have some influence, there was something quite apart from weather producing it.

Continued Fever.—It was not until the year 1867 that the different kinds of this disease were separated at the wish of a Committee of this Association. Until then, the heading even included febricula, in order to avoid any danger of error in the reporting; and, in consequence of this fact, it was necessary to carry the combination on through the whole period. Typhus is now, however, given separately; and its variations closely tally with those of "continued fever, all kinds", showing that probably a large proportion of the unclassified cases were also cases of this disease. It is not very easy, however, to connect the variation of these diseases with any one of the meteorological elements. The number of cases is always comparatively low in early summer; and no better description can now be given than that of Sydenham two hundred years ago—"it takes birth when spring passes into summer, and it rises towards maturity as the year advances (with the decline of the year it declines also)." Finally, the frosts of winter transform the atmosphere into a state unpropitious to its existence.

In the course of the ten years period, there were two distinct epidemics, each extending over about two years, the first culminating in January 1866, the second in the autumn of 1868; this last most violent invasion of disease was followed in the winter and spring of 1869 by a large prevalence of the fever, almost amounting to an epidemic. Besides these great waves of disease, the culminating points of the lesser undulations occur in each year in the months of September, October, and November. And yet it seems impossible to trace any direct connection between this disease and the variations in either humidity or temperature. It seems most probable that a certain degree of both moisture and warmth are favourable to the spread of the poison—that, like a deadly vegetable growth, it flourishes best when there is a fitting soil, and when the other conditions of organised life, heat and humidity, are present.

Unfortunately, in our large towns, materials for it to feed upon are never absent; and many of the fever haunts of Manchester which are still allowed to exist, are true forcing houses, from which the disease sends its branches far and wide through the town.

It may be remarked that there has been comparatively little typhoid

fever in Manchester itself. It rose to the highest pitch about September 5th, 1868, when there were 30 cases reported; but, as a rule, it is not so general in the town as in the country. This fact must probably be connected with the better drainage of the town, and perhaps with the excellent water-supply.

It may be interesting to note the remarkable absence of any epidemic disease towards the close of the year 1866. Perhaps this fact may be placed in relation to the heavy rainfall of that year, the most copious in Manchester for seventy-two years.

I have now mentioned some of the interesting questions which are opened up by a series of medical archives such as we have in these volumes, but others remain behind. We have yet to learn the very nature of the poison which is produced in such abundance at one time, and which is almost absent at another. We do not know in what way it is developed, nor the mode in which it is able to spread simultaneously in detached places. The recent discussions upon the presence of disease-germs in the air show that we are, perhaps, approaching to a knowledge of some of these questions. Professor Lister's observations on the filtering powers of the lungs points to, at least, one mode in which the poison may enter the system. From my own observations upon the microscopic contents of respired air, it seems probable that much that is breathed into the lungs with the air is retained by the bronchial mucus, and only gradually makes its way out along to our tubes. Whatever be the nature of the poison, whether fluid or solid, organised or not, it is obvious that this sojourn in the system cannot but give it ample opportunity for mischief.

I do not venture now to discuss these questions; the answers to them must be drawn from careful observation and a wide induction from well observed facts. They are too difficult to be solved quickly: as Sir Thomas Browne puts it,—“Flat and flexible truths are beat out by every hammer, but Vulcan and his whole forge sweat to work out Achilles his armour.” This much, however, may safely be asserted that, even if the actual nature of the poison were ascertained, there would still be a necessity for our statistics before its habits and its choicest hunting grounds could be clearly made out. We must still sum up in the words of Sydenham,—“We are only guides and pioneers to surer observers than ourselves, who may better be able to investigate the history and cure of diseases. And, in truth, so varying, manifold, and (if I may use the term) so delicate is nature, and so much does she sport in the production of diseases that it is not the work of one man's lifetime (long as it may be) to graphically depict their varied phenomena and their appropriate cures.”

THE ADMINISTRATION OF SULPHUROUS ACID IN TYPHOID FEVER.*

By G. WILKS, M.B., Ashford, Kent.

ABOUT a year and a half ago, we began to meet with sporadic cases of typhoid fever in Ashford and its neighbourhood. The cases occurred in detached houses in different localities. The cases soon began to multiply, and to form themselves, to some extent, into small groups in limited areas: then, constantly on the increase, the fever during the summer, after a clearly proven fouling of the water-supply, attacked such a large percentage of the population as to cause quite a panic among the inhabitants and in the country round.

So long as the cases were sparsely dotted about the district, we found them amenable to ordinary treatment: that is to say, the diarrhoea could be controlled by sulphuric acid, opium, logwood, catechu, chalk-mixture, and the like; the strength could be sustained by quinine, strychnine, etc.; and there was little or no tendency to die from the mere poison of the fever. But, as the cases multiplied, and by their localisation began to indicate foci of contagion, the treatment became more difficult; for the diarrhoea became more unmanageable, the prostration more marked, and an alarming tendency to die became manifest in some instances.

At length, in September of last year (1869), I began to use creasote, which I had heard much praised in connexion with typhoid fever; and certainly it was beneficial. But it had one great drawback: it nauseated the patients, so much so, that the only patient we lost at that time persisted in attributing his death to the creasote. I therefore set to work to find something which should possess the good without the bad qualities of creasote.

The patient to whom I just now alluded was a spare, strong, healthy man, active and temperate. Yet within seven days of my seeing him

* Paper on the Influence of Atmospheric Changes on Disease. (*Manchester Literary and Philosophical Society's Transactions.*)

* Read before the East Kent District Meeting of the South Eastern Branch, at Canterbury, on November 10th, 1870.

first he was dead; and, within twenty-four hours after his death, putrefaction had advanced so far that the room in which the body was laid had to be hermetically sealed from the rest of the house; and at the funeral, sixty hours after death, it was scarcely possible for the mourners to follow at the ordinary distance, so rapid had been the decomposition. Accordingly, I determined that the agent I wanted must be an antiseptic or anticatalytic; and, having in view the different theories concerning fever-poisons, that it should also be antagonistic to the development of low vegetable organisms.

Of course, the first remedy which suggested itself to me was chlorine; for who does not know its wonderful efficacy in scarlet fever? It is, too, a potent antiseptic, and certainly hostile to the growth of germs. But still I could not but think that, inasmuch as the poison of one fever is without doubt totally distinct from that of any other, so the agent which should be most active in arresting the development of the poison in each fever should be different also. The notion is a crude one—perhaps open to the charge of being unscientific. At any rate, it has been by me only crudely and empirically tested.

My next thought was to try carbolic acid; but I feared to risk its depressing influence where the prostration was already so marked.

I therefore made up my mind to try sulphurous acid, which I had once or twice used in cases of sarcina ventriculi, and which, I knew, could be made palatable, and was not depressing. The first patient upon whom I tried it was a daughter of the gentleman who had attributed his death to the creasote. She was very ill before I saw her—alarmingly prostrate both in body and mind, vomiting and purging, with the abdomen tympanitic and painful to the touch, and distinct gurgling about the ileo-cæcal valve on palpation. The pulse was 120, and very feeble; the temperature 103 deg. With some fear as to the issue of the case, I began to administer the sulphurous acid freely. After twelve hours, I saw her again. The vomiting had ceased; the purging was fast abating; the tympanitis was much reduced; the feeble pulse had *not* grown feebler; but the parched tongue was moister, and the thirst less. She said that the medicine, each time she took it, relieved her within a few minutes of the indescribably miserable feeling in her bowels, and of the nausea which had before oppressed her. She could now take the nourishment ordered without fear of retching; and the whole aspect of the case, from the first a severe one, was more hopeful. To cut a long story short, she recovered, though she had entirely resigned all hopes.

Plentiful opportunities for using the acid came to hand; and the more we tried it, the better we liked it, and the more firmly we became convinced of its efficacy. This summer we have used the acid in more than a hundred and seventy cases with signal results; of them all, one only died, and he was an habitual drunkard, and would not take his medicine. In one case only did we withhold the acid; the patient, a female, died. But the circumstances were exceptional, and probably more to blame for the death than the want of sulphurous acid was.

I will now quote from my note-book a few of the more remarkable cases.

CASE I.—Mary W., aged 73, almost a pauper, had been ill a fortnight, and confined to bed three days. She had vomiting and purging, with yellow blood-streaked fluid stools. The abdomen was tympanitic. She was unconscious, save when strongly roused. Pulse 130, fluttering; respiration 30. The tongue was white at the edges, brown in the centre, and dry as a chip. The diagnosis was easy, for the rash was developed. The prognosis was very unfavourable; but she took the acid, and has since married.

CASE II.—Annie P., aged 4, was the child of wretchedly poor parents. Her mother, far advanced in pregnancy, was herself suffering from the fever in a mild form. This child had been ill in bed for ten days, and was, it was thought, moribund when I was sent for. She was continuously delirious, purging incessantly, so that the whole house stank of her offensive motions. The rash was copious; the pulse uncountable; the tympanitis extreme; the vomiting so persistent that the attendants had for hours ceased to give her food. Could any case in itself, and in all its collateral circumstances, be more unpromising? With the utmost difficulty, and by dint of the sternest resolution, I forced the grandmother, who nursed the two patients, to give the child the medicine regularly, and feed it every ten minutes. For four days it lay seemingly at the very point of death, so that every time I entered the house I was taunted with harassing the last moments of a dying child. She took the medicine, and recovered.

CASE III.—Annie F., aged 2, an only child of poor but not poverty-stricken parents, had all the above mentioned symptoms. You will doubtless agree with me that an only child is a more troublesome patient than one of a more numerous family; yet this child too recovered under sulphurous acid treatment.

CASE IV.—Edith M., aged 3 months, the child of well-to-do trades-

people, did not have the rash, but the vomiting, purging, and all the other symptoms, as badly as any case; but she too recovered.

CASE V.—Thomas H., aged 54, a well-to-do mechanic, had been under the hands of a skilful medical man for some weeks with such symptoms as I have before described; but, so often as the diarrhoea was checked, the burning heat and vomiting were greatly increased, and *vice versa*, till at last he was told he could not live the night, and was beyond human help. He then sent for me. When I saw him, I found him in a state of most alarming prostration. His pulse was too fast and feeble to be counted. He had vomiting; the abdomen was tympanitic; and he had purging, the bowels having acted thirty-four times in the last twenty hours. I could not discover any rash; but his state was such as to preclude any very searching examination. I prescribed the acid. In the next sixteen hours his bowels acted twice; he was not once sick. He recovered. This case seems to me to say volumes for this medicine, for there is no doubt that the man had taken all the drugs ordinarily used without deriving permanent benefit or arresting the disease; and yet from the moment he swallowed the first dose of sulphurous acid he began a recovery in which he never faltered afterwards.

The acid should be given in doses of from two and a half to twenty minims, according to age, repeated every four hours, and continued for a week, ten days, or even more, until the patient complains of tasting, smelling, or feeling like sulphur or lucifer-matches; or, in the case of infants, until they actually emit an odour of the gas from their skin and breath. I have never pressed its use beyond this, under the belief that the system must by that time be supersaturated; nor have I ever seen reason to regret stopping it at that point.

Where I have seen the case early, before the diarrhoea has become severe, I have given simply the sulphurous acid flavoured with syrup of orange-peel in water. Where the diarrhoea was troublesome, I have added sulphuric acid and laudanum, according to the age of the patients. Thus my usual formulæ for adults have been the following.

R Acidi sulphurosi ℥ij; syrupi aurantii ℥iij; aquam ad ℥vj; or

R Acidi sulphurosi ℥ij; acidi sulphurici diluti ℥ij; tincturæ opii ℥xx; syrupi aurantii ℥iij; aquam ad ℥vj.

For infants:

R Acidi sulphurosi ℥xv; syrupi aurantii ℥iij; aquam ad ℥j; or

R Acidi sulphurosi ℥xv; acidi sulphurici diluti ℥xv; tincturæ opii ℥ij; syrupi aurantii ℥iv; aquam ad ℥j.

A sixth part of either of these mixtures is to be taken every four hours.

In one case only can I recollect diarrhoea *setting in* during the sulphurous acid treatment, and without having previously existed; but the patient had old standing renal disease, from which she still suffers, though she has almost forgotten fever.

Lest I should be misunderstood, I will state distinctly what I claim for the sulphurous acid in typhoid fever: that it arrests the further development of the fever-poison, and, by continuing this arrest long enough, exterminates the fever. Briefly, it is an antidote.

In some of my early cases, I left off the acid after a few days' use, because the patients seemed better. In almost all such cases, they had a relapse, which was again immediately arrested by the resumption of the acid.

I believe that, where we get the cases soon enough, we may stamp out the disease then and there. For instance, in one thirty-six hours I was sent for to see four children belonging to two different families visiting in the town. I had no doubt as to what their symptoms denoted, and at once gave the acid. At my visit next morning, I was met in each house with smiling faces and the assurance that I had been mistaken in my diagnosis, for the little patients were much better. Of these children, three remained under my care, took the acid for a week, and made complete recoveries, without relapse. The fourth seemed to ail so little that the parents would not heed my advice, but carried her home after two days of the acid. Shortly afterwards, I learned that, three days after reaching home, she had been attacked by typhoid fever, and hardly escaped with life. I make no doubt that, had the other three also discontinued the acid so soon as they seemed well, they too would have had a return of all their symptoms, and have suffered the ordinary course of typhoid fever.

Very possibly I have failed to convince you of the advantages of using this drug; but let me again remind you of the plain fact that, of one hundred and seventy-three cases of this fever occurring in our practice during the past fourteen months, two only died, and those two did not take the acid: for the one it was not prescribed; the other was a drunkard, and would take nothing. Of the hundred and seventy-one who took sulphurous acid, not one lost his life; and there were but few who were not convalescent within fifteen days of commencing the treatment. Surely such a result will induce you to try the medicine for yourselves when opportunity offers.

RECOLLECTIONS OF WORK IN AN AMBULANCE

By WILLIAM MAC CORMAC, F.R.C.S., Surgeon to the General Hospital, Belfast.

V.

September 6th.—There is nothing very eventful to remark of this day. Some of us paid a visit to the camp of French prisoners, of which so much has been said in the papers. At least 100,000 men were confined in an island, formed by a canal and a branch of the Meuse, but few of them had any cover, and food of every kind was exceedingly scarce. It had been raining for several days, and the ground was churned into mud ankle deep. At every step men, seeing our red crosses, would stop us, say they were very sick, and beg to be taken to hospital. They looked what they said, poor fellows; but we could do nothing. The colonel of the 4th Chasseurs d'Afrique, the Marquis de Galifet, asked if I could give him some quinine, as he was then suffering from an accession of African fever. He was out in the drenching rain like the rest, protected only to a certain extent by the hood of a rude *char à banc*. I gave him the quinine, and he begged me, in return, to accept his Arab horse. It is a beautiful animal, and I brought it home with me. It served me, when in Sedan, in place of my own horse, a very good one, which I had brought from Paris, and which was stolen from me. It was difficult to feed him, as fodder was almost unattainable, and his daily dinner consisted for some time of the fragments of stale bread from the wards.

September 8th.—I find I have mentioned in my diary that even up till this day large numbers of dead horses lay unburied, and that it would be several days before all could be put under ground. A great many also had to be killed and thrown into the river. There was no food for the unfortunate beasts, many of whom, like their masters, had been severely wounded. To-day, for the first time, we got our boots cleaned, and towels to dry our faces after washing—luxuries to which we were previously quite unaccustomed, and which we appreciated accordingly.

On the 9th, 10th, and 11th of September, 102 new patients were sent to us from different minor ambulances. All were cases of very serious injury, and many had been previously submitted to amputation on the field. This influx of patients overcrowded us a good deal, and we were most anxious to get tents into which we could put any cases of fever or of erysipelas which might arise, or those threatened with pyæmia, or cases likely otherwise to poison the hospital atmosphere, so as thus to relieve the wards. Of course there were many amongst these new cases which required operation. There were cases of injury so severe that one could scarcely understand any attempt whatever being made to save the limb. I suppose it was everywhere else the same as it was with us, far too much work for the surgeons to do; for instance, in the following example.

CASE XXIX.—Guerieri, 4th Marines, wounded on September 1st in three places, was admitted to Asfeld on September 10th. A ball had traversed the right thigh without injuring the bone. The left tibia was extensively smashed, and so was the upper part of the left femur, close to the trochanters. He was in a very weak exhausted state. It was evident from the moment we first saw him that it was hopeless to attempt to save the limb; but his condition was not such as to warrant immediate interference. He was accordingly carefully tended and fed; and on the 18th, when he had made a considerable rally, it was decided to afford him the only chance he had, that of disarticulation at the joint. The operation was performed in the usual manner with a long anterior flap, and the femoral and other arteries were twisted. The poor fellow died very shortly afterwards. He never rallied from the effects of the shock; and I think that the amount of chloroform he took had a large share in the rapidity of the fatal issue. In no operation, perhaps, does the administration of chloroform demand greater carefulness than in this one.

CASE XXX.—The only other instance of disarticulation at the hip at Asfeld was operated upon on the 10th. The upper and back part of the left thigh, as well as a great portion of the outer side of the limb, had been carried away by a shell-explosion, which tore off a considerable portion of the left buttock as well. As the bone was uninjured, as well as the main vessels, an unsuccessful attempt was made to preserve the limb, or at all events to avoid immediate amputation at the joint, a procedure so uniformly fatal. This, however, failing, the operation became necessary on the 15th September. The flap required to be made of unusual length, and was taken from the inner aspect of the limb, as the soft parts on the outer and back part of the thigh were almost completely removed. The after-shock was considerable; but the administration of brandy and beef-tea after some time produced a good reaction. The man was placed in a tent by himself, with a special attendant, and un-

der the particular charge of Dr. Nicholl, who was most assiduous in his care of him. On the next day, the patient's condition was excellent, the pulse 120, and pretty strong; he had slept and eaten well. For five days I felt quite sanguine as to his ultimate recovery. Each day he appeared stronger and better. On making my evening visit on the sixth day, I found Liprendé, for that was his name, weak and exhausted. He said that the attendant had neglected him all day, and that he had got neither food nor wine. It was, unfortunately, too true. The rascally *infirmier* tired of his work and bolted, leaving his unfortunate patient to take care of himself. He had been seen two or three times during the day, but, as he made no complaints except to me in the evening, the neglect was not discovered till too late to remedy. I do not say that the patient would otherwise have eventually recovered, but there was everything about him and his condition to make us hope and expect that he would do so. He died, however, during the course of that night.

Four cases of resection of the elbow-joint were admitted on the 10th. One of them had been only partial, and proved fatal. In another, amputation had to be immediately performed. The joint had been cut out through a transverse incision across the posterior aspect. There was no attempt at union, and the wound was a large hole into which one might almost put a closed fist. The fore-arm was only attached to the arm by a narrow isthmus of skin and muscle in front. We had several other cases of resection of the elbow, which had been performed outside in this manner—that is, by a transverse in place of a longitudinal incision. The men told us that they had been operated upon by German surgeons, but the method adopted is one which would find little favour in this country. A few cases of injury of the spine were admitted about this date, of one or two of which I may give particulars.

CASE XXXI.—Jean Pujolle, farrier in the 5th Cuirassiers, was wounded in two places on the 1st September. He had received a flesh-wound, caused by a fragment of shell, in the right arm, and his neck was traversed by a ball, which, entering opposite the anterior edge of the left sterno-mastoid, at the mid-point of the muscle, emerged a little to the right side of the fifth cervical vertebra. On his admission, nearly a fortnight after the injury, we found the body almost completely paralysed, from the chest downwards. The respiration was abdominal, the cheeks were flushed, the countenance exceedingly anxious, and the bronchial tubes partially choked with mucus, which was only imperfectly expectorated. The pulse was 110. Both arms were completely paralysed. There was not a trace of power of motion in either. The left leg was also completely paralysed, but there was slight power of voluntary motion in the right leg. We found, however, sensation almost perfect in the left leg, while there was none in the right; and we found complete sensibility to touch in the right arm, while the left was quite anæsthetic. Reflex action could be excited in the paralysed leg. The patient passed both urine and fæces involuntarily. Frequently he cried out on account of pains in his limbs, and the slightest movement in bed caused him great agony. The temperature was usually very high. In this helpless condition this poor creature lingered on. Each day we hoped death would rid him of his great suffering. Bed-sores formed of course; but his general condition remained throughout pretty much as I have described it. I expected before I left to have had an opportunity of performing what must have proved a most interesting autopsy. The patient, however, did not give up the struggle till after I quitted Sedan. I transferred him, with a few others, to the care of the surgeons of a Dutch ambulance just arrived at Sedan, who faithfully promised they would make a *post mortem* examination and let me know the result. I fear it has not been done, since I have twice written on the subject and as yet received no reply.

CASE XXXII is somewhat remarkable in consequence of being an example of almost exactly similar injury. Bonnevey, wounded on the 1st, was also admitted on the 10th September. The ball entered through the upper part of the right sterno-mastoid muscle, and emerged two inches and a half to the left of the *vertebra prominens*. The right side was completely paralysed. He died the following day, and there was no leisure at this time for any *post mortem* examinations.

CASE XXXIII.—Pescher was shot in the region of the second lumbar vertebra; he was also one of the late admissions. A careful search was made for the ball, and it was found impacted in the body of the vertebra, having smashed the transverse processes. It had become, doubtless, altered a good deal in shape, for, though it could be seized by the forceps, no reasonable efforts sufficed to remove it. A few pieces of cloth were alone pulled out; and after a short time very profuse hæmorrhage occurred. The wound required to be plugged to arrest it, and the patient died the same afternoon—the day, in fact, he was admitted. This case illustrates one of the dangers attendant on meddling with bullets deeply lodged in the spine; and it shows that in some cases the extraction of a bullet, even with a good hold of it, is no simple

task. We had a few other cases of spinal injury, but it is unnecessary to mention any details concerning them.

The number of buttock-wounds which we had under treatment is sufficiently remarkable. They were of all shades of severity—some being slight flesh-wounds, caused by the grazing of a shell or piercing of a bullet, while in others the greater portion, or even the whole, of the glutei muscles had been carried away by the explosion of a shell, and the ilium or sacrum injured at the same time. We had in all about eighteen such cases; and if it be true, as is alleged, that the Maréchal de Mac Mahon was wounded in this region, it can be taken as no indication of want of bravery if a soldier should unfortunately be struck there.

CASE XXIV.—Claude Sannier, artilleryman, was struck by a piece of shell on September 1st. He was admitted to Asfeld twelve days afterwards. We then ascertained that almost the whole of the left ilium was exposed, as well as the upper part of the sacrum. The glutei muscles were, on the left side, completely stripped off the bone, and torn from their attachments throughout almost the entire length of the crest of the ilium. On the right side of the sacrum, the soft parts were also very much injured. The entire length of the wound was twelve inches, and it was six inches wide at its broadest part. In the bottom of it, a considerable portion of the sacrum was exposed, and almost the whole of the dorsum illi, which was fissured in several directions. A portion of bone seven inches long and five inches wide was exposed, black and dead. The wound around looked healthy; the granulations were springing up at the edges. Some fragments of bone showed signs of beginning to loosen. The patient lay constantly upon his face. His bowels were regular; he passed urine readily; and his appetite was good. He suffered absolutely nothing. He was twenty-two years of age, and looked a placid, good-tempered fellow. Nothing was done, save dressing the wound carefully, until October 6th, when I extracted several inches square of the outer table of the iliac bone, which had become loose. The whole length of the crest itself would exfoliate; but, although loosened, it was not yet ready to come away. I transferred this fellow, in the best possible condition, to the surgeons of the Dutch ambulance, on October 8th. From first to last, his wound seemed to give him very little annoyance. He never complained, and I never saw in his face an expression in the very smallest degree indicative of suffering.

CASE XXV.—Jean Cabirol, 22nd Regiment of the Line, was wounded and admitted to hospital the same day as Sannier; and the nature of his wound was very similar, though not quite so extensive. It involved, however, about half of the left buttock, the muscles being torn away, and the bone exposed and fractured, both the ilium and the sacrum. The right buttock was also extensively lacerated. But it did not look by any means so horrible a wound as the last. Until September 25th, Cabirol got on pretty well, when he had a rigor, followed by sweating. The left leg began to swell enormously, into a condition of hard œdema, probably from occlusion of the iliac vein; and he died on October 1st, with all the symptoms of pyæmia. A *post mortem* examination showed well marked hypostatic congestion all over the front of the body. He also had been lying constantly upon his face, like the last man. The left profunda vein was found to be full of pus. There could be no mistake about it. The pus was seen flowing up wherever the part was compressed, after slitting up the femoral vein, which, as well as the iliac, contained a soft red clot. The liver contained numerous abscesses; and in the lungs was a number of large yellow softish masses, like tubercle, which must have been deposits of pus, not yet softened down into ordinary abscesses.

There were two cases in which these buttock-wounds proved fatal from secondary hæmorrhage; and it may here be observed that the secondary hæmorrhage so frequent in gun-shot wound is one of the most serious of complications; it indicates that the fluids of the organism are vitiated by some poison, pyæmic or other. The already weakened forces of the constitution are still further lowered by the losses of blood, difficult to check, and ever ready to return; and the result generally is, that the patient yields, whether the original injury be a very severe one or a comparatively slight one. The main vessel of the injured part may be ligatured; but too often this serves merely as a temporary check; and, if the patient do not succumb previously to the disordered state of his blood, the bleeding will recur probably when the ligature falls. The great frequency of secondary hæmorrhage has for its chief causes the absence or faultiness of sanitary conditions, and the debility of the patients, induced by privation from nourishing food, and the exhaustion and exposure to which they have been subjected. The means calculated to remove or anticipate such evils will, if applied, be of more value than the ligature in coping with secondary bleeding after gun-shot injury.

About this date (Sept. 11th) we had a visit from Captain Brackenbury, chief representative on the Continent of the English National

Society for Aid to Sick and Wounded in War. His appearance was most acceptable. Up to that time we had heard nothing from the outside world. We knew not if Paris were besieged or taken, or if a victorious Republic had routed the hitherto victorious German legions. Soon after his visit, we received stores of all kinds—blankets, bedding, food, and surgical assistance in the persons of members of the English Society. What we had been up till then relying upon were the stores which we had brought with us from Paris, partly supplied there by the French Society, and in part too by the English. During all the time we were at Sedan, the French Military Intendance supplied us with rations and with wine, and with a staff of hospital servants. Dr. Sims has, in his Report, already awarded a just tribute of praise to the lady-nurses, who arrived also about this time. I cordially endorse what he has said. I only wish we had had them from the outset. In that case, lives which were sacrificed through want of adequate nursing, or rather through the absence of any proper nursing at all, might have been saved. I suppose that it was unavoidable, that much which might have been done was, through the force of circumstances, left undone; but it is not the less distressing to reflect upon afterwards.

To-day we tasted, for the first time since our arrival, a most welcome treat. Some cans of Irish preserved milk, which is most excellent, reached us. This pleasure was, however, more than counterbalanced by a discovery of which we learnt the same day. During the bombardment of September 1st, a couple of fugitive Zouaves made their way into an underground cistern of water which supplied the hospital, all other supply from the town having been cut off. They went in to escape one form of death, only to meet, poor fellows! with another. They were drowned; and their bodies were not discovered until, the water becoming low in the cistern, it was found necessary to descend into it to get the daily supplies for the house. I did not object to eating horseflesh, to which for a day or two we were reduced, although I confess I did not like it; but, when we discovered the nature of the infusions with which we had been washing it down, I admit that I for one, and I believe all the rest, felt very uncomfortable.

A CASE OF RUPTURED UTERUS.

By JOHN M. BRYAN, Jun., L.R.C.P., Northampton.

MRS. L., aged 42, a washerwoman, living a few miles out of town, was at the full calculated period of her eighth pregnancy. She had never aborted. She had had bad health, and suffered from abdominal pain during the latter part of her pregnancy. She had always had hard labours and large children. She had been ill-treated by her husband (a labouring man), and even turned out of doors in the middle of the night during the week preceding her confinement. The midwife, an experienced person, who attended her during her labour, stated that labour-pains commenced on the morning of Saturday, August 27th, previously to which flooding came on; and that on the following Tuesday morning, about nine o'clock, she first felt the child's head *per vaginam*. Mrs. L. lost a considerable quantity of blood; but, as labour progressed, the flow ceased. She complained of pain high up in the stomach during labour, and was sick two or three times. During the last two hours she had very violent pains. A still-born male child was born at 2 P.M.; the placenta was removed with ease about twenty minutes afterwards. There was no faintness during labour; but she became very faint momentarily about a quarter of an hour after the placental birth, and then vomited once.

At 7 P.M. (Tuesday, 30th August) I was called in. The patient was propped up in bed, pallid and very faint; respiration was quick; the voice weak and scarcely above a whisper. The extremities were cold, and the surface covered with a clammy sweat. The abdomen was large and very tender to the touch. The uterus was contracted; there had been no external hæmorrhage. The placenta was removed entire. I lowered her head, gave diluted brandy, and spoonfuls of milk and arrow-root, a full dose of opium, ordered beef-tea to be made at once, and applied a bandage lightly to the abdomen, bottles of hot water to the feet. The sickness returned, the vomited matter being sometimes of a yellowish green colour. I remained with her till 10 P.M., and gave an unfavourable opinion; in fact, I thought she would not live through the night.

August 31st, 10 A.M. She lay on her back, and had not slept since delivery. The before-mentioned symptoms continued. The face was expressive of pain. The abdomen was more swollen, tympanitic, and tender. I drew off about three ounces of dark-coloured turbid urine, and determined to examine the interior of the uterus, which I had abstained from doing the night before, thinking any additional pain and faintness might hasten her end in her then extreme state. On intro-

ducing my hand into the uterus, which was contracted and contained only one or two small clots, it was found to be ruptured at its anterior part, near the neck: the hand passed easily through the rent amongst the bowels. No hæmorrhage followed the examination. I ordered linseed-meal poultices to be applied to the abdomen, and the opium to be continued every few hours; ice, soda-water, brandy, etc.; hydrocyanic acid, and sal volatile in spoonfuls of water, were also ordered. At 6 P.M., she had not slept, but seemed a little more cheerful: the other symptoms remained as before. Laudanum was added to the poultices.

September 1st, 10.30 A.M. The patient had not slept. She had passed a little urine in the bed. She was becoming weaker. There was much abdominal pain, with vomiting of a coffee-ground colour. The lochial discharge was very offensive. I ordered an injection of carbolic acid *per vaginam*.

September 2nd. She passed a night of agony, faintness, and restlessness, with suffocative feelings, and expired at 2 A.M., sensible to the last.

Post Mortem Examination made by A. G. Osborn, Esq., of Dover, September 2nd, 4.30 P.M., fourteen hours after death.—There was no appearance of external violence or of ecchymosis on the abdomen or pubes. The abdominal muscles on section had an unusually dull red hue. The peritoneum was injected and dark red, with some fibrine between the contiguous edges of the intestine. The uterus was of the size of a child's head—dark-red anteriorly, as though a dusky-coloured hæmatine had stained the tissue. The peritoneum at the fold between the bladder and uterus was torn transversely for six inches, and the uterine tissue torn transversely for five inches anteriorly at its neck; its tissue was two inches thick, and in a semiputrid pulpy state, of a dark port wine colour. Through this rent the hand passed readily.

REMARKS.—Did the lining membrane of the uterus give way on the Friday when the flooding commenced? If so, is it not probable that the rent continued to enlarge during labour, but that the peritoneal coat did not give way till after the birth of the child and placenta? and does not the sudden faintness and pain at the chest mark the time? After such a lesion, is it not surprising that life should have lasted sixty hours? Was the tearing owing to fatty degeneration of the uterine tissue, or to mechanical violence either from without or from pressure of the child's head, or from the first and last causes acting together?

ON THE REACTION OF POTASSIC IODIDE WITH THE OFFICIAL TRISNITRATE OF BISMUTH.

By W. BATHURST WOODMAN, M.D., and C. MEYMOTT TIDY, M.B.

AN out-patient attending at the London Hospital was taking the bismuth mixture of its Pharmacopœia, when it was thought advisable to add iodide of potassium to the previous prescription. When she came the following time, she appeared much alarmed at a red precipitate in the mixture, which she supposed to be "red lead" purposely put in by some neighbour, the sediment having been almost colourless when she reached home. As no mention is made in the ordinary text-books of materia medica of the decomposition which takes place, although it is doubtless well known to metallurgists, it occurred to us to examine the reaction a little more closely. The change takes place slowly, and appears to consist in the formation of an iodide of bismuth, potassic nitrate remaining in solution. This iodide of bismuth is a dark-red substance of cubic form, and seems to be a simple iodide, which is almost insoluble both in water and in excess of potassic iodide. Some of its properties are curious. It is a very insoluble substance; for, in addition to what is mentioned above, we may add that saturated solutions of chloride of ammonium, chloride of sodium, ferrocyanide of potassium, and corrosive sublimate, do not dissolve it in any appreciable proportions. Acetic acid dissolves it slightly, without effervescence. On boiling with liquor potassæ or ammonia, the hydrated oxide of bismuth (H Bi O_4) is produced, which is insoluble in excess of either reagent. On treating this iodide with strong nitric acid, there was active effervescence; fumes of iodine being given off, a blackish, metallic-looking substance being left, entirely soluble in spirit, which proved to be pure iodine. Acid nitrate of bismuth remained in solution, which was not precipitated by a small quantity of water, or until neutralised. With hydrochloric or sulphuric acid there was no effervescence, but iodine was again precipitated; with the latter some iodic acid was formed. Oxalic acid also decomposed the salt, setting free the iodine; the action being somewhat slower than it was in the case of the mineral acids.

A few trials of it in doses of 5 to 20 grains appear to indicate that it is not an energetic therapeutic agent, which is probably to be ascribed to its comparative insolubility.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ROYAL INFIRMARY, EDINBURGH.

CASE OF SKIN-GRAFTING.

(Under the care of Dr. GILLESPIE.)

FOR the report of this case we are indebted to Mr. Page, M.B.

Two pieces of skin, each about a quarter of an inch in diameter, were removed from the front of the upper arm; the portions, being simply raised on a pair of dressing-forceps, and cut off with a stroke of the scissors, were placed upon the surface of an ulcer in a healthy granulating condition, but exhibiting tardy action. The pieces of skin were retained in position by strips of isinglass plaster, and the ulcer dressed in the usual manner with simple lotions, lint, and bandage.

Two days afterwards, the dressings were removed, and the patches were found adherent, with a very narrow bluish pellicle surrounding their margins. On the fourth day, an increase in the suppurative action was observed; and one of the patches fell off dead, while the other desquamated, leaving a delicate and transparent pellicle behind, resembling in every respect the film of cicatrix encroaching upon the breach of surface from the margins of the ulcer. On the sixth day, the patch had grown to nearly double its original size, and at one corner reached the circumference, with which, by the tenth day, a broad isthmus of communication was effected. When this occurred, the cicatrization of the ulcer progressed rapidly, and by the twenty-third day it was complete.

At no period was there any temporary disappearance of the grafted skin; and the transparent and apparently vascular film, noticed first on the fourth day, continued to be visible and of similar appearance throughout.

I may state that the object in transplantation of skin in this instance was to heal a surface, the remains of a large callous ulcer, which, from the amount of cicatrization that had already taken place, prevented further contraction of the surrounding textures.

MIDDLESEX HOSPITAL.

PUERPERAL CONVULSIONS.

(Under the care of Dr. HALL DAVIS.)

THE patient in this case was a primipara. The attack followed delivery, and was preceded by cephalalgia. Anasarca, with albuminuria, was present. The attack came on during sultry, cloudy weather, accompanied by lightning and thunder.

Ellen A., married, aged 20, of good previous health, had lived in London for several years. She was plethoric, short-necked, and full-chested, and was delivered naturally of a fine living male child on August 1st, after twenty-four hours' labour. Three days before delivery, she complained of pains in the head, and had œdema of the lower extremities, eyelids, and hands. Labour went on favourably; but two hours afterwards she was seized suddenly with very violent epileptiform fits: the face became livid, the jaws firmly locked; the tongue was bitten; and foam issued from the mouth. There were clonic contractions of the muscles of the whole body. The fits recurred in quick succession until she was placed fully under the influence of chloroform. This was given for various periods on four occasions, between the hours of twelve and four. Each time, when its effects passed off, the fit became as violent as before. Ice was applied to the head; afterwards, blisters to the nape of the neck. A dose of ten grains of calomel and a minim of croton-oil was administered, but did not act for six hours. The fits continued severe; and the pulse, although in frequency only 84, was very full, hard, and bounding. Thirty-four ounces of blood were taken from the arm. The pulse after this rose to 96, and became soft and compressible. At 7.30 P.M., three hours after the venesection, she had no return of the fits. She was conscious, and complained of great headache and soreness of the tongue. The urine contained one-third albumen.

Aug. 2nd. The patient had had no return of the fits, and had slept fairly. She still complained of headache. She was thirsty. The skin was moist. Pulse 98, regular, full, but not very compressible. There was no tenderness over the abdomen. There was a fair amount of lochial discharge. There was a good secretion of milk.

Aug. 3rd. The headache was better. The bowels were open. Pulse as before. The urine contained one-fifth of albumen. She was ordered to take ten grains of bromide of potassium and five minims of spirit of chloroform three times a day.

Aug. 4th. The headache was better; the appetite improving. She seemed better in every respect. The medicine was continued.

Aug. 6th. She was free from pain, and going on very well. No albumen was found in the urine.

Aug. 8th. She felt rather weak, but complained of no pain. The mixture of bromide of potassium was repeated. Under a tonic and nutritive treatment, the patient made a good recovery.

REMARKS BY DR. DAVIS.—In the course of some remarks on the above case, Dr. Davis observed that it was an illustration of puerperal eclampsia occurring in a plethoric primipara, and exemplifying on the one hand the failure of anæsthetic treatment, and on the other the prompt success of blood-letting, in this form of the disease. Before the attack, the case had exhibited the very usual premonitory signs—anasarca and albuminuria—consequences of renal congestion, due to pressure of the gravid uterus upon the kidneys, the influence of that pressure being increased by the plethoric condition of the patient. That the albuminuria, and presumably accompanying presence of urea and of other urinary excrementitious matters, in the blood, was not attributable to organic disease of the kidney, was apparent from the fact that the excreting function of the kidneys was fully restored within a few days after delivery. As appears in the history of other reported cases, a highly electrical condition of the atmosphere preceded and attended the outbreak of the attack in this patient, and might possibly have contributed in some degree as a cause. In the after-treatment, the bromide of potassium appeared to be of service in removing the cephalalgia. Dr. Davis next referred, by way of contrast with the above case, to another, which had in the present month (October) been submitted to him for his opinion and advice—an example of the asthenic form of the disease occurring in the first stage of labour, and demonstrating the complete success of the anæsthetic treatment by chloroform. Up to its administration, labour had not advanced; and the convulsions had persisted throughout the day, although the bowels had during the day been fully cleared out. So soon, however, as anæsthesia was fully induced, the paroxysms of the disease were entirely and permanently subdued. Dilatation of the os uteri now progressed rapidly to full dilatation; and, no obstacle being present, the labour was rapidly and satisfactorily completed, without resort to instrumental aid. In this case, also, a considerable amount of albumen was detected in the urine drawn off by the catheter, before anæsthesia was had recourse to. Œdema of the face and extremities had in this instance also preceded the convulsions.

LEEDS GENERAL INFIRMARY.

CASES OF LOCALISED CONVULSION.

(Under the care of Dr. CLIFFORD ALLBUTT.)

In a recent number we reported an interesting case of epileptic chorea of the right arm which occurred in the Edinburgh Royal Infirmary under the care of Dr. Laycock. The following are notes of a similar case which occurred in the practice of Dr. Clifford Allbutt of Leeds.

Thomas Glenton, aged 45, was admitted an out-patient of the Leeds Infirmary on the 16th October, 1868. The symptoms closely resembled those of Dr. Laycock's patient; but in Glenton the case was distinctly made out to be of syphilitic origin. He had had primary syphilis about six years before; and, for twelve months previously to admission, had suffered intensely from great tenderness and from pain (much aggravated at night) in the middle part of the right radius. This pain and tenderness was, on admission, distinctly to be made out in the place indicated; no actual node could be discovered, but the bone seemed irregularly thickened. Nineteen days before admission, at 7 P.M., while sitting in his chair, the (left) arm "suddenly flew up into the air" and became violently convulsed, so that his wife was not able to hold it. The left side of the face was also convulsed, but the legs were both motionless. At the beginning he cried out wildly, "Stop my arm", but quickly afterwards lost his senses, and would have rolled out of the chair. No palsy followed the fit. For seven days he had no return of the attack, and felt as usual when the fit returned at the same evening hour. This time, both arm and face were affected in the same order, the other three limbs being unmoved. He lost his senses also towards the end of the convulsion. The following night the attack was repeated, with, however, but a transient affection of consciousness. No more attacks occurred before admission, when he was put upon simple treatment, as it was not until his second visit (October 22nd) that the above facts were made out. It then appeared that he had

had another fit the day after admission, in which he did not lose his senses at all, although in other respects the fit resembled the preceding. The arm since this last fit had for the first time become decidedly weakened. There was no trace of palsy in the face or elsewhere. The optic discs were normal. The patient was placed, on October 22nd, on large doses (ten grains) of iodide of potassium, and improvement at once appeared. He never had another complete fit, though he had startings in the limbs for a few weeks at times; the arm, also, became again almost as strong as usual. On December 17th, he was discharged, cured.

Dr. Allbutt believes that the convulsions in these cases are often of peripheral origin; and he states that he accidentally induced such a fit one day in an ill-nourished syphilitic tailor. The tailor had been admitted for nodes on the tibiæ; and, while the case was being demonstrated to the class, a very painful node on the right tibia was handled freely, and at last was thoughtlessly pressed upon very sharply. In a moment the limb became convulsed in clonic spasm agitating the man in bed; the convulsion spread also to the right arm, but in much less degree. The spasm seemed to last about fifteen or twenty seconds. During the latter half of the time the man was evidently unconscious, and the iris in each eye was slightly convulsed. As the movements ceased he awoke, and seemed to wonder for a moment where he was and what had happened to him. He had never had a fit before, nor did any occur subsequently. On this occasion, he remembered a sharp pain running up the leg and the beginning of the spasm. After that he remembered no more, as "it rose up to his head and took away his senses".

About three years ago, a case more resembling a paroxysmal chorea of the right arm occurred in a man who came from a distance to be under Dr. Allbutt's care. He had suffered from several fits of spasms confined to that limb, but not attended with loss of consciousness. No syphilis or local irritation could be made out. He had but one attack while in the hospital. On this occasion his face suddenly assumed an aspect of great distress, and he exclaimed, "Oh! it is coming, it is coming". At this moment the right arm was thrown into violent agitation, the chief movements being a beating of the breast with great violence and rapidity. It could be restrained by the bystanders but with difficulty, and the restraint seemed to distress him more than the free convulsion. The man was scarcely insensible, but rather bewildered, for he was roused by any attempt to stop the arm, and protested earnestly against interference. On recovery, he did not seem to have a clear remembrance of what had happened, but remembered the attempt to stop the arm, which he said always made him feel worse. The face twitched slightly on the same side, but the legs were both unmoved. The state of the iris is not noticed. Soon afterwards he left the hospital and disappeared altogether.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

WATTS'S CHLORIDISED SANITARY SOAP.

OUR attention has been called to a Sanitary Soap which is now being manufactured by Messrs. Cowan and Sons, of the Hammersmith Bridge Soap-Works. This soap is made under a patent of Mr. A. Watts, the well known editor of the *Chemical Dictionary*. The chemical agent combined with it is the chloride of soda, or bleaching soda, of which it contains nearly two and a half per cent. Chloride of lime, of which the bleaching, disinfecting, and deodorising power is well known, cannot of course, be employed for the purpose, for reasons which will readily occur to the chemist—the palmitate and stearate of lime being insoluble salts. But salts of soda and soap are not incompatible, the palmitate and stearate of soda being soluble salts. The solution of the salt here incorporated with the soap is the well known Labarraque's disinfecting fluid. In this form, it retains its sanitary energies; it adds to the cleansing and bleaching powers of the soap; while the price is not increased beyond that of ordinary soap. Hence, for the purposes of hospitals, sick-rooms, and infirmaries, for the laundry, and in domestic use, it will strongly recommend itself. We recommend to our medical officers of health the question of ascertaining its degree of usefulness and reliability in destroying fever-germs.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 3RD, 1870.

THE REGISTRATION OF DISEASE.

THE paper of Dr. Ransome, which opens the JOURNAL this week, is one of the most valuable and suggestive contributions yet made to this important subject. At the general meeting of the Poor-law Medical Officers' Association held on Tuesday evening last, the subject of disease-registration was ably discussed by Mr. James Lewis, of the Registrar-General's Department, who had been invited by the President to be present and speak on that question. In this movement our Association has shown an active interest. It is one which we desire to promote with all the influence of the JOURNAL.

After briefly referring to the need of sickness-returns as being so far admitted as to render a demonstration of their utility now almost a matter of supererogation, Mr. Lewis observed that Dr. Rogers, in his address, had laid stress upon the desirability of co-operation between the Poor-law Medical Officers' and the British Medical Associations, and that this was a point which he especially kept in view in the remarks he had prepared himself to offer for consideration that evening. He did not enter into details upon any other part of a scheme of disease-registration than that in which the Poor-law medical officers were mainly interested, and therefore he confined himself strictly to the subject of returns of sickness prevailing among the pauper population.

The medical relief-books contain the information which it was sought to utilise; and the point for consideration was how those might be made available for the use of the guardians or the local medical officers of health (where such functionaries existed), and for supplying certain information for State purposes, without taking them away from the custody of the Poor-law medical officers themselves, who ought to keep them for frequent reference, to note the termination of cases, and to ascertain whether a case coming under treatment was a new case or an old one, for example. Mr. Lewis did not approve of any scheme which entailed upon the medical officers the copying out afresh, weekly or monthly, the full details from their relief-books for any purpose whatever. Yet he was so convinced that the local health-officer ought to be in full possession of all the knowledge about the health of his district which the Poor-law medical relief-books afforded, that he had thought over the matter with the object of seeing whether this difficulty about copying could be obviated. He therefore offered the following suggestion upon this point, leaving it to the meeting to determine for themselves whether it was practicable or not. He said: "If I go into any of our large warehouses or shops to make purchases, I find myself in the end supplied with a detailed bill, of which the shopman retains a *facsimile*, taken at the same moment by the aid of a piece of common transfer paper. And, lest it might be thought *infra dig.* to reason from a shopman up to a medical man, let me observe that only the other day I received from a well-known member of the profession in London—in fact, from the editor of the BRITISH MEDICAL JOURNAL—a communication of which he had evidently retained a *facsimile*, taken by this simple method of transfer paper. Supposing this method were adopted by the medical officers, they would be enabled, without involving the least additional trouble, to make one, two, or more copies of the entries in their relief books, and they could thus supply both the guardians and the local health officer with copies, if necessary, all the while retaining the books in their own possession. If this suggestion has any value, it is obvious that the difficulty in the way of making

the detailed medical returns more widely useful for local purposes than at present vanishes." A specimen of duplicate return made in this way was exhibited to show the feasibility of the suggestion, which really seems to us effective and feasible.

Mr. Lewis then referred to the opinion of Dr. Stallard and other competent judges that the present form of relief-books is unnecessarily complicated and troublesome, and suggested that it would be well for the Poor-law Medical Officers' Association to be prepared with definite proposals on this point—a very important one—against the time when renewed action might be called for.

He then addressed himself as follows to the question of returns of disease to be made to a central office.

"For State purposes, a periodical return, showing what diseases are prevalent throughout the country, is requisite; and in reference to the Poor-law medical cases, we have to consider what should be the *nature* of that return, and *in what manner and how often* it should be made.

"As to the *nature* of the return", he added, "I have already twice recorded my conviction that it is impracticable as well as unnecessary to think of sending to a central office for frequent publication anything beyond mere summaries of local details. I have proposed that the precedent set by the Metropolitan Health Officers' Association in 1857-58, and which has been, in its essential features, followed in the returns which have since been published by the Manchester and Salford Sanitary Association, by Dr. Philipson, Dr. Ballard, and others, should be followed if a system of national sickness returns were established. This implies that the information to be sent periodically to the central office should be confined to a simple numerical statement of the new cases of certain of the graver forms of disease, mostly of the zymotic or infectious class—in fact, of such diseases as the State has an interest, on public grounds, in controlling. I would at any rate begin on this elementary basis, and extend the scope of the returns by degrees if desirable.

"I have on former occasions expressed the opinion that the summarised returns should be prepared every week by each Poor-law medical officer from his relief books, and sent direct by him to the central office, there to be published weekly, as were the London Returns of 1857-58. I have here a form of blank return now in use by Dr. Ballard, which would exactly meet, in my judgment, the requirements of the central office, and at the same time would entail no appreciable additional clerical labour on the medical officers. Thus, you see, I proposed to put you in direct communication with the central office so far as these disease returns were concerned."

The Registration of Disease Committee of the British Medical Association are of opinion that these returns should be made first in full detail to a local medical officer of health, and that only after revision by him should summaries of these details be sent by the health-officer to the central office. Bowing to medical opinion on the point, Mr. Lewis has since been led to consider how far local revision may be made compatible with that frequency of collection at the central office which he regards as a *sine quâ non*. If we can have weekly or monthly summaries of revised local details, he at once admits that to be worth striving for, partly because by distributing labour, strength will be economised.

Local revision implies a local reviser, who is assumed to be the medical officer of health acting for a district or union. Such functionaries exist now in many places; and it is supposed that the Royal Sanitary Commission will recommend their universal appointment. If, then, his suggestion about the transfer paper were adopted, the Poor-law medical officers could supply the health officer every week with an exact copy of their relief-entries; and it would be his business, when he had got all the returns for his district complete, to send a summary of their facts to the central office straightway. This, he apprehended, to be what the British Medical Association wants; and the plan would certainly have this advantage, that it would relieve the central office of the large proportion of labour implied by the difference between having to collect and prepare for printing about 700 returns, as compared with about 4000 returns.

Of course, it will be seen that this plan does away with any need for troubling the Poor-law medical officers with making returns to a central office; it would leave them just as they are now, or, at any rate, would cause them no additional work. In fact, if their relief-books were modified as Dr. Stallard proposes, they would positively have

less writing to do than they have now. It would, he supposed, follow that any claims which they might wish to urge for better pay would have to be based on other grounds than those of increased labour in connection with returns of diseases—on their sanitary services, for example.

What is wanted to know now is, having regard to the large area of some of our Poor-law unions, and the distances which some medical officers in remote parts of the country live from any given centre where the Health Officer might be located, whether this plan is compatible with a weekly return for the whole country to the central office. Only the Poor-law medical officers are in a position to answer this question, and it is one which it is hoped they will take into consideration.

If it should turn out that a weekly return upon this plan from the rural and remote districts is impracticable, Mr. Lewis's view is that we might perhaps get it to work on the basis of a *weekly* return from our *largest towns*, where the medical officer and the health officer would be easily accessible to each other; being content with a *monthly* return for the other parts of the country.

Under any circumstances and any plan, it is proposed to ask only for brief summaries of facts sent to the central office, whether weekly or monthly. The detailed information in the possession of the health-officer, it should be his business to utilise frequently and regularly for all sanitary purposes in his district; and at the close of every year he should prepare an annual report, embodying such details as might be decided upon by superior authority—which annual report, being sent without delay to the central office, should be there collated with those from other health-officers, and the results published in an annual report for the whole country.

Mr. Lewis added, finally, that, when he took up this subject of disease registration twelve months ago, he was very much influenced by what seemed the intention or willingness of the Government, as expressed by Mr. Göschen, to a previous deputation at which this Association was represented, to undertake something at once. Hence it would have been purposeless for him then to have taken local revision into account, simply because there were only a few health officers here and there in the country to act as revisers, and, for aught he knew, it might be years before such functionaries became general.

The case is different now. Now we have been distinctly told that the Government will do nothing until the Report of the Sanitary Commission has been received, it being, however, understood that that report will be presented in time for legislation during the ensuing session of Parliament. This is bringing the matter almost within our grasp, as it were, and it is important to be prepared to take the utmost advantage of what the Commission may recommend. To this end, it seems advisable that the Poor-law Medical Officers' Association should come without delay to some conclusion as to the nature and extent of the co-operation they could and ought to afford in respect of disease returns, and the terms upon which that co-operation might fairly be given, in order that they may be prepared to act in concert with the British Medical Association upon this question.

MEDICAL FEES.

IN calling attention to the useful labours of the Shropshire Ethical Branch of the Association in drawing up a tariff of medical fees, we need not now do more than commend to the attention of our members the document issuing from the Branch, which we print at length on another page. The subject is one of considerable importance to a number of junior practitioners especially, who will find here a minimum scale upon which to fall back. We invite careful attention to the subject, and discussion, if any be necessary. It will be observed that it is not in any sense proposed as a fixed or inelastic standard, but as a scale which may be considered reasonable, and to which practitioners may, in case of difficulty or doubt, refer as a minimum having that kind of authority which professional agreement confers. It is the special function of the Association and of the JOURNAL to promote and facilitate such agreement on all professional subjects.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

V.

On the question, Whether certain essential portions of medical and surgical knowledge should be proved to be possessed by all candidates for a licence to practise?

IN connection with the subject of making examination tribunals more exact and sure in the discharge of their functions, it may be well to refer to the question, Whether there are not certain necessary pieces of knowledge which should be proved to be possessed by *all* candidates for a licence to practise medicine and surgery? At present it is the custom with all Examining Boards to subject different men to more or less different tests; and this plan must be always, under any system, necessary, more or less in proportion to the impossibility of examining everybody fully on every subject. But it seems deserving of consideration, as before said, whether there are not certain kinds of knowledge of such extreme importance that *no* candidate should obtain a diploma qualifying him legally to "practise" unless he had shown himself in such matters safely proficient. As an example of what is meant, we may take the following.

In the Report of the Committee of the General Medical Council on Professional Education, Mr. Berkeley Hill remarks: "With the amount of instruction the ordinary medical student is able to obtain in passing catheters, he is more liable in after practice to injure than to benefit his patient when using these instruments." Now, it will be allowed that this is a very remarkable statement; and although opinions may differ with regard to the assumption that the ordinary medical student is unable to obtain the necessary practical instruction, the fact that the ordinary medical student, when he has become legally qualified to practise his profession, is often morally unqualified to pass a catheter, is sufficiently undeniable. In other words, diploma examinations and tests are, at the present time, inadequate to secure the possession on the part of candidates of a piece of practical surgical knowledge of the most essential kind. And, although opinions may differ about the degree of ignorance of the average medical student, it is at least a very significant fact that there has been placed on record by one, whose judgment is entitled to much respect, a statement which, if followed to its legitimate conclusion, amounts to this—that, if a patient were to require to have a catheter passed, and were to consult a surgeon haphazard, the chances would be much in favour of his lighting upon one who would do him more harm than good in efforts to relieve him. And if this be so, it is worth considering whether, in view of the extreme importance of possessing a fair knowledge of the instrument, *every* man presenting himself for examination should not prove his ability to pass with dexterity a catheter on the dead subject; for here again, as in examples before referred to, a man accustomed to use the instrument would show his proficiency in a moment, as a blunderer would betray his incapacity. In the same way, might not *every* man be obliged, before the examiner, to test for impurities in water, to use a stethoscope (not necessarily on a much diseased person), to prepare a specimen and place it under a microscope, to use a laryngoscope and ophthalmoscope (not necessarily on the sick), and so with many other things. Exactly in proportion to the probability that proof of such or such knowledge will be demanded of him, will be the probability of a candidate's acquiring it beforehand. If among the conditions of passing safely the dread portals of the College of Surgeons were the being obliged to dexterously pass a catheter before the examiner, the dexterity would be acquired somehow or other in almost every instance. The only necessary elements are, first, the certainty that the knowledge will be required; and, secondly, the equal certainty that "rejection" will be the consequence of its absence. To put the matter in another light: suppose that, instead of the candidate's being required to pass a catheter, he were obliged, before receiving his diploma, to play "Rule Britannia", and play it well on the flute, what would be the effect, as regards flute-playing, on medical students?

MEDICAL REFORM.

WE have reason to know that the attitude of the Medical Reform Committee of the Association is one of quiet activity, of which the results will be presently apparent. An intelligent neutrality, and a position of friendly concert, as far as possible, with the numerous bodies and individuals, personal and impersonal, who are occupying themselves with the production of schemes variously labelled, is that which will probably best enable the representatives of our powerful association to promote the interests of the general body. Some very intelligent propositions have recently been made which will deserve careful consideration, and some very impracticable and irresponsible suggestions have been made. The Committee of the Association cannot act prematurely or heedlessly; but this much is already apparent, that the plan of direct representation continues to make progress even in conservative minds, and that the importance of the principle of the eighteenth clause is fully recognised. The declared programme of the Association is:—Direct representation of the profession on the Council; a complete register; an uniform minimum examination through the three kingdoms; complete protection for the public and registered practitioner; and the abolition of competition downwards amongst examining boards. It may not be impossible to unite all parties in the effort to obtain such a Bill. Neither patience nor labour will be thrown away on the effort; and we feel well assured that they will not be wanting in the Medical Reform Committee of the British Medical Association.

DR. JOHN MURRAY has been appointed Assistant-physician to the Middlesex Hospital.

Mr. CARDEN, of Worcester, has consented to preside at the next annual dinner of the Fellows of the College of Surgeons of England.

AT the annual meeting of the subscribers to the Hartlepool General Hospital, it was resolved to have a "Hospital Sunday", and a Committee was appointed to make the necessary arrangements.

A GOOD deal of discussion is going on concerning the perils of "hacking" in foot-ball. The subject, however, belongs exclusively to "popular surgery", and we leave it to the daily papers.

MISS GARRETT has been elected on the Marylebone division of the London School Board, coming in at the head of the poll. Two other ladies have also been elected by large majorities.

SAD details are given in the *Ross Journal* of the inquest on the late Dr. Rootes, who was found dead in the churchyard lately, at the tomb of his son, a young man, who had entered the medical profession, and fell early a victim to its perils.

WE learn with great pain that Dr. James Kelly, of Jarrow, has fallen a victim, at the age of thirty-four, to typhus fever, contracted in the exercise of his professional duties. Dr. Kelly was highly esteemed in the district in which he practised.

FOR the preliminary examinations in Arts, etc., for the diplomas of Fellowship and Membership of the Royal College of Surgeons, which will take place at the Whittington Club on the 20th inst. and following days, it is stated that about three hundred candidates have entered their names.

MR. ERICHSEN'S *Science and Art of Surgery*, which has now for many years enjoyed a reputation of the highest as a text-book, has not had its appreciation confined to Great Britain. American editions, and a German translation, have appeared several years ago; and we are now gratified by finding that an Italian translation of the work is in progress. The translation is being made by Dr. Antonio Longhi, medical director in the Italian army, and is appearing in fortnightly fasciculi of forty-eight pages each.

DR. LIEBREICH of Paris has been invited to demonstrate, with his well-known fixed ophthalmoscope, some of the morbid conditions of the fundus of the eye, at the meeting of the Pathological Society on Tuesday evening next. Patients have been placed at his disposal for the purpose by several ophthalmic surgeons from the hospital cliniques of the metropolis.

THE case of *Catch v. Shaen*, now progressing before the Lord Chief Justice, throws a vivid light upon the dark places of workhouse infirmary management, as it used to be before the labours of the Workhouse Infirmaries Association. Mr. Catch was the hero of many historical scenes in the bad days of the Strand, Lambeth, and Newington workhouses. He complains that his conduct has been misrepresented, and is pursuing his attackers for libel.

DR. FAWCETT, at Cambridge, has brought forward the important subject of the purification of the Cam; and, at his instance, the Cambridge Improvement Board have appointed a Subcommittee to take all necessary steps for obtaining a local Act to deal with the sewage-question. At present, thirty thousand inhabitants pour their sewage into this river, which is so largely used for boating purposes by the flower of our population.

THE CENSUS OF 1871.

WE understand that the Commission for the forthcoming census of 1871 for Ireland has been nominated. The Commissioners are: William Donnelly, Esq., Registrar-General; Sir William Robert Wilde, M.D.; and George W. Abraham, Esq., LL.D. All filled the same posts in the census of 1861.—The census in England and Wales will be taken by Major Graham, Registrar-General; Dr. Farr and James T. Ham-mick, Esq., assistants to the Registrar-General; and Mr. W. Clode, acting as secretary. A staff of a hundred clerks will be specially employed for digesting the returns. In its entirety, this is a work occupying three years.

QUEKETT MICROSCOPICAL CLUB.

ON Friday evening last, a practical demonstration was given by the President, Dr. Lionel Beale, of the methods employed in injecting the circulatory system of animals for the purpose of microscopical examination. The President prefaced his demonstration by remarking upon the advantages derivable from this process in researches into microscopic anatomy, and the desirability of making examination immediately after death and before decomposition had begun to attack the most delicate tissues of the body. He then exhibited the apparatus and injecting fluids best adapted for the purpose, and proceeded to show how to set about the work of injection, while the members, of whom there was an unusually large attendance, closely and attentively watched the whole process. The demonstration was illustrated by diagrams of the anatomy concerned, and of the formulæ of the fluids employed specially in the process. Nine new members were elected at the meeting, making a total of 520 members in the Club, sixty-two of whom belong to the medical profession. The meeting terminated with the usual *conversazione*.

POOR-LAW MEDICAL SERVICE.

WE postpone a good deal of important matter this week in order to give space to a lengthened report of the proceedings of the Poor-law Medical Officers' Association. In this we are consistent with the traditions which we are anxious to cultivate and strengthen. The Poor-law Association did not think proper at an earlier date to apply for advice or aid to the British Medical Association, which in 1868, on the motion of Mr. Hart, appointed a Committee to receive and answer with all its influence any such application. The Committee was this year reappointed, and, having been applied to, has not failed to give the same cordial co-operation which it would not have failed to give before, and which it will be equally prompt to afford whenever its fraternal aid is invoked. The recent deputation to Mr. Göschel on the subject of the registration of

disease and the remodelling of the Poor-law Medical Service was the first consequence; but, of course, action should not stop here; and, immediately that the issue of the Sanitary Commission's Report shall show us firm land on which to plant our feet, our Association's Committee would make a second and more detailed application to the Home Secretary or the President of the Privy Council, possibly to both in conjunction. The address of Dr. Rogers contains matter of great interest, the most important contributions this time perhaps being the communications which he gives from Dr. Maunsell in exposition of the Irish medical system.

THE CONTAGIOUS DISEASES ACT.

THE *Gazette* of November 29th announces that the following Commissioners have been appointed to inquire into and report upon the administration and operation of the Contagious Diseases Acts (1866 to 1869), with power to suggest whether the same should be amended, maintained, extended, or repealed: the Right Hon. W. N. Massey; the Right Hon. Viscount Hardinge; the Right Rev. the Lord Bishop of Carlisle; the Right Hon. Sir J. S. Pakington, Bart.; the Right Hon. Lieut.-General J. Peel; the Right Hon. W. F. Cowper-Temple; Sir J. S. Trelawny, Bart.; Sir W. C. James, Bart.; Vice-Admiral R. Collinson, C.B.; Charles Buxton, Esq.; Myles W. O'Reilly, Esq.; Peter Rylands, Esq.; A. J. Mundella, Esq.; Thomas H. Huxley, LL.D.; the Rev. Canon Gregory; the Rev. Professor Maurice; the Rev. John Hannah, D.C.L.; Samuel Wilks, M.D.; J. H. Bridges, M.D.; G. E. Paget, M.D.; Timothy Holmes, Esq.; Holmes Coote, Esq.; George Campbell, Esq.; G. W. Hastings, Esq.; and Mr. Robert Applegarth.

ST. ANDREW'S MEDICAL GRADUATES' ASSOCIATION.

THE fourth anniversary session of the Association will be held at the Freemasons' Tavern. The session will begin to-day (Friday), at 7 P.M., when the Report of the Council will be read, new members elected, and the officers for the ensuing year appointed. Dr. Whitmore will introduce a discussion "On the Results of Sanitary Legislation on the Health of the Metropolis, and on our present urgent sanitary requirements." The session will be resumed on Saturday, the 3rd, at 5 P.M., when the President, Dr. Richardson, F.R.S., will deliver the anniversary address, "For the Future of Physic". The anniversary dinner will be held on the same day, at 6.15 P.M.

THINGS BETTER MANAGED IN FRANCE.

IF it be lawful still to remind people that there are things better managed in France than in other countries, we would like to refer to the statistics of railways for 1869, which are very satisfactory as regards accidents. Only two passengers and four railway servants were killed, and only 112 passengers and 61 servants received injuries, out of the 90,000,000 who travelled; that is to say, one passenger for every 45,000,000 was killed, and one out of every 800,000 injured. Such a result has, it is believed, been obtained chiefly by the adoption in working of the system of "centre-vapeur" applied to the locomotives, by which the speed, in descending inclines, can effectually be moderated. Cannot our own engineers and traffic managers take a hint?

A PLEASANT REMEDY FOR SEA-SICKNESS.

THERE have been many suggestions made as to the prevention of sea-sickness, none of which have, to say the least, been found in practice to be completely successful. The introduction into practice of hydrate of chloral, which produces with certainty sleep for a definite number of hours, has suggested a means of escaping the horrors of a short sea-passage at least, and possibly of mitigating the most prolonged horrors of sea-sickness. To go asleep at Dover, and to wake to find oneself at Calais, is a plan which, failing other expedients, has in it much promise. An ordinary dose of hydrate of chloral produces sleep usually in a quarter of an hour, and with almost unfailing certainty. Some cases just published by Dr. Doring of Vienna seem to show that the value of hydrate of chloral to obviate sea-sickness is very great. It produces quiet and prolonged sleep. In all the instances recorded, it

seems to have been of great value even during prolonged sea-voyages, giving a good night's rest, arresting violent sickness when it had set in, and stopping the tendency to its recurrence.

PHYSICAL STUDIES AT CAMBRIDGE.

IT is proposed that the new professorship of Physic at Cambridge shall be terminable at the close of office of the first professor, if the University be so minded; that the stipend be £500 a year, payable out of the University chest; and that he should give one course of not less than forty lectures in each of two terms at least.

THE BIRMINGHAM MEDICAL SCHOOL.

WE hear that a dinner of the old students of the Birmingham Medical School is to be held at the Great Western Hotel, Birmingham, on December 8th. Lord Lichfield will take the chair, and the Council and Professors of Queen's College will be present. A very large muster is expected.

THE ROMAN CLIMATE.

A GOOD handbook to Rome is not less useful in pointing out the dangers of a residence there, and the best means of combating them, than in showing that any solid advantages are to be derived by an invalid who winters there. A little book published by Dr. Taussig* supplements the article by Dr. C. T. Williams, which we lately published, and will serve as a hygienic guide for ordinary visitors to the Eternal City, if it fail, as we hope it will, to attract thither sufferers from pulmonary and other diseases, to whom a mild and equable climate is necessary. The subject is one which is very timely, and a word or two will not be out of place. Thermometrical, barometrical, hygrometrical, and other meteorological observations, have been carried on for the last thirty-three years at the Collegio Romano, and are specially valuable by reason of the long duration of them, and of the great scientific ability of Father Secchi, who superintends them. It were well for the advance of climatic knowledge if the various winter-stations now fashionable were provided with equally competent observers. Should the expulsion of the Jesuits from Rome, now talked of, be carried out, we trust one exception, for science' sake, will be made in favour of Secchi, who is a distinguished philosopher. The meteorological observations show that Rome enjoys about the same mean winter-temperature as Nice; that it is liable to very great variations, to which we ourselves can testify; that the mornings are cooler than the evenings; that the amount of moisture is less than might be expected when the heavy rainfall, the large number of rainy days, and the proximity of the Campagna, are borne in mind; that the most prevalent and most powerful winds are the cold Tramontana or north wind (which, Dr. Taussig says, purifies the air, but disposes to congestion of the internal organs), and the mild enervating sirocco; and that the rapid alternation of these opposite winds, occurring sometimes in the space of a few hours, is the cause of the great variations of temperature to which this climate is subject. In describing the geographical position of Rome, and its geology, we are surprised that Dr. Taussig does not find in the porous *pozzolana* soil, which has remarkable power of absorbing water, an explanation of the small relative dampness of the city, on which he lays so much stress. Experiments have shown that a lump of this soil, if brought into a room, considerably increases in weight in a few hours by absorbing moisture from the atmosphere; and this might in some degree explain the phenomenon referred to. Dr. Taussig does not lose sight of the inclemencies of the climate, and the consequent dangers to invalids, the risks of visiting museums and palaces, which are very great, both on the score of fatigue and of cold, the warming apparatus being of a primitive nature and quite inefficient. One museum at least, of exceeding interest, is so damp, and has so low a temperature, that we will warrant that even a robust and healthy visitor shall catch cold if he loiter there. Intermittent fever is not only the principal disease of the country, but it complicates, and gives an intermittent or re-

* "The Roman Climate: its Influence on Health and Disease, serving as a hygienical Guide." By G. Taussig, M.D. Rome: 1870.

mittent form to, almost every other malady: for instance, to pneumonia, to typhoid and rheumatic fevers, to common headaches and toothache, and even in some cases to spasmodic affections, as asthma, epilepsy, etc. All forms, except perhaps the *perniciosa maligna*, yield to the administration of quinine. The most prominent theory as to causation of malaria is that of Dr. Balestra, who assigned it to the seeds of a microscopic *alga* constantly present in all marshes, for whose vegetation and propagation by spores the necessary conditions are the existence of stagnant water, a high temperature, and the vicinity of decomposing vegetable matter. These spores, according to Balestra, can be introduced into the system by the stomach, lungs, or skin; but, when brought into contact with a solution of either sulphite of soda, arsenic, or quinine, they lose all power of vegetation, and undergo a change of structure. The theory resembles that of Dr. Salisbury, and, like it, needs confirmation. Various efforts are being made to reclaim the Campagna; and the difficulties which arise from scanty population are likely to be met by the introduction of machinery, for which a society has been formed in Rome. Portions of it, as the lake of Ostia, are being drained; and Pius IX is described as having set a good example by causing Trappists to settle a few miles outside Rome, in a most unhealthy part. It might be well to know if the Trappists take the same view of the Papal benevolence. Father Secchi has for many years urged the planting of the neighbouring bare hills as a means of retaining the moisture deposited on them, which now finds its way to the Campagna, instead of rendering the hills fertile, and thus, according to Becquerel, tending to equalise the rain-fall.

UNIVERSITY COLLEGE HOSPITAL.

WE are informed that the larger portion of the amount required to defray the expenses of providing the projected baths for the Skin Department of University College Hospital has been collected, through the exertions of Dr. Tilbury Fox; and that the Committee feel themselves in a position to sanction the immediate erection of the baths, which, as far as we can learn, will be the most complete of their kind in London. The architect, Mr. Manning, has arranged, in accordance with Dr. Fox's suggestions, that the fumigating-baths for iodine, mercurial, and sulphur medications, those adapted for the treatment of itch-cases, and the disinfecting chamber, shall be completely separated from that part of the baths in which the cold, hot, alkaline, acid, hot-air, and hot-vapour applications, are to be made; viz., the general bath-hall, a room 30 by 23 feet, exclusive of dressing-platform 15 by 10 feet, and to which is attached the Turkish bath. A special chamber, with apparatus for heating it to a very high temperature, will adjoin the sulphur-baths, and be used to disinfect the clothes especially of the patients attacked by pediculi. The estimated cost of the baths was originally put at £1,000; but the total cost will be about £1,300, and of this £1,100 has been subscribed.

PROPAGATION OF DISEASE BY MILK.

PROFESSOR JOHN GAMGEE writes to us to suggest a plan of disinfecting milk and dairy utensils with the view of preventing the propagation of disease.

The demonstrations by Dr. Michael Taylor of Penrith, Professor Bell of St. Andrew's, and Dr. Ballard of Islington, that the scarlet and typhoid fevers are susceptible of transmission in milk, render it of the first importance that a complete purification of milk-pails, milk-cans, etc., should be at all times adopted. Milk vendors, moreover, have found to their cost, and even ruin, that at times the milk of healthy animals—of cows to which every attention was paid with a view to the production of good milk—is apt to become foetid, putrid, and to separate on boiling. It is one of the oldest injunctions in the management of dairies, that scrupulous cleanliness is essential. But, from Dr. Ballard's exhaustive inquiry into the possible means of contamination, it would appear that the ordinary precautions of scalding and rinsing cans are not sufficient without the precaution of providing at all times against the admixture of contagious matter with the water used in any and every washing or purifying process. Contagious germs resist an undetermined amount of heat. The hot water of the laundry has not prevented the propagation of scarlet fever poison from infected

clothes to those from healthy sources: these, on being returned to their owners, have propagated the malady. It is, therefore, essential to study the means which must at all times prove sufficient for the effectual disinfection of milk utensils, and, under certain limitations, of the milk itself. It is by no mean difficult to extend to the dairy Mr. Read's process, which has found favour with beer-bottlers, and which consists in injecting into a bottle, just before it is filled with beer, a disinfectant spray. By means of this spray the entire internal surface of the bottle is instantly disinfected and the air is purified. Beer thus bottled retains its brightness if the proper amount of disinfection have been applied; and by this means every germ of disease or decay, every possible ferment in the water used for washing purposes, can be rendered harmless. I should, therefore, propose that dairy utensils should be washed or purified with weak solutions of chloralum. A combination of chloralum and sulphurous acid might be more advantageously employed with large cans, so that the latter gas would have a tendency to displace and purify the atmospheric air in the cans. A very small amount of chloralum added to the milk imparts to it no flavour or hurtful property, and would effectually destroy ferments and germs of disease. The steps, then, to follow are: 1. To wash and scald all dairy utensils as usual; 2. To use an antiseptic, such as chloralum, instead of washing soda, in the water used to wash the said utensils; 3. The milk-pail into which the milk is poured as fast as it comes from the cow should be disinfected, by a spray through a funnel-aperture at the top, by inverting the can over the spray-producer; it is then turned on its bottom and filled with milk, which on rising in the can would absorb and partly displace the antiseptic gas evolved; 4. Cooling the milk promptly: the reduction of temperature should be as low as the coldest spring-water to be had; but I believe in time artificial refrigeration to a temperature of about 40 deg. will be found easy and profitable; 5. A definite and ascertained quantity of a harmless disinfectant can, with the greatest advantage and certainty of good results, be added to the milk.

THE ACTION OF WINE.

DR. PARKES and Count Wollowicz, M.D., have continued, with claret (Haut Brion of good quality), the series of experiments they undertook with brandy and alcohol, with the view of ascertaining by physical and chemical experiment the action of alcohol on the human body. The account of their investigations has been laid before the Royal Society. Their conclusions are that the general results of these experiments are in all respects identical with the experiments on alcohol and brandy; that is to say, there were a marked increase on the action of the heart and acceleration of the pulse, coinciding tolerably well in amount with the effect produced by pure alcohol in the former experiments; there was no unequivocal alteration of temperature in the axilla or rectum, no alteration in the elimination of nitrogen, for the increase in the last period cannot be credited to the direct effect of the wine; no alteration in the phosphoric acid of the urine; some augmentation of the free acidity of the urine; no alteration of the alvine discharges. In other words, claret-wine in quantities of ten to twenty ounces daily, as they gave it, cannot so far be distinguished in its effect from pure alcohol. Its most marked effect, the increase of the heart's action, must be ascribed to the alcohol in great measure, though the ethers may play some slight part. They point out that it would be going too far to assert that the dietetic effects of red Bordeaux wine and of dilute alcohol are identical. The difference between them must probably be sought in their effects on primary digestion and assimilation, delicate and subtle influences which experiments like those recorded in the paper do not touch. The influence of the sugar, of the salts, and of the acidity must also be appreciated by other methods. The man himself affirmed that the wine agreed with him better than the alcohol or brandy, but the large quantity he took of these last fluids vitiates the comparison. These experiments on wine enabled them to define somewhat better than the previous trials what might be considered moderation for the robust and healthy man who was the subject of this experiment. The ten ounces of wine, containing about one fluid ounce of pure alcohol, did not cause the less unpleasant feeling of heat or flushing. The twenty ounces (containing almost two fluid ounces of alcohol) were manifestly too much. He felt hot and uncomfortable, was flushed, the face was somewhat congested, and he was a little drowsy. Moreover, as already mentioned, alcohol then began to appear in the urine. There-

fore he ought certainly not to take much more than one fluid ounce of absolute alcohol in twenty-four hours. With regard to the propriety of this healthy man taking any alcohol, they have no hesitation in saying he would be better without it. His heart naturally acts quickly and strongly enough; alcohol increases its action too much, and might lead to alteration in its condition, or to injury of vessels, if any degeneration were to take place in them. This man had gone through the Abyssinian campaign, and stated that, when the force was without rum, owing to deficiency of transport beyond Antalo, he had in no way felt the want of the stimulant, though some of his comrades did. This seems to confirm their opinion that alcohol for him is not a necessity, and indeed is not desirable.

BOARDING OUT.

THE Poor-law Board has issued, we are glad to see, an order respecting the boarding out of pauper children. Hitherto the guardians have been unable to place out children in any homes beyond the limits of their unions. The new order, however, empowers the guardians of large urban unions to avail themselves of the boarding-out system, by giving them greater freedom in the choice of locality to which the children may be sent. The order recommends that there should be no boarding with out-door paupers; that, in the foster-parents, open air should be preferred to sedentary labour; that especial attention should be paid to decent accommodation, and the proper separation of the sexes; that great care should be taken to provide the children with education and with clothing; and that all boarding out in large towns should be avoided. We receive privately excellent accounts of the success of this plan of dealing with pauper children, from Scotland and from various parts of England where it is now being tried.

SCOTLAND.

ROYAL MEDICAL SOCIETY OF EDINBURGH.

THE following gentlemen have been elected Annual Presidents for the session 1870-71: Edwin Hinchcliff, M.D., Yorkshire; Alexander Macdougall, M.B., C.M., Argyleshire; James Muir Howie, Ayrshire; William Livesay, Isle of Wight.

RELAPSING FEVER IN GLASGOW.

THE epidemic is still very markedly on the increase, but there is now some prospects of accommodation being raised to meet it. About a fortnight ago, negotiations for the purchase of a large piece of ground for the erection of a permanent fever hospital were concluded. This piece of ground, which is named Belvidere, is thirty-three acres in extent; a portion of it is already in possession, and the whole will be delivered up after three months. On the portion already obtained temporary accommodation is being raised, so that we may expect in a few days to have a large addition to the present accommodation for fever patients.

UNIVERSITY OF EDINBURGH.

AT the recent meeting of the Edinburgh University Court, Dr. J. O. Affleck was appointed assistant to Professor MacLagan, and Mr. J. H. Buchanan, M.A., and Mr. James Dewar, F.R.S.E., assistants to Professor Brown.

GLASGOW: THE MEDICAL SESSION.

THE classes are now in full work, both at the Infirmary and the University, and at the Andersonian University. At the Infirmary, the clinical lectures are on a new footing, in accordance with the suggestion of Dr. Fleming. The arrangement now is, that any of the physicians or surgeons who pleases may lecture clinically, but that none are compelled to do so. The consequence is, that this winter all the surgeons, and, with the exception of one, all the physicians, in the Infirmary are lecturing; so that, instead of four, there are now nine clinical lecturers.

This is certainly a very inconvenient circumstance; but it is, perhaps, premature to condemn the new system on this account, as another year may show some change. At the University, though the outside of the building is not all that could be desired, still the class-rooms are very comfortable, and we believe that the session will be less inconvenient than we at one time feared.

EDINBURGH UNIVERSITY: THE COURT OF CURATORS.

IN proceeding to fill up two vacancies in the number of their representatives in the Court of Curators, the Town Council had recourse to a plan whereby they hope to avert their threatened disfranchisement. Instead of electing two of their own number, they conferred the privilege on Lord Gifford, one of the most popular of the Lords of Session, and on Mr. William Chambers, the eminent publisher. The Lord Provost assured his fellow Councillors that he had good reason to believe that this policy would conciliate the University party, who had been agitating for a change in the constitution of the Curatorial Court. There still remained two members of the Town Council in the Court.

IRELAND.

THE Mullingar Board of Guardians passed a resolution on Nov. 17 to increase the salaries of the medical officers £20 per annum each; but at their last meeting a letter from the Poor-law Commissioners was read, dissenting, and limiting the increase to £10 each only.

DUBLIN OBSTETRICAL SOCIETY.

THE opening meeting of the thirty-third annual session of this Society was held on Saturday evening last, the 26th ult., in the Hall of the King and Queen's College of Physicians. The chair was taken by Dr. George Johnston, M.D., President of the Society, and Master of the Rotunda Lying-in Hospital. Amongst those present were the Presidents of the Colleges of Physicians and Surgeons, and the Governor of the Apothecaries' Hall. Dr. Lombe Atthill, Honorary Secretary, read the annual report, which was of a highly satisfactory nature. In it was contained a suggestion that the presidency should extend over two years. The Chairman, on the adoption of the report, proceeded to deliver an address inaugural to the session. He congratulated the Society on its present flourishing condition, while at the same time the losses it had sustained during the past year by death were deplored, a just tribute being paid to the memories of Drs. C. P. Croker and Coleman. Sixteen papers had been read in the last session, among which were a communication by Professor Haughton, F.R.S., on the Muscular Power of the Uterus; a paper on Atresia Vaginae; on the Sanitary Condition of the Rotunda Hospital, by the President; on Transfusion, by Dr. Beatty; on Hare-lip, by Mr. Stokes; on the Treatment of *Post Partum* hæmorrhage by Perchloride of Iron; on Senile Contraction of the Vagina, by Dr. M'Clintock; and on Congenital Tumour of the Head in a newborn child. Dr. Johnston concluded his address by thanking the members cordially for the kindness he had experienced at their hands while occupying the presidential chair. The following officers were then elected. *President*: G. H. Kidd, M.D.; *Vice-Presidents*: J. A. Byrne, M.D., and Henry Kennedy, M.B.; *Treasurer*: H. S. Halahan, M.D.; *Secretary*: L. Atthill, M.D.; *Committee*: Drs. T. E. Beatty, F. Churchill, W. Roe, J. Denham, and A. H. M'Clintock. The customary votes of thanks to the outgoing President and to the visitors having been passed, the meeting adjourned.

PROVINCIAL MEDICAL SCHOOLS.—Mr. Luke Armstrong writes to say that the number of students attending at the University of Durham College of Medicine is 77. The return which we published last week was, as we expressly stated, a copy of the return made for the Inspector of Anatomy, as showing the number of dissecting pupils (35). The returns for the London schools were made up from the same source and on the same scale. Of course it is well understood that there is in each case a larger total number of students, counting those who are attending all the classes, and who are not dissecting.

A TARIFF OF MEDICAL FEES RECOMMENDED BY THE SHROPSHIRE ETHICAL BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

At the Annual General Meeting of the Shropshire Ethical Branch of the British Medical Association held in Shrewsbury on the 3rd October, 1870, it was unanimously resolved "That the following tariffs of medical fees, which have been submitted to, and discussed by the meeting (having also been previously circulated among the members for their consideration and commendations), be approved and recommended for general use by the Associates of the Branch."

The Council of the Shropshire Ethical Branch of the British Medical Association in issuing, in deference to the wishes of numerous practitioners, a tariff of Medical Fees (founded upon that of the Manchester Medico-Ethical Association—an abstract of whose arguments in relation thereto is herein embodied), deem it their duty most emphatically to disclaim the slightest wish or intention to dictate either to the members, or to other practitioners, in the matter of professional charges—which, so long as the medical and surgical, unlike the legal and other professions, hesitate to base their title to remuneration upon the abstract value of their services, must, they feel assured, remain an open and vexed question.

Although the General Medical Council alone could promulgate anything like a *compulsory* scale of charges, your Council are of opinion that a *recommendatory* tariff will not only prove useful as a guide to the junior practitioner—often in doubt as to the remuneration to which he is fairly entitled—but serve as a reference in cases of dispute, and thus tend to prevent litigation, and promote a friendly arrangement.

The scale (a purely recommendatory one, be it noted), after much thoughtful consideration and consultation with the general body of practitioners throughout the county and adjacent districts, has been drawn at such a rate that the humblest member of the profession need not hesitate to make it the basis of his charges—a rate calculated, indeed, rather in accordance with past usage than what is essential to the maintenance of the proper status of the profession—due regard being had to the diminished value of money, and the increase of wealth among the several classes of the community. Ere many years have elapsed, a higher tariff will doubtless be necessary. In the meanwhile, your Council would venture to express an earnest hope that every member who, from seniority or high professional status, may be in a position to do so, will not fail to charge higher fees whenever the circumstances of the case justify them.

Your Council, while fully admitting that the *income*, rather than the *house rental* of patients, is the true principle on which to found a tariff, have nevertheless deemed it expedient to make the latter (as being the least open to objection) the basis of their division into classes. Exceptional cases, they need scarcely remark, will of necessity occur, in which the practitioner must use his own discretion: as, for instance, in the case of *farmers, lodgers, and tradespeople*—from the rental of which latter a liberal deduction may be made, when not incurred solely for personal or family convenience.

On the whole, the following would seem to be a fair classification.

CLASS I. When the house rental is from £10 to £25 per annum.

CLASS II. " " " £25 to £50 "

CLASS III. " " " £50 to £100 "

The scale, it may be remarked, commences with a class rental of £10. There is, however, a still lower grade of the commonality that may fairly be called upon to pay more or less, according to their circumstances—a class which, for their own health's sake, it is very desirable, by affording them every reasonable facility for consulting qualified practitioners, to keep from the counter of the unqualified druggist and the clutches of the quack. Though it has been found impracticable to arrange a scale specially adapted to the means of the class alluded to, your Council would earnestly impress upon the members the desirability of attending them at reduced fees. Not only would it be a boon to the poor themselves, but, in thickly populated districts, partially remunerative to the practitioner—dependent of any higher source of satisfaction or reward. Such nominal charges, however, should always be made, if possible, for ready money.

No allusion, it may here be well to note, has been made to the subject of payment for medicines. It has been intentionally omitted, with the view to mark the sense of the Association upon the point in question, and, as far as possible, morally to enforce the important principle—that medical men should found their claim to remuneration *solely upon the value of their time and skill*, and altogether ignore the objectionable system of "drug payment." Indeed, the practice of supplying medicines is rapidly dying out in continental states; and equally de-

sirable is it for the patient and practitioner that it should become obsolete in this country—of which, however, there appears to be no immediate prospect. Under these circumstances, after a careful comparison of the respective advantages to patient and to practitioner, of prescribing *and supplying* medicines, or simply prescribing, your Council are of opinion that the tariff is applicable to either case—inasmuch as, in the former, the cost of the drugs may be regarded by the practitioner as counterbalanced by the retaining hold he has upon the patient, irrespective of other contingencies.

In regard to operations, fractures, etc., the time and skill required vary so greatly in individual cases, and the amount influenced so much by the eminence and special qualifications of the operator, that to frame a scale of surgical fees—fairly adapted to all cases—is a matter of considerable difficulty. Your Council, therefore, in the present transition state of the profession, would simply recommend, as a *minimum*, the fees sanctioned by the Poor-law Board.

The tariff is appended in a tabular form, with explanatory notes—the numerals to which respectively correspond.

NOTE.—In deference to the wishes of various members, an additional form of tariff (No. 2) is appended for the guidance of those who, from long established local custom, or other causes, find it impracticable to at once effect a change in the system of fees. In that event, the Council would strongly recommend such practitioners, while charging the items separately in the ledger, to send in a simple account for the sum total; and to allow any dissatisfied patient to refer to the ledger for particulars, rather than submit to the degrading system of "drug details."

Tariff of Medical Fees, inclusive of Medicine. (The Roman numerals refer to the three classes already described.)

A.—GENERAL PRACTITIONERS.

1. Ordinary Visit.—I. 2s. 6d. to 5s.; II. 3s. 6d. to 7s.; III. 5s. to 10s. 6d.
2. Special Visit.—A Visit and a Half.
3. Night Visit.—Double an Ordinary Visit.
4. Mileage beyond One Mile from Home.—I. 1s. to 1s. 6d.; II. 1s. 6d. to 2s.; III. 1s. 6d. to 2s. 6d.
5. Detention per Half-Hour.—I. 2s. 6d. to 3s. 6d.; II. 3s. 6d. to 5s.; III. 5s. to 10s. 6d.
6. Advice at Practitioner's House.—I. 2s. 6d. to 5s.; II. 3s. 6d. to 7s.; III. 5s. to 10s. 6d.
7. Letters of Advice, or Prescription.—I. 3s. 6d. to 7s.; II. 5s. to 10s. 6d.; III. 7s. to 21s.
8. Consultations.—Refer to Explanatory Notes.
9. Attendance on Servants.—I. 2s. 6d. to 3s. 6d.; II. 2s. 6d. to 5s.
10. Two or more Patients in one House.—Refer to Explanatory Notes.
11. Midwifery.—I. 21s.; II. 21s. to 63s.; III. 42s. to 105s. and upwards.
12. Abortions.—Refer to Explanatory Notes.
13. Vaccination.—I. 5s. to 7s.; II. 5s. to 10s. 6d.; III. 7s. to 21s.
14. Certificates of Health, etc.—Refer to Explanatory Notes.
15. Medicines Repeated.—Refer to Explanatory Notes.

B.—CONSULTANTS.

1. Advice or Visit.—I. 21s.; II. 21s.; III. 21s.
2. Mileage inclusive of Fee.—Refer to Explanatory Notes.

Tariff of Medical Fees, exclusive (No. 2) of Medicine.

GENERAL PRACTITIONERS.

1. Visit within Postal Delivery.—I. 1s. to 2s. 6d.; II. 1s. 6d. to 3s. 6d.; III. 2s. 6d. to 5s.
2. Special Visit.—A Visit and a Half.
3. Visit between 10 p.m. and 7 a.m.—Double an Ordinary Visit.
4. Journeys—Mileage, for first mile.—I. 1s. 6d.; II. 1s. 6d. to 2s.; III. 2s. to 2s. 6d. Per Mile Extra.—I. 1s. to 1s. 6d.; II. 1s. to 2s.; III. 1s. 6d. to 2s. 6d. If the distance be only one mile, from 2s. 6d. to 5s. should be charged for taking out horse or carriage, according to Class.
5. Detention per Half Hour.—Refer to Explanatory Notes.
6. Advice at Practitioner's House.—Refer to Explanatory Notes.
7. Letters of Advice.—I. 3s. 6d. to 5s.; II. 5s. to 7s. 6d.; III. 7s. 6d. to 10s. 6d.
8. Consultations.—Refer to Explanatory Notes.
9. Attendance on Servants.—Refer to Explanatory Notes.
10. Two or more Patients in One House.—Refer to Explanatory Notes.
11. Midwifery.—I. 15s. to 21s.; II. 21s. to 63s.; III. 42s. to 105s. and upwards.
12. Abortions.—Refer to Explanatory Notes.

13. Vaccination.—I. 2s. 6d. to 5s.; II. 5s. to 10s. 6d.; III. 7s. 6d. to 21s.
 14. Certificates of Health, etc.—Refer to Explanatory Notes.
 Works.—1½ per week, per head.
 Clubs.—1¼ per week each member. N.B.—No Member of a Club should be entitled to Medical Attendance, etc., whose wages, salary, or income, exceed Thirty Shillings a week.

Medicines, etc.

- Mixtures, 3xij.—I. 3s. 6d. to 4s. 6d.; II. 4s. to 4s. 6d.; III. 4s. to 5s.
 „ 3viij.—I. 2s. 6d. to 3s. 6d.; II. 3s. to 3s. 6d.; III. 3s. 6d.
 „ 3iv.—I. 1s. 6d. to 2s.; II. 2s. to 2s. 6d.; III. 2s. 6d.
 Draught, 3iss.—I. 1s. to 1s. 6d.; II. 1s. 6d.; III. 1s. 6d. to 2s. 6d.
 When two or more are sent, a moderate decrease in the charge should be made.
 Drops, 3iss to 3ij.—I. 1s. 6d.; II. 1s. 6d. to 2s.; III. 2s. to 2s. 6d.
 Pills, xij.—I. 1s. 6d.; II. 1s. 6d. to 2s.; III. 2s. to 2s. 6d.
 „ vj.—I. 1s.; II. 1s. to 1s. 6d.; III. 1s. 6d. to 2s.
 „ ij.—I. 6d. to 1s.; II. 1s.; III. 1s.
 Powders, vj.—I. 1s. 6d.; II. 1s. 6d. to 2s.; III. 2s. to 2s. 6d.
 „ iv.—I. 1s. to 1s. 6d.; II. 1s. 6d. to 2s.; III. 2s.
 „ i.—I. 6d. to 1s.; II. 1s.; III. 1s.
 Blisters.—I. 1s. to 1s. 6d.; II. 1s. 6d. to 2s.; III. 2s. to 2s. 6d.
 Gargles and Lotions.—May be charged somewhat lower than Medicines proper.

Explanatory Notes.

A.—GENERAL PRACTITIONERS.

1. *Ordinary Visit*.—Needs no explanation.
2. *Special Visit*.—A visit of which notice is not given before 10 a.m., at which hour the practitioner is understood to commence his daily round; also, when *immediate* attendance is requested. Either incident is often embarrassing to the practitioner, and entitles him to a larger fee.
3. *Night Visit*.—A visit made between 10 p.m. and 7 a.m., for which double the ordinary fee should be charged.
4. *Mileage*.—This is understood to commence at one mile from the practitioner's residence, and should be added to the fee for the visit, according to the class.
5. *Detention*.—When at the desire of the patient, or from the urgency of the case, the practitioner is detained more than half-an-hour, he is entitled to increased remuneration, at the rate of an ordinary visit, for every extra half hour so detained. This, however, does not apply to obstetric cases.
6. *Advice at Practitioner's House*.—The same charge, according to class, as for an ordinary visit; and the same addition for detention.
7. *Letters of Advice or Prescription*.—The charge should be somewhat in excess of that for *viva voce* advice.
8. *Consultations*.—When the ordinary medical attendant has to meet another practitioner in consultation, he is fully entitled, from loss and disarrangement of time, to not less than double his usual fee. If, however, the consultations are frequent, the increase may be remitted at his discretion; and in the following case, also, if requested by the practitioner in attendance. When a general practitioner is himself called in consultation, he is entitled to the consultant's *minimum* fee of 21s. Obstetric consultations should be charged by arrangement between the Practitioners.
9. *Attendance on Domestic Servants*.—When paid for by their employer, or paying for themselves, the charge should be for patients in Class I or II, according to their position and circumstances. If the employer himself send for the practitioner, he may fairly be held as the person responsible for payment.
10. *Two or more Patients in one House*.—If members of the same family, and paid for by one person, the full fee should be charged for the first, and a half visit for each of the others. When not of the same family, the full charge should be made for each.
11. *Midwifery*.—From long established custom, the fee is generally understood to include the after-visits, when few in number, and within the prescribed distance of an ordinary visit. It may also be well in certain cases among the lower grade, in Class I, to reduce the fee to 15s., if paid within a month. The obstetric tariff necessarily admits of considerable latitude in regard to the fee, consequent upon the oft prolonged and harassing attendance in cases of difficult labour, and the varying pecuniary position of the several classes of society.
12. *Abortions*.—In simple premature labour, the same charge should be made as in ordinary cases of midwifery. In abortions, the necessary visits should be charged as such, *plus* an additional fee for detention, in accordance with the principle laid down in No. 5.
13. *Vaccination*.—This is not included in the obstetric fee, and should

be charged from 5s. to 21s., according to Class or number of visits required.

14. *Certificates*.—Simple certificates may be charged as ordinary visits or letters of advice; but in cases of life assurance, or lunacy, involving special examination and responsibility, 10s. 6d. to 42s. should be charged, according to Class and circumstances. The assurance fee of 10s. 6d., however, should apply only to cases in which the amount insured does not exceed £50.

15. *Medicines Repeated*.—When, as frequently happens, a patient applies simply for a renewal of medicine—a visit being deemed unnecessary—the charge should be regulated by Class, as for Advice at Practitioner's House.

B.—CONSULTANTS.

1. *Advice or Visit*.—This includes advice at home, and attendance within a mile—either alone or in consultation with another practitioner. Two visits, except in consultation, are generally made for each fee.

2. *Mileage inclusive of Fee*.—For any distance not exceeding three miles, from 21s. to 42s., according to Class; and for every addition of three, or moiety of three miles, 21s.

Frequency of attendance and facilities for travelling by rail, may, in exceptional cases, and on the recommendation of the local attendant practitioner, be regarded as a valid reason for a moderate reduction of the fee.

The above fees are from one to two-thirds less than the usual consultation charges for mileage, etc., in London, Edinburgh, Dublin, and other large towns.

NOTES OF THE WAR.

THE Aid-Committee of the German Society in Vienna for the aid of the sick and wounded has offered to the Saxon Ministry of War the gratuitous use of the Austrian baths, for convalescents, during the coming winter and summer. The Saxon Ministry has acknowledged the offer with thanks, but declines it for the present, as the royal bath-hospital at Teplitz is available for the wounded, and they can be readily conveyed to it.

THE HOSPITALS AT BERLIN.

THE *Wiener Medizinische Wochenschrift* of November 26th says: In the hospitals at Berlin, Charlottenburg, and Lichterfeld, there are about 3,800 sick and wounded under treatment. Of these, 692 Prussians and 62 French are severely wounded; 919 Prussians and 45 French slightly wounded; 44 Prussians and French affected with ophthalmia; about 1,300 Prussians and French slightly ill; more than 500 Prussians and French convalescent from typhus; 66 cases of hospital gangrene; 25 cases of dysentery; 10 of insanity; besides others suffering from various diseases.

THE SAXON HELP-UNION.

THE Report of the International Help-Society of the Kingdom of Saxony contains the following remarks on the Saxon Field-diaconate (*Feld-diaconie*). The fidelity with which the corps from its first formation has laboured up to the present day becomes more evident, when an account is taken of the losses which it has undergone. Five of its members—three clergymen, a merchant, and a student—have fallen victims. Of the eighty “field-deacons”, more than forty have returned, most of them severely ill. The remainder are labouring partly in the lazarettes before Paris, partly in those between Paris and Germany; some accompany the trains conveying the sick and wounded to Germany; others are active in various ways.

THE FRENCH PRISONERS IN GERMANY.

AN official report has been forwarded to us from Basle on the distress among the French prisoners in the lazarettes in Germany. It is stated that of these prisoners, who amount to above 150,000, many are ill, many suffer from wounds, and most of them are quite destitute. The almoner of the French prisoners in Ulm writes that in that place there are 1,000 sick and wounded, and that the means of aiding them are absolutely wanting. Typhus makes great devastation among these unhappy Frenchmen; the average number of deaths is ten daily. At Minden, there are 500 prisoners ill with dysentery, typhus, and small-pox; and the number is daily increasing. There is the greatest difficulty in relieving them, even in obtaining what is strictly necessary; for there is a want of everything, especially linen. Scarcely one of the fever-patients located in eight halls and barracks has a shirt to change, and many have no stockings. With the best will, it is impossible to

do what is necessary, without clean linen, warm clothes, woollen jackets, stockings, drawers, etc., which are not to be had. The Basle charitable agency has received similar distressing reports from Marienberg, Coblenz, and other places, on the truly terrible destitution which prevails among the prisoners.

REPORTS OF SOCIETIES.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

TUESDAY, NOVEMBER 29TH, 1870.

JOSEPH ROGERS, M.D., President, in the Chair.

THE PRESIDENT delivered an address, of which the following is an abstract. After some introductory remarks, he said: Shortly after our last meeting, in July, Dr. Rumsey, the President-elect of the Public Medicine Section of the British Medical Association, wished me to read a paper on Poor-law Medical Relief, at the then forthcoming annual meeting at Newcastle-on-Tyne. Though fatigued with the labours devolving on me in my official capacity during our association year, I felt it would be politic to comply with his request, and for this reason. Hitherto, as you know, Poor-law medical reform has been mainly advocated by gentlemen who are, or have been, connected with the Society, and who are therefore open to the suspicion that, in seeking reform, they are influenced by selfish feelings. But I thought that, could I succeed in enlisting the sympathies and securing the active co-operation of the British Medical Association, with its 4000 members, the large majority of whom are in no way connected with the administration of the Poor-laws, but possess large powers for aiding us by their constant, I may say daily, intercourse with our law-makers, a great point would be secured. Actuated by this feeling, I went to Newcastle, and before the Section in the Town Hall gave a *resumé* of those statistics and the deductions which have been drawn from them, which at our successive quarterly meetings during the last two years I have brought before you. At the conclusion of my address, Dr. Burke, who occupies a position in the Irish registrar's office similar to that which Dr. W. Farr holds at Somerset House, rose and in an able speech fully endorsed all that I had stated as to the benefit his country had derived from the operation of the dispensary system. The Section was much struck with the comparisons I instituted between the medical relief arrangements that prevailed in the two towns of Newcastle and Belfast; they are as follows:—

	Medical Officers.	Cost of Medical Relief.	Population.	Total Poor-law Expenditure.
Newcastle:	8 ...	£853 ...	110,968 ...	£43,093 0 0
Belfast:	18 ...	£3,700 ...	146,529 ...	£22,114 12 5

Ultimately it was resolved that the Committee which had been appointed at Oxford, in 1868, to confer with the Council of our Association, should be reappointed. This, on being submitted to the general meeting, was carried by acclamation.

The resolution, which was adopted, gave power to the Committee to add to their number. Now, as the Association Committee of two years ago had never been called together, it was not improbable, unless some gentleman undertook the initiative, that a similar occurrence might happen again. But I had not travelled specially to Newcastle to point out the evils of the present system and seek the aid of the Association, with any intention of allowing such an abeyance. On my return to town, I set to work to beat up recruits for the Committee, and in this I have been much assisted by our excellent friend Dr. Rumsey; indeed, without his aid, and the use I was permitted to make of his name, I probably should not have succeeded in enlisting the support of so large a number of representative, medical, and other gentlemen. Among those who readily agreed to join the Committee, were several gentlemen (members of the British Medical Association) who had directed their attention specially to the important question of registration of disease; and as they had applied for an interview with Mr. Göschén, it was suggested that we should combine our efforts, and go to the President as a united deputation; and, as the request for the registration of disease was based upon the proposal that the Poor-law medical officers should make a weekly return of all new cases of disease which came officially under their observation, it was considered desirable to formulate certain propositions, which would cover the whole ground of Poor-law medical reform. Our main reason for arriving at this conclusion was, that to go to the President of the Poor-

law Board simply for registration of disease, would be to admit that the service was in so perfect a state of organisation as to permit registration to be immediately and efficiently carried out; but those members of the deputation who had studied the question of English medical relief, and were acquainted with its imperfections, knew that such registration, under existing circumstances, would be almost worthless.

[The propositions handed in to Mr. Göschén, and subsequently forwarded to the Royal Sanitary Commission, with the request that they should be printed as an appendix to their report, have already been printed in the BRITISH MEDICAL JOURNAL for October 22nd.]

After commenting favourably on some of the propositions, Dr. ROGERS continued. As regards the fifth proposition (relating to the Registration of Disease), I urge the Association to support it, not only because it would render a signal service to the community, by giving early warning of the outbreaks of epidemics, and to science, by affording a clue to the causation and topography of certain obscure forms, and notably of hereditary disease; but also because, if adopted, it would be the first step to official recognition of the position which Poor-law medical officers ought to hold, viz., that of health-officers, in connection with, and under the direct control of, the State.

The seventh proposition distinctly formulates that which I have just referred to, by suggesting that certain additional duties should be performed by the Poor-law Service. This, if adopted, would practically place them in the distinct position of health-officers.

You may have read, in the published reports of the deputation, that I urged, as a preliminary to the adoption of sickness registration, a complete recast of the whole service. Having been instrumental, with others, in bringing forward the propositions, it would have been unreasonable and inconsistent for me to take any other course; but, though still holding that opinion, I strongly advise that the Association should throw no obstacle in the way of this reform, even though it be effected under the imperfect Poor-law arrangements at present in force. I am satisfied that no attempt will be made to oppose on you increased obligations, without additional remuneration. The public and the House of Commons know fully how inadequately your services are requited. As regards the amount which should be paid for such additional labour, the scheme which I would suggest, if adopted in its entirety, would involve the necessity of returning each week to the health-officers of the town, county, or part of county, not only the gross number and character of all new cases of disease, preventable or otherwise, but the existence of nuisances, or other things prejudicial to public health, which might be observed in the medical officer's district. If the area and population in urban and rural districts were adjusted, such reports or returns might be paid for by a definite and equal amount; but until such be the case, I see no other solution of the difficulty, save a graduated fee, the lowest sum being 2s. 6d., rising from that to 10s. 6d.; the variation in amount to be determined upon a recognised principle by the central authority. The fee for the registration of disease, and for sanitary reports, should, like the rewards for vaccination, be a government charge.

You are aware that, in my last address, in briefly referring to the report of the Poor-law Board then just issued, I stated that I would at this meeting direct attention to the medical section of it, with the view of exposing the numerous fallacies which it contains; and as a large portion of it was occupied by an attempt to discredit the Irish system of medical relief, by making out that it was something totally different from what its advocates had asserted, I forwarded a copy to Dr. Maunsell, an Irish dispensary physician, who has devoted considerable attention to Poor-law questions, and requested him to give me his opinion on certain marked passages. I will now read you his reply.

"I find that the mean number of paupers in receipt of out-door relief in England was 784,906; and of in-door, 157,740; that is, over five times as many received out-door as did in-door relief; while in Ireland, 288,953 received in-door, while but 50,257, or less than one-fifth, received out-door relief. I attribute this discrepancy to the fact that, as the vast majority of the out-door cases are those of sickness, they come under the Medical Charities Act in Ireland, while in England they become cases of out-door relief. To assimilate the numbers, the 775,327 dispensary cases ought to be added to the 50,257 for Ireland. Now let us see the economy of it.

"Rate per head out-door relief, in England, £4 5s. *per annum*.

"Rate per head out-door relief, in Ireland, less than £1 *per annum*.

"The expenditure for out-door relief was £48,184 for 50,257 paupers; for those relieved under the Medical Charities Act (number 775,327) the expenditure for medical officers, apothecaries, midwives, medicines, medical appliances, rent of dispensaries, fees for vaccination, registration, etc., was £123,713, or something over 2s. 6d. per head. In fact, it appears to me to come to this: in England, under your system, you divide the ready-made article under two heads, the in-door paupers,

which costs you £8 10s. *per annum* to support; the out-door paupers, £4 5s.; that these latter are augmented to an inordinate degree by the want of a Medical Charities Act, which would enable some effort to be made to stay them on the threshold of pauperism; that is, when it arises from sickness. This we have, and this we apply, and do so efficiently at the cost of 2s. 6d. per head; and the consequence is, that, while our health and strength is improved, and thousands of us are not demoralised by considering ourselves paupers even in name, our rates are but 2s. 11³/₄d., whilst yours are 7s. ³/₄d. per head of the population.

"In page 48, 'another important distinction is to be borne in mind; it is, that whilst in England a medical order is treated like any other order for poor relief, and the recipient is at once counted as a pauper, in Ireland the receipt of a medical order does not entail any such result. There does not appear to be much cause for congratulation on that score; you call it out-door relief, and make them paupers at a cost of £4 5s. a-head; we call it medical relief, and do not demoralise them by making them paupers, at a cost of 2s. 6d. per head. I call this per head, as I have divided the expenditure on dispensaries by the total number of tickets; this large class alluded to differs therefore merely in name, and tells very much in our favour, both socially and economically.'

"In page 50, it says 'that it is evident that a much greater proportion of sick paupers are required to come into the workhouse hospitals in Ireland with its dispensary system, than in England without it.' It argues thus, because it chooses to say, on whose authority I don't know, that the sick poor admitted into the Irish workhouses in 1868 numbered 112,071; out-door poor, 50,257. Now, if you turn to page 17 of the Irish Poor-law Commissioners' Report, you will find, after the year 1868:—

'Total number admitted in sickness 55,607

'Number admitted who were not sick 185,237

'Total number admitted during the year...240,843.

"It attributes this circumstance 'to a more strict state of the law, which, in the case of the able-bodied, prohibits out-door relief,' etc. *There is no such law.* 'And to the necessity of removing the sick poor from their wretched homes, where there would be no chance of recovery.' This is very pretty writing, but it is not the fact. If the patient choose to remain in his home, we cannot remove him against his will, *and still our death-rate is less than yours.*

"With regard to 'the ready access of gratuitous medical attendance, and the serious additional charges it would entail on the public burdens.' Has it done so in Ireland with the present faulty arrangements? With regard to 'its pauperising tendency, by diminishing self-reliance,' etc. Is not that exactly what it prevents? in contradistinction to your system, which makes every poor person who cannot at the moment pay a doctor, a pauper.

"In page 51 they assume, 'that, because 50,257 persons only appear on the lists as out-door paupers, all the persons relieved under the Medical Charities, 775,327 could pay, and are not paupers as they would call them.' I grant you that a great number of them could pay something, but not to such an extent as would operate in any such degree as they would have you to suppose, as a transfer of patients from the private to the public practitioners; besides, this is merely a bugaboo to enlist practitioners against the system. Of course, the faults of our system are not going to be adopted by you.

"This specious argument comes next: 'There are few medical men in the rural districts in Ireland, while in England, on the other hand,' etc., and it takes the whole of Ireland, and compares it with London. On this subject you might as well correct them. It is true that in Ireland there are 2410, and that 949, or three-eighths, are Poor-law Medical Officers. The number of medical men in England and Wales is 10,616. You appear to have 623 Unions; and I imagine, if you count the medical officers, they bear a very close proportion to ours. Next they say, in London alone there are 3,228 medical practitioners, or one to every 1,000 of the population. Now it so happens that in Dublin and its environs there are 500 practitioners, and the population is 412,053, or more than one to every 1,000 inhabitants; but if you deduct 3,228 from the total of English medical men, you have but 7,000 for the rest of England and Wales. Take Churchill's *Directory*, and look at the local list, with the towns and villages where medical practitioners reside. Birmingham shows 250; Brighton and Bristol, 100; Liverpool, 300; Manchester, 300; and many have 100, 80, and 50; now, if you deduct these from the remaining 7,000, I think you will find that there are just as few medical men in the rural districts of England as there are in Ireland.

"I do not know to what extent medical clubs exist in England; but I am very much under the impression (from what I have seen and read)

that both the poor and club patients are, under your starved English system, extensively attended by unqualified assistants. I see on page 58 that the number of medical officers in England and Wales amounts to 3,906; total medical men, 10,616. Ireland, 949; total of medical profession, 2,410. There is not much discrepancy to boast of then.

"I think I have now touched on most of the subjects contained in your Poor-law Report to which you directed my attention, and which has evidently been manipulated to serve a purpose."

Whilst on this subject, I may as well inform you that in 1852 (the date of the introduction of an efficient system of medical relief in Ireland), the gross expenditure on poor relief was £1,099,678, or 1s. 7d. in the pound, inclusive of medical relief, which was then only £54,289; in 1869, gross relief had fallen off to £817,772, or 1s. ¹/₄d. in the pound, inclusive of medical relief, which had been gradually increased until it has become £123,718 on the medical charities only, and a total of £133,000, inclusive of salaries and drugs, for the Irish workhouses. There are three ways in which the Irish Commissioners state that Poor-law expenditure may be diminished: "by the improved sanitary condition of the people, and consequent decrease of sickness; by a decrease in the applicants for workhouse relief; and, lastly, by a reduction in the price of food." In the two Dublin workhouses in 1852, there were but two medical officers, and an apothecary for each, at salaries of £100 respectively; now there are three in the north and four in the south, and apothecaries, at £150 each; and yet the expenses have diminished.

Reverting to the annual report, on page 49 will be found the following:—"In England, the instances are comparatively few in which persons receive medical relief only; nearly all here who are attended by the Poor-law medical officers requiring further relief as well." Believing this statement to be generally opposed to what really does happen, I have made extensive inquiries in every county of England and Wales, and find that, as I suspected, large numbers of such poor are attended who have no other relief whatever. I will quote from the letters I have received: "For every pauper requiring relief, I attend four or five requiring medical relief only, and whose names I never even enter in my medical relief book." "The instances in my district of those who have medical relief only, would be five out of six or more." "It is very common indeed to have an order for medical attendance on the wife or children, the husband being in work at the time, and receiving no further relief." I could make extracts of a similar character from a large number of letters. On the same page I find another assertion: "The services of the Poor-law medical officers are strictly limited to the pauper class." I will again quote from letters: "I should say decidedly that, in my experience, the services of the Poor-law medical officers are *not* strictly limited to the pauper class. My services are frequently ordered and given to persons who neither require nor receive further relief; nay, more, whom the board pronounce able to provide additional relief for themselves. I have frequently to attend ordinary illness, while midwifery orders are refused on this score."

At the aggregate meeting of medical officers in June 1868, the late Dr. Colborne said, "Not only do nearly the whole of the rural labouring population, but labourers in the direct and immediate employ of the rich and distinguished, even of cabinet ministers, peers of the realm, possessors of fabulous wealth, come upon us for themselves or families as patients." Further on, he stated, "this I know to be true of at least one half of England and Wales." The letters which I have received tell me that it is equally true of the whole of the country. There is, however, just enough truth in the statements to enable the office to put them forth as the rule, when in reality they are but the exceptions.

I would not have you suppose that in exposing the fallacies in the last annual report of the Poor-law Board, I seek thereby to diminish the facilities for medical relief to the poor. I am satisfied that those facilities are not so great as they should be, inasmuch as they are now rendered by medical officers under a galling sense of injustice; and as it is not given to the best of us to pull against the stream continuously, it must happen, under the existing system, that injury is inflicted on the sick poor, who can only secure imperfect medical attendance, and increased cost on the ratepayers, who have to meet the consequences of such unavoidable neglect; this the higher death-rate and heavy local taxation in England and Wales clearly exhibit.

On page 51, "The foregoing facts prove that the difference between the medical practice in the two countries is by no means occasioned by Poor-law regulations," etc. I contend, on the contrary, that the difference in favour of Ireland is entirely traceable to the admirable regulations which, with few exceptions, have been there carried out. There the districts are fairly equalised; salaries are much larger and placed on a uniform system; all drugs are found; and the dispensary physician can rely, in the performance of his duty, on the support of the Commissioners. Here, on the contrary, there are regulations (called general orders), it is true; but they are never enforced. Salaries are fixed by

guardians on no principles whatever; even in the same union,* districts are assigned to officers (with the sanction of the Poor-law Board) of such area as renders it physically impossible that the duties can be done. With the exception of the metropolis and a few large towns, all drugs are furnished by the medical officers. What can be said for regulations which have sanctioned 622 districts, exceeding 15,000 acres; 73 districts which extend seven miles from the medical officer's house; 204 districts, exceeding 15,000 persons; that 627 districts should be held by 291 medical officers; that 266 medical officers should attend from 1,000 to 10,000 patients annually, altogether making up 1,511 appointments contrary to the rules and regulations of the Poor-law Board, which, until quite recently, invariably crushed a medical officer if he dared to make complaint, however legitimate, of any wrong-doing, and which has led to a heavier mortality and a positively profligate (because preventable) expenditure on poor relief; and yet I find that Earl Devon, ex-inspector, secretary, and president, though he be, in his evidence before the Sanitary Commission, asserted "that, subject to a few exceptions which the necessity of the case had rendered necessary, and are sanctioned in each individual instance by the Poor-law Board, the area is 15,000 acres, and the population 15,000." I challenge the noble lord to produce his proof of the official consideration of, and interference with, the ideas of guardians respecting medical relief which he claims †

[Dr. Rogers read here extracts from letters, showing the overwork and insufficient pay of the medical officers, and the effects of false economy.]

Mr. W. H. Smith, M.P. (one of our honorary members) has placed a notice on the paper that he will, early next session, call attention to the administration of poor relief in the metropolis, and move the appointment of a Royal Commission. I regret that his notice of motion has been so framed as to exclude the rest of England and Wales. Still, though thus limited, a commission honestly determined to gain information would lay bare the vicious arrangements in our local and central administration, and so effect a large public service. I, therefore, urge you to press on all Members of Parliament whom you may know, the importance of Mr. Smith's motion, and beg them to support it. Should you be met by the remark that, if carried, it might embarrass the Government, say that poor-law questions have never been considered of such importance as to jeopardise, only to inconvenience, an administration; and that without Parliamentary pressure, the department will rest contented with the *status quo*, and no change of a beneficial character will ever even be attempted.

I have secondly to remind you that our friend, Dr. Brady, has resolved to introduce a Bill, having for its object such reform in medical relief as will place the service on a more satisfactory footing; and, in order to secure a favourable consideration when it comes on for second reading, has pointed out, through the medical press, what kind of information will best suit his views. At present, as you too well know, guardians believe that they best serve their own and their constituents' interests by making the cheapest possible bargain with their medical officers. In this false view of economy, they have either been supported, or at least left undisturbed, by the Poor-law Board, which almost seemed to look to them for enlightenment. To obtain facts, to show how much they have been in error, is what Dr. Brady requires. I, therefore, beg of you to put into his hands or mine any such information as will exemplify the evil consequences to the community that have resulted from the faulty arrangements which have been permitted to exist in all matters relating to the care of our sick poor. I have given you cases in point above. Can you not each of you from your own experience furnish others?

In conclusion, allow me to congratulate you on the signal success which has hitherto attended our efforts; not only are our ranks continually recruited by the accession of members of the Poor-law service, but many gentlemen (the *élite* of the profession), Members of Parliament, distinguished political writers, and others, support our cause,

* Mr. Griffin's analysis of Lord Elcho's returns showed that in sixteen Unions the stipends of the medical officer ranged from 8d. to 1s. a patient; in 239, from 1s. to 3s.; in 348, from 3s. to 7s.; in 51, from 7s. to 16s. per patient. Salaries in England, with all drugs to find, average £49 only; in Ireland, with nothing to find, £90. Earl Devon, before the Sanitary Commission, asserted that the average salary was £68 a year. This is on the assumption that the whole sum returned in the medical relief column of the Poor-law Board's Report is distributed amongst the medical officers; which, however, is a gross inaccuracy.

† The total number of districts in England and Wales where the acreage and population exceeds the limit of the General Orders of the Poor-law Board is as follows:—

Excess in Acreage.—Above 15,000, 355; above 20,000, 127; above 25,000, 81; above 30,000, 31; above 35,000, 18; above 40,000, 11; above 45,000, 15; above 50,000, 12; above 60,000, 8; above 70,000, 4; above 80,000, 2; above 100,000, 1; total, 665.

Excess in Population.—Above 15,000, 98; above 20,000, 48; above 25,000, 28; above 30,000, 15; above 35,000, 5; above 40,000, 9; above 50,000, 1; above 80,000, 1; total, 205.

and, in the press, on the platform, and in Parliament, are prepared to urge that the objects for which we strive shall be conceded. Can it be doubted that yet a little while and their complete realisation will be achieved?

MR. JAMES LEWIS, of the General Register Office, spoke of the importance of seeking the aid of, and co-operating with, the British Medical Association for the registration of disease. The substance of his remarks is given at length elsewhere.

Mr. BENSON BAKER proposed the first resolution:—"That in the opinion of this meeting it is desirable that a general registration of all new cases of disease coming under treatment at the public cost in workhouses and Poor-law districts should be established, and that the medical officers of such workhouses and districts, as enjoying the largest opportunities for observing facts prejudicial to the public health, should be intrusted with the duty of making weekly or, in times of epidemic, more frequent returns of cases actually coming under treatment, and of other facts concerning the spread of disease, to the health officers of their respective localities." He thought that the Poor-law medical officers had not only the best knowledge of the state of health of their districts, but also of their sanitary state and of the preventive measures to be adopted, and were thus well qualified to act as deputy health officers. He believed that the Poor-law Board were becoming alive to the necessity of registration. But, even with full knowledge, it was difficult to prevent disease, unless the medical officer had compulsory powers to remove the sick member of a family to an hospital. He was glad to hear from Mr. Lewis that an abstract return was sufficient for the central office; but he considered that the local health officer should be supplied with full details. It ought to be the duty of the medical officer to take note of bad drainage, bad ventilation, and other sanitary defects.

Dr. MAUNSELL, Dispensary Physician of the South Dublin Union, in seconding the resolution, explained the system of registration in operation in Ireland. He stated that each medical officer made a return of the cases of disease occurring in his district, taking special note of any disease unusually prevalent. In Dublin the returns were made up weekly, in outlying districts monthly. A quarterly and an annual return were likewise drawn up.

Dr. BRETT objected to more work being imposed upon the medical officers without more pay. He remarked that the Poor-law medical officers were not interested in preventing all cases of sickness; that was the duty of the state.

Dr. SANSOM insisted upon detailed returns and not mere excerpts. What was wanted was notice of the forerunners of disease. When an epidemic had already gained a footing it was too late.

Dr. BARCLAY (Medical Officer of Health for Chelsea) thought that the returns should be sent to the central office at once, and then be sent back to the health officers. He therefore questioned the advisability of pledging the Association to the plan proposed.

Dr. STALLARD said that the British Medical Association seemed to lay stress upon this point. He was of opinion that the returns ought to be made to the Guardians, and as much in detail as possible. They ought to have as much knowledge as possible of all sanitary defects. A modification of the plan adopted in Ireland would, he thought, be the best. It was advisable also to secure an intelligent, not a mere routine, return. In addition to this, an intelligent appreciation on the part of the public was necessary.

Dr. ALDIS (Medical Officer of St. George's, Hanover Square) advocated the adoption of the plan used by Dr. Ballard. He also paid a tribute to the willingness of the medical officers in his district to supply him with any information for which he asked them.

Dr. LETHBY said that, as far as his experience went, it was of the greatest advantage that an immediate return should be made to the medical officers of health. What was wanted was a simple and speedy return. He had proposed to his Board to supply the medical officers with paper, stamps, and every facility, so that they might have as little trouble as possible. He considered these officers overworked and underpaid.

Mr. BENSON BAKER explained that, when dispensaries became generally established, the Poor-law medical officers would come under the jurisdiction of the Dispensary Committee.

Dr. LYON PLAYFAIR, M.P., thought it advisable that one remark which had been made by a previous speaker ought not to go forth as the opinion of the Association. He thought it was of the greatest pecuniary interest to the medical officers themselves to prevent disease as much as possible. It was their success in this respect that had made the Irish medical officers so popular. He should be glad to see them better paid; and he was of opinion that the money would not be grudged if the public felt that it was expended upon the plucking out of the seeds of pauperism. They would extricate themselves from their present

anomalous position, and become important public officers by attaching to themselves sanitary duties, as was the case in Ireland.

The resolution was put and carried.

Mr. WICKHAM BARNES proposed the second resolution—"That it was advisable that the workhouse and district medical officers should be appointed deputy health-officers, and be remunerated for the proposed health-returns on a scale to be determined by the central authority."

Dr. BARCLAY seconded the resolution, which was carried.

Dr. BRETT proposed, and Dr. ALDIS seconded, a resolution to the effect that copies of the resolutions should be sent to Mr. Göschen and to the Secretary of the Sanitary Commission.

Dr. DUDFIELD, in supporting the resolution, showed from the statistical returns of Kensington for the last five years how the maintenance of an effective staff of inspectors had been instrumental in reducing the average of mortality; and that, when sanitary inspection was relaxed, the mortality again rose.

The PRESIDENT mentioned a fact that had come to his knowledge within the last two hours. It was to the effect that, in consequence of the many abuses that prevailed under the present system, a general order had been issued in Ireland by which it was determined that medicines and drugs should no longer be purchased by the respective Boards, but that an Apothecary-General should be appointed at a salary of £500 a year, who should purchase the cheapest and best drugs for all the Unions. The importance of this measure would be seen when it was remembered that £32,000 was spent upon medicines. As the same abuses existed in England, Dr. Rogers urged this plan upon the attention of the Poor-law Board for adoption in this metropolis.

With votes of thanks to Dr. Lyon Playfair, Mr. Lewis, and the President, the meeting separated.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 11TH.

JAMES PAGET, Esq., F.R.S., President, in the Chair.

Skin-grafting. Mr. JOHN CROFT, for Mr. Le Gros Clark, exhibited a patient, who came into Hospital with a large sore on the leg, six inches by four. He was in ill-health. On August 1st a piece of skin, a quarter of an inch in diameter, was snipped from the thigh, and fixed on the sore. On the 11th there was hardly any of it to be seen; but by the 22nd, when Mr. Croft took charge, an island of skin, three-eighths by one-fourth of an inch in size, was visible. This rapidly spread, and the whole was now nearly skinned over.—Mr. F. MASON had operated on about twelve cases. As to the size of the pieces to be grafted, he thought they might be too large, and they might be too small—his own were of the size of canary-seeds. He had failed completely in a case of ulcer of the neck, owing, he thought, to the position and movement of the grafts. His pieces, as a rule, did not disappear, though sometimes the healed portions looked as if they would ulcerate.—Mr. CARTER asked Mr. Lawson (in reference to his paper reported in the JOURNAL of Nov. 19th) if it would not have been better to take the pieces from the other eyelid; they looked buttony now.—Mr. LAWSON said it was not a model to be copied, but rather an experiment. In another case, he would try to do all at once. He would not like to damage a sound eye for the sake of a bad one, and the results of such an operation were seen after entropium.—Mr. GANT wished to know what it was that grew.—Mr. SPENCER WATSON had tried the plan successfully in a boy who had suffered a severe burn on the back. He got one or two pieces to grow.—Mr. ARNOTT had, in a case of keloid in the neck, removed the diseased structures and transplanted some pieces of cuticle. The sore was at the angle of the jaw. One piece slipped, but became adherent at the edge; five others remained fixed, and did well. He had in one instance transplanted a piece of cuticle an inch square in the loin. It seemed to disappear, but after a fortnight a small patch was seen. In the case of a man who had two sloughing ulcers, which after a time improved, he transferred to one three pieces of cuticle, and left the other alone. The pieces did well, and after a time the sore was nearly healed, when he found the other sore, which had not been interfered with, nearly as well. The keloid was removed by deep dissection in August, and had as yet shown no sign of returning.—Mr. REEVES thought it would be well to note that it was the large piece which sloughed.—Mr. DURHAM's experience had been satisfactory. His method differed somewhat from that generally adopted. A boy aged 12 had suffered from a patch of lupus non exedens on the cheek. He cut it out, and, loosening certain strips of skin from the edges, turned them inwards without cutting through their connections at one end. All adhered, and each became a centre of cicatrisation. In another instance, a little girl had a nævus on the point of her nose. This

was removed, and two small pieces were planted. They soon cicatrised. He thought that small pieces were better than large ones.—Mr. CALLENDER said that among Mr. Willett's cases one woman was markedly syphilitic. A portion of the cuticle transplanted to an ulcer on the leg had taken root and done well.—Mr. HEATH asked the age of the sore—was it really syphilitic, or did it only occur in a syphilitic person?—Mr. CALLENDER said it seemed an ordinary tertiary one.—Mr. POLLOCK briefly replied.

Mr. T. SMITH exhibited a patient believed to be the subject of Vaccino-syphilis.—Mr. Callender, Mr. Gascoyen, and Mr. Berkeley Hill were appointed to examine and report on the case.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 15TH, 1870.

RICHARD QUAIN, M.D., President, in the Chair.

Mr. JAMES E. ADAMS exhibited a specimen of Dislocation of the Wrist. This specimen was taken from the body of an old woman in the dissecting-room of the London Hospital College, and was without any history. All the tendons were normal, lying in healthy synovial sheaths, and there was no sign of any old inflammatory mischief about them or the ligaments. The proximal end of the metacarpal bone of the first finger was of normal shape and size, and fitted into a depression on the inner side of the articular end of the radius. The end of the middle bone of the second finger was opposite to the interval between the radius and ulna, but articulated with a small piece of bone, probably the remains of the os magnum. The fifth metacarpal bone articulated with the unciform, which articulated closely with the inner side of the ulna. On the radial side of the unciform a process of bone reached from the ulna to the base of the fourth metacarpal bone—probably the styloid process of the ulna. On the palmar surface, the unciform process and the pisiform were very close together, and so placed that a line passing through the unciform process and the centre of the pisiform bone had a direction parallel to the long axis of the ulna. The metacarpal bone of the thumb articulated with the remains of the trapezium. A horizontal section showed the scaphoid and the semilunar, and probably the cuneiform, to be fused together, the cancellous texture being continuous. The inferior radio-ulnar articulation was also partially ankylosed.

Dr. SILVER exhibited the Suprarenal Capsules of a man, aged 24, who had died of Addison's disease. The man came under his care at Charing-cross Hospital, in June, and he afterwards became an in-patient. He had been growing dusky for two years; previously to that he had been fair. The cause was rendered obscure by an attack of ague two years before. He was very weak, complained of inability to take a deep breath, and had palpitation. Some time before death he showed cerebral symptoms. He died in the night. After death the vessels of the brain were found to be loaded, the ventricles containing more fluid than ordinary, and the corpora striata softened. The lungs were tolerably healthy, the left apex slightly adherent, and both containing masses of obsolete tubercle. The spleen was normal. The suprarenal capsules were adherent, and completely converted into a calcareous mass on each side. Dr. Silver considered that the case tended to show the connexion between Addison's disease and tuberculosis. He also alluded to two similar cases which he had encountered in visiting country hospitals.

Dr. R. D. POWELL brought forward a series of specimens, and a table of fifteen cases which had occurred at the Brompton Hospital, illustrating the Pathology of Fatal Hæmoptysis in Advanced Phthisis. Specimen 1 consisted of the lung of a man, aged 25, who had died, while under Dr. Powell's care, from exhaustion, three days after his first attack of hæmoptysis. Both lungs were the seat of lobular pneumonic consolidations in all stages of degeneration, and in the right lung there were some old smooth-walled cavities, the largest of which, situated at the base, contained a sacculated aneurism, as large as a small walnut, of a secondary branch of the pulmonary artery. The aneurism had thin, brittle walls, contained few coagular lamina, and had ruptured by a small opening. Specimen 2 showed a small sacculated aneurism situated in the wall of an old indurated quiescent cavity, which had given rise to abruptly fatal hæmoptysis, in a patient of Dr. Symes Thompson, at the Brompton Hospital. This patient had been ill for several years, but had never had hæmoptysis before. Specimen 3 had been removed from a patient under Dr. Powell's care, who had died suddenly of hæmoptysis on October 12, 1870, having had previous attacks of copious hæmoptysis in January and September. This specimen showed a large thin-walled cavity, the surface of which was in a state of active ulceration, which had led to extensive exposure of large vessels, and erosion of their walls. From one of these branches of the pulmonary artery the hæmorrhage had occurred; and on the same vessel, a little higher up, a small aneurism was situated, partially ob-

structing a bronchus. Specimen 4 was removed from a patient of Dr. Pollock's, who had died from rapid tubercular phthisis, but had never had any important hæmoptysis. This specimen, like the preceding, showed a large cavity in a state of active ulceration, leading to extensive exposure and erosion of vessels. It illustrated the long-continuing patency of large vessels in the walls of cavities, and the formation of fibrinous coagula in them, attached to the side first exposed, and invaded by the ulceration, and the subsequent removal by the same process of the vessel-wall, leaving the coagulum bare while the vessel still remained patent. Of the fifteen cases of fatal hæmoptysis in the table (including three of the above cases), twelve had resulted from rupture of the pulmonary artery in a cavity, preceded in eleven by dilatation (five sacculated, six varicose), and in one case from ulcerative erosion. In three cases the source could not be discovered. Dr. Powell regarded old-standing unilateral cases of phthisis with quiescent cavities as most favourable for the formation of aneurisms or ectasias of branches of the pulmonary artery; cavities in a state of active ulceration as most liable to cause fatal hæmorrhage by erosion of the vessel. In both these cases the artery was invaded on one side only, the other being still in connexion with living tissue. When a vessel was surrounded by pneumonic consolidations it was more likely to become obliterated. Dr. Powell referred to a paper by Dr. Rasmussen, in which eight cases of fatal hæmoptysis were related—four from sacculated aneurisms, and four from dilatation of pulmonary branches.—Dr. C. T. WILLIAMS had seen the vessels sometimes dilated and thin-walled—sometimes almost calcareous. Was there any change in the vessels in early consolidation?—Dr. BASTIAN thought it was not difficult to account for fibroid change in the coats of the vessels. In the brain, this was generally so. With an old cavity and chronic induration, he could understand the vessels partaking of the change, and dilating or giving way where there was no support.—Dr. MOXON had failed entirely in discovering the source of hæmorrhage in two suddenly fatal cases. One was a girl who died in five minutes; yet he could find consolidation merely. It was a matter of surprise that Dr. Powell's cases should be of the kind they were, as in such it was usual for the vessels to contract. He would rather expect to find such change in rapidly fatal cases.—In reply to Mr. Arnott, Dr. MOXON said he had pursued his search for the source of the hæmorrhage systematically till the lung was reduced to exceedingly small pieces.

Mr. DAVY exhibited two Hip-joints from patients of Mr. Holt and Mr. Holthouse. One was an example of the destructive form of disease, with general erosion and abscess in the pelvis; the other, of bony ankylosis, the result of a fractured neck of the thigh-bone, taking place long ago, and ending in a stiff joint.

Mr. DAVY also exhibited the Ruptured Stomach of a Dog which had been run over in the streets. There was no external injury, yet the stomach was traversed by a large rent.—Mr. ARNOTT had no idea that these cases were rare or he would have brought some before the Society. In one case a little boy fell from a ladder; there was no external mark, yet there was a large rupture of the stomach. At University College Hospital, a man came complaining of colicky pains. He had already been supplied with diarrhœa medicine; while there, he was taken very ill and speedily died. The day before he had had a fall and hurt his side, but he walked home and partook of a meal as well as of the physic. There was a large rent in the wall of his stomach, and its contents were lying in the peritoneal cavity.—Dr. MURCHISON had seen as many as three in one day, the result of a railway accident, the passengers' stomachs being full.—Mr. HULKE had seen a case where the stomach formed part of the contents of an umbilical hernia, and, in forcible attempts at reduction, a rent four or five inches long was made in its wall.—Dr. MOXON had seen the stomach of a boy run over by a carriage, where the vertebral column seemed to have cut the stomach like a knife.—Mr. ARNOTT alluded to another case of a young man playing at football, who had received a blow from an elbow; death followed on the second day. There was a large opening in the jejunum.

Dr. WHIPHAM exhibited a specimen of Diseased Tricuspid Valves, the left side being healthy. The patient, a male, had symptoms of pneumonia, and had suffered from hæmoptysis. He gradually sank, when it was found that the right lung in its lower lobe was hepatised, and that the pleura had given way. All the valves of the heart were healthy, except the tricuspid, which was ulcerated, and some of its chordal tendons were broken across. There was no apparent cause for this, and no pyæmia. Dr. Anstie had recorded a case where there was pus under the aortic valves, which seemed to resemble this.

Dr. KELLY showed a specimen of Malformed Heart in a case of Cyanosis. The heart was taken from a child, aged three months. The pulmonary artery arose from the left ventricle and the aorta from the right ventricle. The only communication between the systemic and

pulmonary systems was through the patent foramen ovale; the ductus arteriosus was closed. There was no malformation in any other organ. The child was not cyanotic until five weeks after birth: it then became rather livid, and every morning had slight convulsive attacks, probably brought on by impure blood passing through the nervous centres. During life a loud systolic bruit could be heard nearly all over the thorax, but most distinctly at the apex. Another child in the same family had previously died of a similar affection.

Dr. KELLY also showed a Malformed Heart, taken from a child, aged 6, who died in King's College Hospital of renal dropsy after scarlet fever. There were no symptoms of heart-disease during life, with the exception of a systolic bruit between the base and apex of the heart. The septum between the ventricles was defective above, so that there was an oval communication between the right auricle and the two ventricles. The adjacent portions of the tricuspid and mitral valves were intimately adherent.

Dr. KELLY showed a specimen of Necrosis of the Patella, taken from a girl, aged 7, under the care of Mr. Wood. She ran a dirty fork into her left forefinger last August, and shortly afterwards symptoms of pyæmia came on; there were shivering, and a fluctuating range of temperature, and swelling of the left knee-joint, which was very painful. The joint was opened and some pus escaped. In a few weeks it was again opened, and a good deal of pus came away. The girl then began to improve in health; and, one morning last October, when the wound was being dressed, the patella was found lying loose, and was removed by forceps. The bone was yellow, and somewhat destroyed on its lower and posterior aspect. It weighed, when dry, 1'485 grammes. The finger at this time was nearly healed. Both wounds had been treated with carbolic acid, according to Mr. Wood's method. The child soon made an excellent recovery, and left the Hospital in November.—Mr. WOOD said the case was really one of pyæmia. An abscess had formed over the metacarpal bone and destroyed it. The pus was let out, but a swelling of the knee-joint followed, and an opening had to be made to allow the matter to escape; another had also been required after a time. He had used McDougall's powder as a disinfectant.—In reply to Mr. HULKE, it was stated to be too early to look for repair.

Dr. PAYNE exhibited a specimen of Cancer of the Thyroid in an elderly lady who had suffered for years from goitre. Latterly she had bronchitis, dyspnœa, and loss of voice, supposed to be due to a thoracic tumour. After death, it was found that the left lobe of the thyroid had pressed on the recurrent laryngeal, and was converted into a thick-walled cavity containing creamy material like medullary cancer, also isolated nodules containing multiple nucleated cells. The mass really consisted of two structures—ordinary goitre, and cancer.

Mr. ARNOTT exhibited a specimen of Concurrent Myxoma from the gluteal region. The patient was a middle-aged woman, and a similar tumour had been removed twelve months before. It apparently sprang from the periosteum, and was soft, lobulated, and jelly-like.—Referred, along with Dr. Payne's specimen, to the Morbid Growth Committee.

Mr. J. D. HILL exhibited a Tumour that day removed from the Scapula, having been attached to its under surface and costa. It pressed on the vessels and nerves, and was of rapid growth. It had not been examined.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting of the above Branch will be held in the Council Room of the Midland Institute, on Thursday, December 8th. The Chair will be taken at 3 P.M. precisely.

Members are invited to exhibit pathological specimens at the commencement of the meeting.

T. H. BARTLEET, *Honorary Secretary*.
Birmingham, November 1870.

BATH AND BRISTOL BRANCH.

THE second ordinary meeting of the session will be held at the York House, Bath, on Thursday, December 15th, at 7 P.M.; CHARLES BLEECK, Esq., President.

R. S. FOWLER, } *Honorary Secretaries*.
E. C. BOARD, }

6, Belmont, Bath, November 1870.

CORRESPONDENCE.

A QUERY AS TO REGISTRATION.

SIR,—We, the undersigned medical practitioners resident at Wirksworth and Matlock, in the county of Derby, beg to direct your attention to the extraordinary circular enclosed, purporting to emanate from a member of our body, which has been given away extensively in this town during the past week. The writer of it is, we find, by reference to the *Medical Register*, registered as "Surgeon in the service of a charitable institution"; the date of his registration being December 12th, 1867, nine years after the passing of the Medical Act; and there is no evidence that he has obtained any of the qualifications mentioned in Schedule A. We therefore respectfully call thus publicly upon the Registrar for England of the Medical Council to show by what authority this name was placed on the *Register*; who proposed, and who seconded, the proposal for registration, as well as the names of the supporters of the proposition;—that we, and others of our body who are anxious to uphold the honour and dignity of the profession, may know in whom to place confidence when the time comes, as it assuredly must, for direct representation of the profession in the Council.

We make no comment upon the circular; it is in itself sufficiently condemnatory of the writer, be he qualified or otherwise.

We are, etc.,

W. CANTRELL, M. & F.R.C.S.Eng., L.R.C.P.Ed. (by exam.), and L.S.A.Lond., Wirksworth.

WILLIAM WEBB, M.D., F.R.C.S. Eng. (by exam.) and Edin., L.S.A.Lond., etc., Wirksworth.

WILLIAM MILLIGAN, M.R.C.S.Eng., L.R.C.P.Ed., L.S.A.Lond., Wirksworth.

GEORGE HARVEY, F.R.C.P., Wirksworth.

R. C. B. HOLLAND, M.D., M.R.C.S.Eng., L.S.A., Matlock. Wirksworth, November 25th, 1870.

To the Gentry, Clergy, Farmers, Tradesmen, Artisans, and other Inhabitants of the Town and Neighbourhood of Wirksworth, Cromford, Matlock, etc.

Ladies and Gentlemen,—In consequence of the lamented death of your able and accomplished surgeon, the late Mr. Chas. Walker, a vacancy has arisen at Wirksworth for a successor to his practice and position. Having conducted Mr. Walker's practice for the last six months, I have reason to believe, with perfect satisfaction to all his patients, I beg respectfully to inform you that it is my intention to commence practice for myself at Wirksworth, as soon as my engagement with Mr. Walker terminates, when I trust by moderate charges, by prompt attention to every call, and from an experience acquired by a long and varied practice at hospitals and other public institutions, to merit a continuation of the support so liberally accorded to my predecessor. I might just state, for the satisfaction of patients, that I have been house-surgeon and medical officer to hospitals and dispensaries, in London and elsewhere, for nearly twenty years—institutions where hundreds of patients are seen daily, and by such means have acquired an amount of practical knowledge and skill, and have met with such decided success in the treatment of the diseases of women and children, and in pulmonary and chest affections, and in rheumatic cases, as it is scarcely possible to be achieved by any junior practitioner (see *Times'* report of 1858). Visit and medicine to tradesmen and artisans in the town, 1s. 6d.; in the country, 1s. per mile.—I have the honour to be, ladies and gentlemen, your faithful and obedient servant, GEORGE GILL, Surgeon; many years House-Surgeon to a Metropolitan Hospital; late Sanitary Officer to a Board of Health; also from an Hospital for Consumption and Diseases of the Chest; Recipient of a Testimonial voted by a Board of Guardians for his satisfactory treatment of Epidemic and other Diseases; author of several papers on Sanitary and other Scientific Subjects.

* * * We have sent this communication to the office of the Medical Council, and have received the following note.—The Clerks of the Medical Council, in the absence of the Registrar, beg to state that Mr. George Gill of Wirksworth was registered on December 12th, 1867, under the forty-sixth section of the Medical Act, by the Branch Medical Council for England, as a Surgeon in the Public Service; evidence and testimonials having been laid before them that brought his claim within the meaning of that section.

THE BLANE MEDAL, ROYAL NAVY.

THE adjudication of the Blane Medal has just been made by the President of the Royal College of Physicians, the President of the Royal College of Surgeons, and the Director-General of the Medical Department of the Navy (in accordance with the bequest of the founder, the late Sir Gilbert Blane, Bart., formerly Physician to the Fleet), to naval medical officers who have shown the most distinguished proof of zeal and ability in the professional returns rendered annually to the Medical Department of the Navy.

The medals, which are awarded biennially, have been on this occasion conferred on David Lloyd Morgan, M.D., Deputy Inspector-General of Hospitals and Fleets, recently promoted to that rank, and now serving at Bermuda Naval Hospital; and on Alexander Rattray, M.D., Surgeon R.N., now serving in H.M.S. *Bristol*, training ship of naval cadets.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following candidates have passed the Second M.B. Examination for Honours. (* Obtained marks qualifying for Scholarships.)—Medicine.

First Class.

Curnow, John (Scholarship and Gold Medal), King's College
*Irvine, James Pearson, B.A., Sc. (Gold Medal), University College
Roberts, Richard Lawton, University College

Second Class.

Bruce, John Mitchell, M.A.Aberd., University of Aberdeen
Burgess, Wm. Frederick Richardson, Guy's Hospital
De Liefde, John, Guy's Hospital
Pollard, Frederick, St. Thomas's Hospital
Seaton, Edward Cox, St. Thomas's Hospital

} equal.

Third Class.

Carter, Charles Henry, B.A., University College
Smith, Richard Thomas, University College

Obstetric Medicine.

First Class.

Curnow, John (Scholarship and Gold Medal), King's College
*Burgess, William F. R. (Gold Medal), Guy's Hospital
Pollard, Frederick, St. Thomas's Hospital
Seaton, Edward Cox, St. Thomas's Hospital
Carter, Charles Henry, B.A., University College
De Liefde, John, Guy's Hospital

Second Class.

Irvine, James Pearson, B.A., B.Sc., University College
Barnes, Edgar George, St. George's Hospital

Third Class.

Smith, Arthur William, Guy's Hospital
Smith, Richard Thomas, University College

Forensic Medicine.

First Class.

Bruce, John M., M.A. (Scholarship and Gold Medal), University of Aberdeen
Burgess, William F. R. (Gold Medal), Guy's Hospital

Second Class.

Irvine, James P., B.A., B.S., University College
Smith, Arthur William, Guy's Hospital

} equal.

Third Class.

Carter, Charles H., University College
Curnow, John, King's College
Seaton, Edward Cox, St. Thomas's Hospital

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following members of the College passed the primary or anatomical and physiological examination for the Fellowship, on November 22nd.

William Preston Goodall, Newhall Street, Birmingham, diploma of membership dated June 15th, 1855 (of King's College); Thomas Hiron Bartleet, Old Square, Birmingham, February 3rd, 1860 (of the Birmingham School); John Adolphus Sharp, Maidstone, April 21st, 1868 (of Guy's Hospital); James Ryall Rouch, Bradford, May 5th, 1868 (of St. Bartholomew's Hospital); Edward Nettleship, L.S.A., Kettering, November 17th, 1868 (of King's College); John William Ley, London Hospital, November 11th, 1869 (of the London Hospital); and Gopaul Chunder Roy, Calcutta, May 4th, 1870 (of the Calcutta School).

The following gentlemen, who are not members, also passed this examination.

Thomas Cook, M.D., Paris; Alban Henry Griffiths Doran, of St. Bartholomew's Hospital; William Rose, of King's College; Henry Humphreys, of University College; Thomas Davies Harries and Wm. Williams, of Guy's Hospital.

It is stated that twelve out of the twenty-five candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, November 24th, 1870.

Atkinson, Walter Mark, Cheshunt, Herts
Gray, Clement Frederick, Newmarket
Pugh, Edgar Joseph, Waltham Abbey
Simon, Arthur Charles, St. Helier's, Jersey

The following gentlemen also on the same day passed their first professional examination.

Baldock, Alfred, St. Bartholomew's Hospital
Bethell, Alfred, King's College
Pilkinton, Henry Oldfield, Manchester
Sealy, George James, Guy's Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

BIRMINGHAM GENERAL DISPENSARY—Resident-Surgeon: applications, Dec. 28th.

CORK NORTH CHARITABLE INFIRMARY—House-Surgeon and Resident Apothecary: 12th.

EVELINA HOSPITAL, Southwark Bridge Road—House-Surgeon: Registrar.

EVESHAM UNION—Medical Officers and Public Vaccinators for District No. 3, and the Parish of Pebworth: applications, 12th; duties, 26th.

FARRINGTON DISPENSARY, Bartlett's Buildings, Holborn—Resident Surgeon: applications, 3rd.

FEVER HOSPITAL AND HOUSE OF RECOVERY, Cork Street, Dublin—Temporary Physician: applications, Jan. 4th.

GUISBOROUGH UNION, Yorkshire—Medical Officer for the Danby District: 13th.

HOSPITAL FOR SICK CHILDREN, Birmingham—Physician.

INVERKIP, Renfrewshire—Parochial Medical Officer: applications, 7th.

KING'S COLLEGE, London—Demonstrator of Chemistry.

LINCOLNSHIRE COUNTY LUNATIC ASYLUM, Bracebridge, Lincoln—Assistant Medical Officer: applications, 3rd; duties, 17th.

LONDON SCHOOL OF DENTAL SURGERY, Soho Square—Lecturer on Dental Anatomy and Physiology: applications, 14th.

MANCHESTER CLINICAL HOSPITAL AND DISPENSARY FOR CHILDREN—House-Surgeon: applications, 3rd.

MANCHESTER ROYAL INFIRMARY—House-Surgeon; Two Physician's Assistants: applications, 10th; election, 19th.

NEWCASTLE-UPON-TYNE BOROUGH LUNATIC ASYLUM—Resident Medical Superintendent.

ST. BARTHOLOMEW'S HOSPITAL—Professor of Chemistry in the Medical College: applications, 9th.

SCOTTISH NATIONAL INSTITUTION FOR IMBECILE CHILDREN, Larbert, Stirlingshire—Superintendent: applications, 15th.

SHETLAND, DELLING, AND NORTHMAVINE PARISHES—Medical Officer: applications, Dec. 17th.

SOUTHERN, Argyshire—Parochial Medical Officer.

SOUTHPORT INFIRMARY AND LOCAL DISPENSARY—House-Surgeon: applications, 6th; election, 10th; duties, Jan. 1st.

WESTERN GENERAL DISPENSARY, Marylebone Road—Resident Dispenser and Assistant: applications, 9th.

YORK COUNTY HOSPITAL—Surgeon.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

***BLACKETT**, George P., Esq., appointed Medical Officer and Public Vaccinator to the Whickham District of the Gateshead Union, *vice* *J. H. Stevenson, Esq., deceased.

***CATON**, Richard, M.D., appointed Lecturer on Comparative Anatomy and Zoology at the Liverpool Royal Infirmary School of Medicine.

***DE ZOUHE**, I., M.D., appointed Curator of the Museum of the Liverpool Royal Infirmary School of Medicine.

***LAWRENCE**, H. Cripps, Esq., elected Surgeon to the Westbourne Provident Dispensary and Maternity.

***MURRAY**, John, M.D., appointed Assistant-Physician to the Middlesex Hospital, *vice* *J. Burdon Sanderson, M.D., F.R.S., resigned.

BIRTHS.

ASHLEY.—On November 24th, at Ladbroke Square, the wife of William Henry Ashley, M.D., of a daughter.

CLARKE.—On November 23rd, at Woolston, Hants, the wife of Alfred F. S. Clarke, M.D., Royal Artillery, of a son.

ELLIOTT.—On November 27th, at Manor Road, Forest Hill, the wife of John W. Elliott, Esq., Surgeon, of a son.

DEATHS.

***EARLE**, James Lumley, M.D., of New Hall Street, Birmingham, on Nov. 23rd.

FOX.—On November 20th, at Long Ashton, Bristol, Emily, wife of *Wilson Fox, M.D., of Grosvenor Street, London.

HENSON.—On November 16th, at Hull, Charlotte M. R., infant daughter of *S. Russell Henson, Esq., Surgeon.

SEDDALL, John V., M.D., Surgeon 86th Regiment, at Cape Town, Africa, on October 8th.

TREVOR-ROPER, George, L.R.C.P.Ed., at Rock Ferry, Cheshire, on Nov. 14th.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Indian Medical Gazette, Oct. 31st; The New York Medical Gazette, Nov. 12th; The New York Medical Record, Nov. 17th; The Boston Medical and Surgical Journal, Nov. 17th; The Madras Mail, Sept. 19th; The Shield, Nov. 26th; The Bedford Times, Nov. 22nd; The Edinburgh Daily Review, Nov. 17th; The European Mail; The New York Medical Gazette, Nov. 12th; The Bedford Times and Bedfordshire Independent, Nov. 12th; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. 8 P.M., Casual Communications. 8.30 P.M., Dr. John Brunton, "On Prolapse of the Funis Umbilicalis, and its Treatment by the Postural Method."

TUESDAY.—Pathological Society of London, 8 P.M. Dr. Liebreich, "Ophthalmic Illustrations of Diseases of the Eye"; Mr. Foster (for Mr. Thompson of Nottingham), "Tumours removed from the Breast"; Mr. H. Arnott, "Secondary Epithelioma of the Heart and Lungs"; Dr. Dickinson, "Cystic Sarcoma of Lumbar Glands"; Mr. Trotter, "Malignant Disease of the Kidneys"; Mr. C. Heath, "Fibrous Tumour from the Axilla—Procidentia Uteri with Ovarian Cyst—Lipoma of the Nose"; Mr. Squire, "Enlarged Spleen"; Dr. Tilbury Fox, "Keloid Tumours from the Ear" (the illustrations contributed by the Editor of the new American *Photographic Review*.)

WEDNESDAY.—Obstetrical Society of London. 7 P.M., Council Meeting. 8 P.M., Mr. J. T. Mitchell, "Case of Hydrocephalic Head necessitating Craniotomy"; Mr. Cullingworth (Manchester), "Case of Pelvic Cellulitis noted with special reference to the Temperature"; Dr. Wiltshire, "Fibro-enchondromatous Tumour complicating Pregnancy—safe Delivery." Concluding Report of the Infant Mortality Committee: and other papers.

FRIDAY.—Clinical Society of London, 8.30 P.M. Sir Henry Thompson, "Operations for the restoration of a large portion of the Male Urethra lost by Sloughing"; Mr. T. Smith, "On the nature of the so-called Congenital Tumour of the Sterno-mastoid"; Dr. Handfield Jones, "A query as to the safety of Subcutaneous Injections"; "Report upon Mr. T. Smith's Case of Ulcer following Vaccination"; Dr. Silver, "On the Use of Veratrum Viride in Acute Rheumatism"; Mr. Teevan, "Four Cases of Operation for unusually large Calculi."

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

To PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

STITCHING PERIODICALS.—In the JOURNAL for November 19th, Dr. Skinner recommends a system of stitching periodicals invented by Messrs. Ashworth of Manchester. Have they any agent in London where their contrivance can be seen?—J. D.

SOME indignant druggists have complained in the *Pharmaceutical Journal* of cabalistic prescriptions signed Watson Bradshaw, running as follows:—R Pulv. cinerei gr. ss; ext. sedativ. gr. iv. M. ft. pil. h. s.—R Liq. alkal. 3iss; extr. nigr. gr. ss; ess. M. pip. m. xx; infusi subamaræ ad 3viij; tinct. subamaræ, 3vj. M. capiat partem sextam ter in die.

Aprilis 19mo die, 1869.

Watson Bradshaw.

43, Welbeck Street, Cavendish Square, W.

Other similar forms include "extract nervini," "acidi eupeptici," "extr. laxativi," etc. These extraordinary specimens of prescribing are criticised from a pharmaceutical point of view as being unintelligible and likely to lead to error and to blind guessing.

Mr. Watson Bradshaw, M.R.C.S., L.S.A., and L.R.C.P.E., explains his position thus:—"My patients are invariably reminded that they can only have their medicines compounded by the especial druggists, to whom I hand them over. I have a perfect personal right, and shall continue to exercise it whenever I think proper, of inditing my prescriptions in any mode I may deem expedient, without the risk, I should think, of subjecting myself to the censorship of a posse of angry druggists." The mode in which a medical man frames his prescriptions is not precisely "his own private affair": and the particular mode of secret formulæ which Mr. Bradshaw avows himself to employ has been emphatically condemned by the general voice and usage of the profession.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

CALVERT'S CARBOLIC PRODUCTS.

SIR,—It has given us much pleasure to learn that you can speak favourably of our carbolic acid soaps, and we are quite sure the medical profession generally will endorse your opinion after fairly testing them. We, however, beg permission to state that the toilet soaps contain ten per cent. of pure carbolic acid, and not merely five per cent.; also, that they can be supplied either with or without perfume.

We are, etc., F. C. CALVERT & CO.

ERRATUM.—In a notice from one of our correspondents of the International Hospital at Bingen, in the JOURNAL of October 15th, page 423, it was erroneously stated (through the accidental misplacement of a paragraph) that "out of five deaths at the hospital, three had been from tetanus." The deaths occurred at the hospital at Rudesheimer.

THE POLICY OF THE ASSOCIATION.

SIR,—In a note which you append this week to the letter of a correspondent, who addresses you on the subject of professional remuneration, you say that our Association has a very democratic constitution, and is a sort of General Council of the profession, in which the rank and file are able and ought to assume a full share of activity, and not leave too much to the leaders. As one of the oldest and most sincere friends of the Association, allow me to say a few words on this important text; not, perhaps, quite in the sense which you would preach if you had to write the sermon, but still I hope usefully—certainly with a good intent.

Looking to the vast and important increase in the numbers of the Association since the JOURNAL, under the editorship of Dr. Markham, Mr. Hutchinson, and yourself, began to assume its proper position and influence, I cannot feel quite satisfied with the amount of its public work, and the energy and skill with which it is directed. It seems to me that we have lost greatly in initiative and activity since we lost the central directing energy and devotion of Sir Charles Hastings. Our numbers have more than doubled apparently in the last five years, but these are little more than the number of readers of a good and cheap journal. We do little or nothing to utilise our greater power. What can we point to as the result of the work of the Association since his death? There was last year a great effervescence about Medical Reform, and some honest enthusiasm was shown; and, at the bidding of our leaders, we held meetings and raised a storm which crushed the Government Bill because it was incomplete and unsatisfactory. Since then, we have had no cue: our work of destruction was effective, but of course we must not rest here. In your last number you speak of activity everywhere, except in the body of which your JOURNAL is the organ; I suppose because there is none to report. Everybody has his little bill: Sir Dominic Corrigan, the Irish bodies, Mr. Simon, and even one of your contemporaries has amused itself by publishing a paper so described, hatched out of its own consciousness, and destined for a flight in space. I suppose the British Medical Association ought to have a bill, and I hope it will. Then I cannot help observing that on such questions as the relation of the Poor-law dispensaries to public hospitals; the abuse of hospitals; and general sanitary questions, our Association ought to have a potent voice and to take action. I cannot help thinking that if such meetings as that held independently at the Royal Medical and Chirurgical Society, at the instance, I think, of Dr. Meadows, such meetings as those of the Medical Officers of Health and of the Poor-law Medical Officers, were held under the auspices of the British Medical Association, much more could be effected by their promoters, and the working power of the Association would be increased. I do not take a sufficiently active part in the affairs of the profession to know whether it is the fault "of the rank and file" or of "the leaders" that everyone tries to launch his own little cock-boat and fly his own flag; perhaps of neither, it may be of both. I point to a phenomenon of which I am not capable of offering a decisive solution. But I wish to conclude with an appeal to the rank and file to use more largely the invaluable and potent machinery of the Branches of the Association for agitating such questions; and to the "leaders" to give their time and attention to carry out energetically the responsibilities connected with office. Perhaps I am only a "laudator temporis acti," but I think Sir Charles Hastings would have managed better, at all events more vigorously. The list of members which appeared a few weeks back would indeed have rejoiced his heart; and such a powerful army as is now mustered at the back of the "leaders" of the Association—thanks, let me say once more, to the steady improvement in the JOURNAL—is able, and I doubt not ready, to carry any position against which it is led, no matter how strong. I hope the observations which I thus entrust to your courtesy for publication will carry weight by their truth; if they do not, I do not know that it would add anything to their influence if I were to subscribe to them the name of

A SEPTUAGENARIAN.

* * In several important points—the registration of disease, Poor-law medical reform, tariffs of fees, and medical reform—our columns to-day appear to afford an answer to our excellent but censorious correspondent.

GLUTEN BREAD.

SIR,—Will you kindly tell me if there is any means of obtaining pure gluten flour for diabetics? Van Abbott, of Oxford Street, used to supply it, but says his stock is exhausted, and he cannot get any more.

November 1870.

I am, etc., T. E. B., jun.

PRECAUTIONS AGAINST FEVER.—Mr. C. J. Renshaw, Ashton-upon-Mersey, forwards us a circular which he has had printed and freely distributed in his neighbourhood. The rules are a copy of those of Dr. Budd, as circulated by Dr. Whitmore, and have previously been thoroughly popularised in the profession by their first promulgation and frequent repetition in our columns. It only remains to make them equally known among the public. Copies of these rules have now been extracted from our columns and widely circulated by Dr. Lankester, Mr. D. Davies (Bristol), Dr. Nesham (Newcastle), Dr. Whitmore, our correspondent, and probably most officers of health. It is necessary, however, that we should point out that the evidence obtained at the Children's Hospital, Birmingham, goes very far to prove that Rule No. 3, which provides for placing soiled linen in a pan of water with Condy's fluid or other disinfectant, and then sending it to the laundry, affords insufficient safeguards. We need not recapitulate the facts, but they are sufficiently strong to make it the clear duty of a medical man at present to advocate either disinfection in a proper apparatus at a very high temperature—or their destruction. The point is one of great importance, and the conclusions arrived at by Dr. Heslop and the other medical officers of the Birmingham Hospital for Children point to this as being the only proper course.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than Thursday, twelve o'clock.

R. M. P. (Newtown, Montgomeryshire).—The Licence of the College of Physicians is a licence in Surgery and in Medicine; and this holds good in whatever year it may have been given.

THE TREATMENT OF ITCH.

SIR,—In reply to the query of Mr. Couch, viz., "what is the cheapest, most certain, and expeditious way of treating the itch, with the least interruption to prison labour", I may state that for many years I have, with never-failing success, treated prisoners suffering from the itch, with sulphurous acid, in a vapour bath. The acid is easily generated by burning sulphur, and from twenty to thirty minutes' exposure to the fumes is sufficient to effect a cure. I have but rarely had to repeat the application. The clothes of the patient should be fumigated by the same means. I think that this plan will satisfactorily meet each particular of Mr. Couch's query.

I am, etc.,

CROSBY LEONARD.

Bristol, November 25th, 1870.

THE following is an extract from the report of the directors of the Clerical, Medical, and General Life Assurance Society, presented at the general meeting.

"The quinquennial investigation to be made at the close of the current financial year, with a view to the declaration, in January 1872, of the ninth bonus, will afford an occasion, to which the directors look forward with the utmost confidence, for applying the provisions of the act to exhibit in detail the sound and satisfactory position of the society. In regard to that bonus, the directors think it right to add, on account of the manifest advantage which is offered to persons intending to assure, that, as all participating policies in existence at the closing of the books will share in it, persons who complete assurances before the 30th June next will be benefited by the division, although one premium only will have been paid. The year has been one, if not of great development, yet of entire prosperity. The new assurances have been, both in number (466) and amount (£267,210), substantially the same as those effected in the previous year, which were in number 478, and in amount £270,025. The total income (£230,355) exhibits an increase, the payments on account of death (£140,719) a decrease; whilst the expenses and general outgoings, as detailed in the financial statement, remain almost stationary. The consolidated fund has reached this year an augmentation of £58,655, being £8,000 more than the amount added in 1869. That fund, at the close of the year, reached £1,707,769."

GLYCERINE IN SURGERY.

SIR,—As one much interested in the surgical and antiseptic treatment of wounds, though little engaged in surgical practice, would you allow me to suggest the using of glycerine instead of carbolic acid as an application to flesh-wounds. In small wounds I have found it of the greatest benefit. When slightly diluted with water, it cleanses the surface and prevents the admission of irritating particles.

Southampton.

I am, etc.,

A MEMBER.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. R. S. Fowler, Bath; Dr. S. Monckton, Maidstone; Dr. J. W. Ogle, London; Mr. T. Spencer Wells, London; Dr. J. C. Thorowgood, London; Mr. Charles White, London; Mr. R. Fielding, Alfreton; Mr. Southam, Manchester; Our Liverpool Correspondent; Mr. H. Priestley, Sheffield; Mr. Walter Smith, Islip; Dr. Madge, London; Dr. Gairdner, Glasgow; Mr. Crosby Leonard, Bristol; Mr. Lawson Tait, Birmingham; Mr. M. H. Clayton, Birmingham; Dr. Aveling, Rochester; Dr. Meadows, London; Dr. Keith, Aberdeen; R. M. P., Newtown, Montgomeryshire; Dr. Gull, London; Mr. John Gamgee, London; Dr. Crace Calvert, Manchester; Mr. S. R. Henson, Hull; Mr. J. St. S. Wilders, Birmingham; Mr. G. P. Blackett, Wickham; Dr. Hyde Salter, London; Mr. Berkeley Hill, London; Dr. Renshaw, Ashton-upon-Mersey; T. E. B. Y.; A Member, Southampton; Mr. Bevan, Birkenhead; Dr. Sibbald, Edinburgh; Mr. J. Startin, London; Dr. Aldis, London; Dr. George Harley, London; Dr. G. B. Brodie, London; Mr. Henry Hancock, London; Mr. W. Hickman, London; Mr. G. Nayler, London; Dr. Sankey, Cheltenham; Mr. J. T. Clover, London; Mr. J. Thompson Dickson, London; Dr. J. Braxton Hicks, London; Mr. David Davies, Bristol; Mr. T. W. Nunn, London; Dr. J. C. Hall, Sheffield; Dr. T. K. Chambers, London; Dr. Althaus, London; Dr. Tatham, London; Mr. C. Meymott Tidy, London; Mr. D. B. James, London; Mr. Thomas Moore, Sheffield; Mr. P. W. Swain, Devonport; Messrs. Ansar, Harford, and Co., London; Dr. Horace Dobell, London; Dr. Cotton, London; Mr. J. Paget, London; Dr. Routh, London; Dr. A. J. Pollock, London; Mr. W. Walker, Lea Wood, near Matlock; Dr. Oppert, Hamburg; Dr. W. T. Greene, London; Dr. Morell Mackenzie, London; Dr. T. Clifford Allbutt, Leeds; Dr. Septimus Gibbon, London; Mr. George Buchanan, Glasgow; Dr. T. W. Grimshaw, Dublin; Dr. Barham, Truro; Dr. A. Wiltshire, London; Dr. G. F. Elliott, Hull; Dr. Charles E. Prior, Bedford; Sir Duncan Gibb, Bart., London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. W. Mac Cormac, Belfast; Dr. A. Ransome, Manchester; Our Birmingham Correspondent; Mr. James Louttit, Shetland; Dr. G. Wilks, Ashford; Mr. G. W. Dalston, Brough; An Occasional Correspondent, Birmingham; Mr. Star, Saffron Walden; Dr. Falconer, Bath; Mr. Steele, Bristol; Mr. W. C. Sutcliffe, London; Dr. M. W. Taylor, Penrith; Mr. Erichsen, London; M.R.C.S. Eng.; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; The Secretary of the Pathological Society; The Secretary of the Obstetrical Society; Dr. Athill, Dublin; Dr. Woodman, London; The Secretary of the Clinical Society; Dr. Joseph Rogers, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. Chiene, Edinburgh; Mr. Arthur Hogg, London; etc.

CLINICAL LECTURE

ON THE

TRANSPLANTATION OF SKIN.

BY CHARLES STEELE, ESQ.,
Surgeon to the Bristol Royal Infirmary.

TRANSPLANTATION of skin is a subject of great scientific interest and practical value. Though the possibility of transplanting skin has been known but a short time, it has largely engaged the attention of surgeons; and most of those who have experimentally tried it have been highly gratified with the results which they have obtained, and have become warm advocates of this mode of treatment. It is of interest in every-day surgery, as well as in the more striking forms of autoplasty.

Ulcers thrust themselves upon the care of all surgeons, the private practitioner, the parish and club-doctor; while the most aggravated and chronic cases continually come under our notice as hospital surgeons. To all, a means of decided and rapid cure, such as transplantation of skin promises, is a matter of congratulation. Like many other important advances in science, there have been for a long time indications strongly pointing to it. The vital power of transplanted skin as a centre of growth has been repeatedly proved in cases of total detachment, as well as in the remarkable results of plastic operations. Where a large portion of skin is dissected from the subjacent tissues, its connexion with the body is maintained only by a neck of integument (which is generally twisted); it is transferred to a raw new surface; and yet in most instances it lives as well in its adopted as in its natural *habitat*. We have all also observed the great value which is possessed, in a large ulcerated surface, by any portions of true skin, however small; and the remarkable manner in which these prove to be, as it were, oases in the desert, and spread their circles of cicatrisation over the granulating surface to meet the circumferential, and greatly expedite the cure. It appears that Dr. Frank Hamilton of New York suggested this plan as early as 1847, but put it into operation for the first time in 1854 in the person of Horace Driscoll, who had lost a large portion of the integument of his leg by the fall of a heavy stone upon it. After the lapse of fifteen months, it was apparent that the ordinary processes of nature were insufficient for repair. The integument was taken from the calf of the opposite leg, but was wholly inadequate to cover the entire sore. In ninety days, cicatrisation was complete; and it has remained so until the present day. In the result, it was observed that the new piece of skin had grown from its circumference in every direction, so that it was in the end nearly twice its original size. (*New York Medical Gazette*, August 20th, 1870.) Dr. Hamilton proved that transplanted skin would adhere to granulations; that the piece engrafted need not cover the ulcer, but would develop cicatrisation for its margin. He did not, however, discover that the graft might be wholly separated before insertion. It was reserved for M. Reverdin of Paris recently to demonstrate that portions of skin of various sizes might be removed from any part of the body, and engrafted upon a granulating surface; that they would live, act as centres of cicatrisation, give new vigour to the healing part, materially hasten recovery, and even bring about restoration in some ulcers which, from their size, could otherwise never have been healed.

M. Reverdin's paper on Epidermic Grafting was read before the Surgical Society of Paris in December of last year, and published in the *Bulletin* of the Society for that year, and also in the *Gazette des Hôpitaux* for January 11th and 22nd, 1870. Mr. George Pollock heard of M. Reverdin's experiments in May last, and immediately tried the treatment on a most suitable case, in a child eight years of age, who had been in St. George's Hospital for three months and a half with a very extensive burn of the right thigh, of more than two years' duration. The ulcerated surface extended from the buttock to the knee; it was broad above, narrow and pointed below. The progress and success of this case attracted considerable attention, and the practice was soon adopted in most of the London and several provincial hospitals.

In applying this treatment to ulcers, we must bear in mind the two leading objects of treatment—firstly, rapidity of cure; and secondly, permanence of cicatrisation. The following points are of importance to consider when we are about to operate: the state of the ulcer;

the size and number of pieces to be grafted; how near they should be placed; whether the whole or only part of the cutis should be inserted.

It is necessary that the granulating surface be in a healthy or tolerably healthy condition. This was insisted on by Mr. Pollock and Mr. Lawson in an interesting discussion at the Clinical Society on November 11th, and has been felt to be an essential by all who have practised the operation; and, where failure has followed skin-grafting, an ill-conditioned state of ulcer has generally been the cause. I feel that, where there is any marginal cicatrisation, or disposition to form the same, grafting may safely be practised, and the process from the margin will rapidly advance.

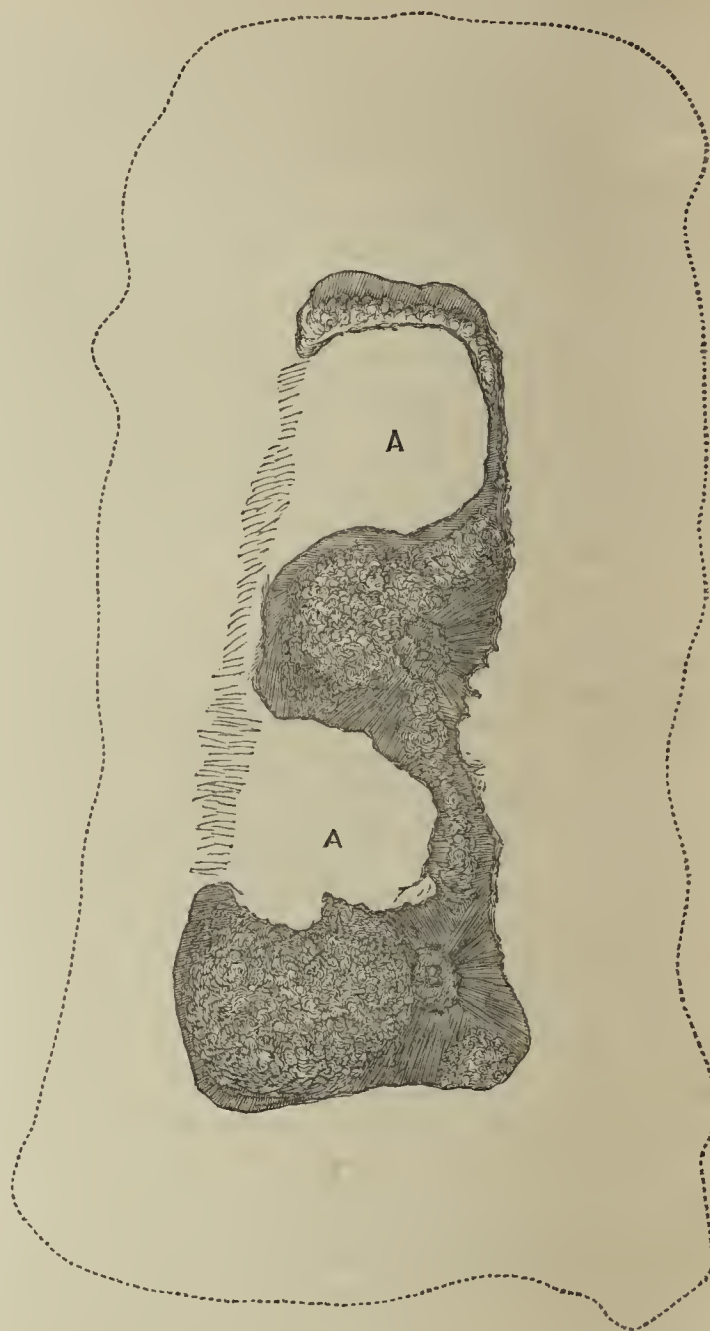
With regard to the size of pieces of skin and the depth of true skin to be used, it has been clearly shown that those employed by M. Reverdin and Mr. Pollock and many others, of the size of a millet-seed or an oat, whether including the whole or only part of the cutis vera, answer admirably; while the minutest subdivisions, as carried out by Mr. Dobson at the Bristol General Hospital in some striking cases which he brought before a meeting of the Bath and Bristol Branch of the Association on October 27th, set up rapid cicatrisation; and portions of entire skin a quarter of an inch in diameter also answer well. From these facts, it is evident that all that is essential is the papillary layer of cutis, no matter how small, capable of developing cuticle, and therefore cicatrisation. But, in dealing with individual cases, I feel it right to bear in mind the size of cicatrix which will result, and the strain to which it will be subjected. While, therefore, on the grounds of economy of skin and consideration for the patient, we should use little skin in such ulcers as will not be subjected to great strain, yet in those which will, as large ulcers on the leg, which, after being healed, frequently disappoint by breaking out again, it is most evident that to transplant a number of fair sized portions of entire skin, which will retain certainly their elasticity, and so, by their individual stretching, relieve the tension of the whole surface, is the most likely to be permanently successful. Transplanted skin does not retain its perfect integrity and function, as does skin employed in Taliacotian operations; since, in the first place, we cut it so close to its under-surface, in order to avoid fat and areolar tissue, that we must cut through most, if not all, the sweat-glands and hair-bulbs; and, secondly, the new piece sheds its epidermis, and for a time takes on the appearance of granulations, and, when cicatrisation has taken place, has more the smooth look of a cicatrix than the furrowed and soft appearance of true skin. Yet it contains its elastic tissue, is thicker in consistence, and has a more natural feeling and appearance than the cicatrix formed around it. Experiments have shown how little may be used with good results; they will yet show, I feel sure, that far larger portions may be employed than have yet been, and with great advantage, as, for instance, in relieving contractions from burns. I have now under treatment a case of this nature, in which I expect to show that a piece of the size of a penny will succeed, and give elasticity in a situation where it is greatly needed—namely, in the bend of the elbow. It is clear that, the greater the number of centres, the more rapid the cure must be, and the firmer the cicatrix; but I am inclined to think that, in a large surface, the same sized piece of skin would prove more useful if employed in a series of graftings than if distributed in exactly the same spots at one operation; for I am convinced that each series gives fresh life and vigour to the whole surface. For the same reason, since each graft is found capable of developing a cicatrix from a quarter of an inch to an inch in diameter, it is wise to insert the portions of skin from an inch to two inches apart, and subsequently place fresh points between these.

In operating, a portion of skin is pinched up in a forceps, or between the finger and thumb, and removed, either in the entire thickness or in part: it is essential on the one hand that no areolar tissue and fat, on the other that the papillary layer of cutis, be removed. The granulations, if quite healthy, need only be clean; if not quite bright and active, they are slightly incised or scratched; and, when bleeding has stopped, the graft is laid upon the surface. The portion removed is easily cut up, if desired, on the thumb-nail, and each portion can well be applied with the point of the scalpel. Some use a narrow strip of ordinary plaster, some transparent isinglass plaster, others Lister's lac-plaster. I have used these, and also a strip of gutta-percha tissue, which holds the portions of skin firmly in place, and, being transparent, enables one to see, while stretching it across, that the grafts do not slip. Over these, strapping, water-dressing, or any lotion suitable to the state of the granulations, should be applied; then a compress of cotton-wool, retained by a bandage, rather firmly applied, to insure close adaptation of the grafts to the granulations; the wool also serves to keep the grafts warm. I feel it wise to avoid ointments in the early dressings, as particles of grease might insinuate themselves beneath the transplantations and separate them. Unless there be copious suppuration, it is well not to disturb

the dressings till the second day ; the appearance then presented is the epidermis of the graft lying free on the granulation dressings, or on the graft ; if spread out, it shows the original size of the graft, which now is contracted and pale. During the next few days, the graft becomes vascular, and looks very like the surrounding granulations, and is nearly lost to view unless it be of some size, when it appears as a raised mass. It is difficult, and sometimes impossible, for even the operator to distinguish the grafts, if small, for the first seven to twelve days. The first indication of activity is a faint blue cicatrising aspect in the site of the graft ; and I also observe, if the graft be near the circumference, a line of cicatrification running from the circumference to the graft, and one from the graft to the circumference, which unite and increase to a band, and so increase again the cicatrix-producing margin ; in fact, these lines shoot out in various directions to any near margin or points, and thus in time may divide an ulcer into a series of smaller ones. One fact of great importance and value, and which shows the remarkable influence of the transplantations on the whole ulcer, is the rapidity with which cicatrification from the margin proceeds directly the grafts have established themselves, and even before they show much cicatrix of their own. Mr. Couper observed the same fact in a case under his care in the London Hospital, but remarked that he was not prepared to consider it more than a remarkable coincidence. I, however, feel it to be one of the most valuable immediate effects of transplantation, that the grafts act as natural stimulants to the ulcer generally, and arouse renewed energy in the marginal cicatrising edge, wearied with its previous almost hopeless exertion. These views I may well illustrate by the narration of the following case.

John Dando was admitted last April into the Bristol Royal Infirmary under my care with a very large syphilitic ulcer on the right leg, extending from an inch below the knee to an inch above the ankle-joint, and occupying the whole anterior and both lateral aspects of the leg, leaving only a band of entire skin behind, one inch wide below, but wider over the calf. The ulcer was extremely uneven and unhealthy. By carbolic lotion, black and yellow wash, and nitrate of silver lotion, successively, and scruple doses of iodide of potassium internally, continued for some time, a healthy granulating surface was established, which cicatrised and did well until the ulcer was reduced about one-third in size. Then the healing efforts became for a time exhausted, cicatrification entirely ceased, the surface put on an irritable appearance, and no progress was made for about three weeks. Under poultices and simple dressing, healthy granulations again appeared ; and for two months strapping promoted good, but rather thin, cicatrification. In the beginning of October, all healing effort again became suddenly arrested ; the cicatrised edge remained, though no cicatrification proceeded ; and granulations were present, though pale and unpromising. On October 13th, I removed two portions of skin, each of the size of a fourpenny-piece, from the upper arm, one piece being the entire thickness of the skin throughout, the other the entire thickness in the centre, but sloping towards the edges ; and, having scratched the granulations, placed these pieces upon them, one near the upper part of the ulcer, the other near the lower. The ulcer at the time was about six by three inches in size. I retained the grafts in place by narrow strips of plaster, and strapped the ulcer. On uncovering the surface two days afterwards, the epidermis of the grafts came away, but the grafts remained adherent, as pale, doughy-looking masses. During the next ten days, they appeared only as elevated patches of granulation, but the ulcer assumed a healthy appearance ; and, by the time the grafts were surrounded by a feeble zone of cicatrification, we observed that the marginal cicatrification had proceeded with much greater rapidity than at its healthiest progress before, and that the ulcer was most contracted opposite each graft, so that these, which when inserted were an inch and a half from the margin, were now only about three-quarters of an inch from it. The granulations around each graft were very healthy, and cicatrification proceeded rapidly, but the space between them and below the lower island remained less active ; and on November 9th, I removed from the left arm two portions of skin about the size of a pea, taking merely the papillary layer, and engrafted these, one between the two former grafts, the others below the lower original graft. These adhered, and presented similar appearances ; in ten days, they were centres of cicatrification, and in two days longer showed lines of cicatrification passing from them to the margin. Near to them, and to the cicatrification surrounding the previous grafts, the whole ulcer contracted rapidly, and the first grafts joined the margin on one side ; the product being of a whiter, more skin-like appearance, of a firmer, thicker consistence, and of a more elastic feeling than the surrounding blue cicatrification formed before grafting was commenced. At this stage the accompanying sketch was taken. Two days afterwards, the bands of cicatrification, extending to every point near the grafts, were wide firm bands, and the previously continuous granulated surface was subdivided by them into six small patches. I used small

grafts, including only a portion of the skin, on the second occasion, for the sake of comparing the result with the results of the larger portions of entire skin used for the former grafting. My only regret in this case is, that I did not adopt the plan of treatment some time previously, and thus provide the patient with a much stronger general cicatrix, including many portions of almost true skin capable of stretching and relieving tension, and therefore more likely to prove lasting.



Several cases of large ulcers of the leg successfully healed by this method have been reported under the treatment of Mr. Pollock in St. George's Hospital, Mr. Lawson in the Middlesex Hospital, Mr. F. Mason in the Westminster Hospital, Mr. C. Heath in University College Hospital, Mr. Bellamy in Charing Cross Hospital, Mr. Durham in Guy's Hospital, Mr. Kempe of Exeter, Mr. Dobson at the Bristol General Hospital, and others ; also, of large ulcers resulting from burns, many of which were previously incapable of healing—all proving that we have now the means of healing ulcerated surfaces of unlimited size, provided they are or can be brought into a tolerably healthy condition. And, further, we shall be able to prevent those unsightly and distressing contractions of burns hitherto so frequent, and to remedy them in cases where they have occurred, and where it would be difficult to procure skin from the immediate neighbourhood for plastic operation ; as, for instance, in a case which I have now under treatment in the Bristol Infirmary, of contraction of both elbows by firm bands, surrounded by large cicatrices, where a long neck would be needed, and the cicatrix of the surface on the forearm or arm, from which a sound piece of skin might be removed, would materially increase the tension of the old cicatrix. In these cases we are enabled to slit up the band, produce a large raw surface again, establish granulation, and

transplant freely. As I observed before, I hope to transplant into the bend of the left elbow of the child referred to a large piece of skin, and so give nearly natural pliancy to the part. I endeavoured to do so on the right, but failed, because I tried to transplant on to the new raw surface; and though the piece of skin appeared at first to be likely to unite, immediately suppuration commenced it came away. The fear of failure in grafting large pieces of skin is, that some points may not adhere, in consequence of pus being formed from the granulations below, and burrowing under and separating in part or whole the transplanted skin. I do not mean that grafting will ever be a substitute for plastic operations; it cannot, since the skin in the former does not retain all its natural character, as in the latter, but it will prove most valuable where plastic operations cannot advantageously be adopted.

Another field of usefulness is open to skin-grafting in cases of severe lacerated wounds needing partial amputation, or involving considerable sloughing; where the prospect of being able to transplant when granulation is fairly established, will enable us to save more of valuable parts than we should otherwise have ventured to leave uncovered by any skin, trusting alone to granulation. Such a case was recently admitted into the Bristol Infirmary. A man had his fingers and hand severely crushed and lacerated by cog-wheels, the skin in rags, the muscle mashed, and the metacarpal bones comminuted. The thumb was uninjured, and I amputated through the middle of the palm, pinching off the bones near the carpo-metacarpal joints. There was no skin to form a covering, and some sloughing of the soft parts has followed; but granulation has commenced, and, when it is fairly established, by transplanting on to the palm, and the surface covering the ends of the bones, I shall be able to materially hasten recovery and give a firmer, harder, more yielding surface for use. In retraction of stumps leaving bones covered with granulations only, transplantation of skin will be of great service, and will doubtless save some secondary amputations. Finally, following the example of Mr. Durham, of Guy's Hospital, by modification of skin-grafting, we shall be enabled to remove, with boldness, tumours involving the loss of much integument.

Another great benefit to be derived from transplantation is that of arresting the breaking down of large cicatrices. This has just been illustrated in the case of J. Dando, already mentioned. On November 30th, an ulcer formed in a large healed surface of thin cicatrix midway between the sound skin and the grafts. On December 2nd, I planted two portions of skin of the size of a pea upon this oblong surface. One, the lower, lived, and, on December 6th, was becoming red; and had stimulated fine blue cicatrization from the margin to cover half its surrounding ulcer; while the upper had died and ulcerated the surface on which it was planted, and was increased to fully a third larger. On this, and also on another ulcer which had formed, I planted a piece of skin of the size of a fourpenny-piece.

With regard to the source from which integument should be taken, most prefer the inner side of the upper arm; but one important feature of the operation is that it gives freedom of removal from any part or any person, and our endeavour should be to gain integument of the same consistence as that belonging to the part on which we plant it, while we are careful not to produce tension in the part from which we remove skin. But we are not confined to our patient even; an amputation giving healthy skin affords an abundant supply. Mr. Leonard and I both made use lately of this source from a leg amputated by Mr. Tibbits. Mr. Leonard's grafts took, but mine failed, owing to the unhealthy character of the ulcer—a syphilo-strumous ulcer covered with aplastic lymph. I was anxious to try skin from such a source, and scraped the lymph from several granulations; though the soil was unsuitable, some grafts adhered for a time, and gave assurance that they would have succeeded in a healthy ulcer. I have since employed healthy skin from an amputated limb in three cases.

Patients in a hospital are under the control of their surgeons to a degree unknown beyond its walls, and the interest elicited in their cases when such a novel plan of treatment is adopted encourages them to put up with pain and wounds where others would require firm promise of success; therefore there will be many gentlemen who will read of successes, and, owing to distance from hospitals, will be unable to witness results, which they are anxious to behold and to urge upon unwilling patients. Moreover, we have yet to prove the stability of these cicatrices; therefore I am sure that, should the surgical staff of the Plymouth Hospital systematically carry out a series of skin-transplantations for the next seven months, so as to be able to show every stage, from graftings two days old to cicatrices of large size, which have stood hard work for six months, they will, on the occasion of the annual meeting of the Association in August 1871, alike rivet the attention of numerous visitors in their wards, and help to establish the reputation of an operation which, though simple, must prove to be one of the most valuable discoveries of the nineteenth century.

ON THE TRANSMISSION OF THE INFECTION OF FEVERS BY MEANS OF FLUIDS.*

By MICHAEL W. TAYLOR, M.D., Penrith.

It was for too long in the world's history the opinion that the atmosphere was exclusively the medium concerned in the transmission of epidemic diseases, and that the air surrounding the sick was the only nidus in which the infectious element might nestle and fructify, and diffuse itself from place to place, and from man to man. When the Hindoo, on an outbreak of cholera in his native village, looked with suspicion on his water-supply, and would fain attribute the origin of the disease to a poisoning of his tanks or water-courses through the agency of evil spirits or malevolence, in one respect, in regard to the etiology of the pestilence, he was in advance of medical knowledge in Europe up to a certain epoch. His experience, it is true, had been greater than ours; and, though not extending over more than two generations, it had been mighty and continuous; whereas ours had been exceptional and interrupted. But a rude generalisation from the phenomena observed in successive outbreaks had impressed him with the suspicion that the drinking of impure water was somehow one of the sources of the pestilence.

During the enlightened medical experience of these later years, the problem of the modes of communication of cholera has been wrought almost to a demonstration. The results of most of the special investigations which have been officially conducted by governments, as well as the evidence afforded by private medical inquiry, have consolidated the basis of those principles first enunciated with so much patience and truthfulness by that gifted pioneer in sanitary science, the late Dr. Snow—viz., that the elements of contagion reside chiefly in the fluid discharges of cholera, and that the great medium by which the disease is propagated is the drinking-water contaminated by these excretions. These propositions may be held to have been proven by the soundest of all processes of reasoning, the analytical; and each successive outbreak since 1849 has afforded additional data to substantiate them.

If it be accepted, then, that water is capable of holding and maintaining in activity the specific contagious principles cast out by the bowel-discharges of cholera, and that it moreover may be the means of conveying that disease, by being swallowed, to the healthy, analogy would forbid us to disbelieve that water may be the medium by which are transmitted the contagious *exuvia* of other diseases which possess the similar typical property of generating a contagious principle in the intestinal surface, or on other surfaces of the body. When we are told, therefore, that in enteric fever the specific virus of that disease is eliminated in the intestinal discharges, a similitude in this respect, with certain limitations, is approximated between that disease and cholera; and the value of the inference, that the means by which both the poisons may be transmitted shall be similar, depends on the degree of importance which we are inclined to attach to analogical reasoning on such questions. But, as might be expected in a so well studied disease as enteric fever, facts and observations have so accumulated as to have allowed the induction of general propositions, applicable to practice, of its modes of propagation and transmission. Thus it has been determined that the causation of this fever is essentially to be sought for in the emanations from house-drainage, in sewage, and in certain forms of putrefying animal matter, which produce the disease, according to one view, from being merely the recipient of the infectious excreta of some previous fever-patient; or, according to another view, from the spontaneous generation of the poison by peculiar fermentation in the decomposing matter itself. I will not pause to discuss this question; but I feel constrained to admit the possibility of the spontaneity of generation of fever, from, besides other reasons, the recognition of some undoubted instances in isolated houses in the country, originating under circumstances which seemed to preclude previous contagion from the sick.

In regard to the contagium of infectious diseases, there are two channels through which it may diffuse itself to those exposed to its action. These are, first, transmission by inhalation; and second, transmission by swallowing. By these two ways—in the one case air, and in the other ingesta—are the vehicles by means of which the morbid principle is carried into the body. Transmission by the air is doubtless infinitely the most frequent mode by which these so-called poison-germs are propagated. The atmosphere which supports our being, and which pervades in us and around us on every side, is unmeasurably the most abundant natural medium or recipient of volatile emanations, which property of volatility and diffusibility we presume to be an endowment

* Read in the Public Medicine Section at the Annual Meeting of the Association in Newcastle-on-Tyne, August 1870.

of these miasms. Besides, the amount of absorbent surface in the human body necessarily in continuous contact with air, from the nasal fossæ to the minutest ramifications of the respiratory apparatus, is to an infinite degree greater than that which is ordinarily exposed to contact with liquids. It is not wonderful, therefore, that we are prone to attribute the preponderance of cases of infection to inhalation and absorption of the miasm in the lungs, though it is even doubtful whether, in many of such presumed examples, the virus be not mingled with the saliva, and swallowed, and in its passage infect through the mucous surfaces of the mouth and throat, either by absorption, or possibly by simple contact therewith.

But the second mode of transmission—that is, by swallowing—is so common as to remove the circumstance from the category of exceptional occurrences, and to establish it as a certain law in the history of the morbid germs. Amongst the most convincing observations on this mode of transmission of typhoid, I may mention those of Dr. W. Budd, those of Drs. Buchanan and Seaton, in the Ninth Report of the Medical Officer of the Privy Council (1866), on the outbreaks at North Tawton and at Tottenham; and those of Lebert of Zurich; also the facts elicited in the history of the fever at Guildford in 1867; at Terling, in Essex, in the same year; and at Ackworth, and at Tadcaster, as reported by Dr. Clifford Allbutt before this Association last year.

But, if the drinking-water of a locality be recognised as the means by which a fever-element is carried into the system, why may not other fluids act in a similar manner as vehicles for the same poison? Given the introduction of the contagium, in the same state of activity, into milk or beer, or any of the ordinary beverages standing in the sick-room of the fever or cholera patient, and let these fluids be swallowed by the healthy, why may not the same result follow from the drinking of these as from the drinking of infected water? The propagation of both of the above mentioned diseases to the attendants and those in intercourse with the sick, and even to those in distant places, by means of articles of food and drink so contaminated, is possibly more frequent than is generally admitted. This may occur either from the soiling of the hands, or from the direct admixture of the *exuvie* or discharges with liquids or vessels used by the patient—by the drying up of those discharges, and the dissemination of their poisonous elements, either in the form of dust, or by the particles of dust already existing in the apartment, acting as *carriers* of the infected germs, which, when absorbed by liquids, by adhering to clothes, or by currents of air, might be carried to distant quarters. In the case of a water impure from sewage-leakage, supplied by public services, or by public or even private wells, a multitude of people use the same water; and, when disease results, we are ready to admit the sequence of cause and effect, because the proofs from individual cases become various and abundant, and often even crucial. But, in the case of beverages or food exposed in a fever-chamber, on account of the paucity of persons who are likely to partake of them, it is almost impossible to arrive at any safe inferences.

To proceed further: as in cholera and typhoid, it is in the excreta from the alimentary canal that the contagious element resides; so we are led to judge that, in typhus and the exanthemata, it is from the exhalations from the respiratory tract, from the skin or its epithelial efflorescence, or from faucial exudations, that the poison comes. Do the poisons of these diseases ever infect the healthy, by being swallowed, or by coming into contact with the mouth and throat? Does not the poison of diphtheria? I have seen a man of fifty take the disease apparently from having had some saliva spurted over his face and mouth on examining a child's throat. Trousseau tells us of colleagues who died from malignant diphtheria contracted in this way. May not the dry epidermic dust from the desquamative plates of scarlatina, by being drawn into the mouth and mingling with the saliva, infect by contact, or, by becoming attached to solid or liquid ingesta, spread the disease by these means? It has fallen within my own experience to observe some facts bearing on these points; and, having led up the argument so far, let me now adduce these cases.

The first set of observations relates to an epidemic of continued fever, and the second to scarlatina; and, in both, milk from a public dairy appeared to be the medium by which the diseases were transmitted to different households. All the facts and arguments concerning the first of these epidemics were published in the *Edinburgh Medical Journal*, May 1858, in a paper entitled "On the Communication of the Infection of Fever by Ingesta." I shall, therefore, dwell but slightly on this instance.

A number of cases of fever occurred in the town of Penrith in the autumn of 1857, in rapid succession, in several houses in different localities of the town. For a considerable period previous to this time, the town had been very clear of fever. I was at some pains to trace the origin of these first cases; and a curious history it proved to be. The

first case was clearly an imported one. It was that of a young woman who in September was brought from Liverpool to her father's cottage, which contained two rooms only, small, ill-lighted, and ill-ventilated. She was then in the early stage of fever; she passed through the fever; and subsequently the fever spread to other members of the same family living in the same house. The house was that of a poor milkman, who kept three cows, and retailed the milk to about fourteen different families in the town. The milk was brought direct from the byre into the kitchen where the sick children lay; the mother, who was the nurse, milked the cows; and the milk was, by the bye, taken out in tin measures and pitchers for distribution to the customers. During the months of October and November, cases of fever appeared amongst children and young persons in seven different households in the town, which were supplied with milk from these premises; and these formed almost the aggregate and entirety of the cases of fever which existed in the town at that epoch. The investigation of the circumstances attending each particular seizure—the absence in all of direct exposure to, or contact with, the sick, and in most the absence of communication with the milk-carrier; the very transient nature of such intercourse in the exceptional cases in which it did occur—led me to the inference that the milk itself had absorbed the fever-exhalations, or become contaminated directly with fever-virus, and induced the disease in those who drank it. This happened thirteen years ago. By a singularly fortuitous chance, in the course of my practice in the same town, three years ago my attention was forcibly called to a parallel coincidence. This refers to a series of cases which I am about to relate, which led me strongly to suspect

The Propagation of Scarlatina by means of the Milk-supply.

The town of Penrith, containing a population of eight thousand, had been very free from scarlatina throughout the year 1866; and, during the first quarter of 1867, no deaths were recorded from this cause. On the 27th of April, the first death was reported in a child of a small provision-dealer. It was in a quarter thickly and exclusively tenanted by the lower orders, and situated at one extremity of the town, that this child sickened and died. The disease spread amongst several families located in the adjacent yards, who had intercourse with this shop, and six deaths took place within a stone's throw of it, between the 27th May and 7th June. Amongst those to whom the disease was conveyed, was a child of J. C., aged four months; it was ill between two and three weeks, and it died during the period of desquamation, from the secondary affection of anasarca and ascites, on June 12th. The child was buried on June 14th. It was the only child in that house, and the disease spread no further there. It was a small cottage. J. C. at that time kept four cows, and carried on a small business as a milkman; the cows being milked sometimes by himself, and sometimes by the wife, who attended to the sick child. The milk was brought direct from the byre to the dairy, or back kitchen of the cottage, where it went through the usual process of filtering; it was afterwards taken out by a servant girl and by an errand-boy (who did not sleep on the premises), to certain customers in the town, numbering about fourteen households. In the meantime, up to the date of June 10th, he remembered that scarlatina was epidemic solely in this distinct locality of the town, in which the dairy was situated. All the deaths, which, including this last, were eight in number, had occurred, with one exception, within a pistol shot of this place.

House No. I.—On Monday, June 10th, Mary T., aged 7 years, living in A Street, was visited and found to have an injected throat and a strawberry tongue. Next day, the scarlatina rash appeared, the eruption being very copious and vividly red, with much heat and turgescence of skin, a rapid pulse, and delirium. She passed through the disease favourably, and was up on the eighth day. There were two other children in this house; one of them, a twin sister, showed the first symptom of scarlatina on the 21st of same month, and passed through a mild attack. This house was supplied with milk from C.'s dairy, and the milk was delivered daily at the door by a young girl, who served as the milk carrier of the establishment at that time. It was received and taken into the house by a servant. These children had undoubtedly some occasional and temporary intercourse with the person who brought the milk, as they sometimes came to the door and drank cupfuls of the milk immediately on its arrival in the house. This was the first case in this street, which was situate quite at a distance from J. C.'s house.

House No. II.—L Street was a wide open roadway, abutting on which some half dozen detached villas had been built. One of these, having about it all the attributes of salubrity, which altitude, isolation, or aspect could give, and the sanitary arrangements of which were as perfect as art or money could accomplish, was cruelly smitten with the epidemic. There was a family of six fair young children, one of whom escaped through having had scarlatina before, but five took it. In the

first case in this house, the date of invasion was on the same day as in house No. 1, viz., June 10th; it was in a child three years old. The case was attended with a bad form of sore throat, but recovered. Subsequently three more of the children, at the ages of 8 years, 2 years, and 11 months, died on the 8th and 9th July, from that serious diphtheritic complication and diffusive glandular engorgement which often sets in about the tenth day, and forms one of the most fatal sequelæ of the disease. This house was supplied daily with C.'s milk, which was consumed by the children, none of whom were known to have had communication with the milk-carrier.

House No. III.—Exactly on the same day, June 10th, a case was visited in a different part of the town. It was in B Square, an airy open space on a slope on the opposite side of the valley. It was in a good class dwelling house, inhabited by a married gentleman without family, but with one young female servant. In this young person, the rash appeared on the 9th of June; she was taken to her own home on the 10th, passed through a mild attack, and recovered. This house was supplied with C.'s milk, which was taken in at the door by the servant girl, who fell ill; she was the only inmate who consumed milk.

House No. IV.—A large, new, detached mansion in the same suburban square had milk delivered daily from C.'s dairy. The lady and her family of five children removed to a sea-side residence forty miles off, about the 20th of June. A few days thereafter, her eldest daughter, aged 17, commenced with scarlatina. At that watering village, at that time, or for some time before, no case of scarlatina had been known to exist. The young lady passed through the disease, which, within ten days, attacked another daughter, and subsequently others of the family. The young lady who first became affected was a great consumer of milk. She never saw, nor had any communication with, the milk-carrier, as the milk was invariably received at the threshold by one or other of the domestic female servants, who themselves escaped the disease.

House No. V.—On the morning of Saturday, June 22nd, I visited a house in the same square. The family consisted of father and mother and three young children, aged respectively 7, 5, and 2 years, as well as two young female servants. The milk was brought from C.'s dairy, and it was invariably taken at the back gate of the house by one or other of these servants. The eldest child had been indisposed the evening before, and restless all night, and on this morning the rash was out on the neck, chest, and throat, and it subsequently extended through its usual course. Isolation was maintained, and carbolic acid fumigation indefatigably pursued for two weeks (which process I advise as surpassing all other methods of disinfection in scarlatina), and the rest of the family and servants escaped. This child used milk regularly at her meals, and could not possibly have had any intercourse or even seen the person who brought the milk, being in bed or upstairs at the time of the milk-carrier's call at the house.

House No. VI.—At an inn in the centre of the town, quite in a different quarter from any of the preceding houses, I saw another case on Saturday, June 22nd. It was a young person aged 18, the niece of the landlady, whom I found covered entirely, even to the feet, with the scarlatinous rash; and it was stated that it was seen on the chest and face on the preceding morning, so that it was probably the second day of the disease. It passed through the usual course. It is proper to note that this young person occasionally took the daily supply of milk from the hands of the milk-carrier, and, moreover, that she was not in the regular habit of using milk, but that she drank a mugful on the evening of Wednesday, June 19th. This household was supplied from C.'s dairy. There were no children in the house, and the disease spread no further.

Thus ends the recital of the primary series of cases which were known to me to have followed the trail of the milk-carrier. It will be noted that all in this group of the six first infected were children or adolescent persons; and if I were to trace the progress of the milk-carrier from door to door, amongst the remainder of his customers (as I am bound to do in fairness to any antagonism to my hypothesis), I find, curiously, that in almost every case amongst the rest of the households so supplied, special circumstances afforded reasonable explanations why their inmates should have obtained immunity. Thus, *a b c* houses, with families of young children, soon after the 12th, when it became apparent that infection was conveyed from the milk-vendor's premises, ceased to take the milk. Again, the houses *d e f g* were tenanted by middle-aged and elderly persons without families or young people—a group, therefore, who were presumed not to be susceptible of the contagion. There was only one house, *h*, containing children, which continued the intercourse with the dairy to the end, that escaped the hurtful influence. Moreover, during these thirteen days, from the 10th to the 23rd, the interval during which these six cases occurred,

the disease was not prevailing yet amid the population generally; it was just being started on its epidemic career, which subsequently assumed an alarming and fatal progress, as the following returns will show.

The annual deaths in Penrith from all causes were, in the years 1866, 257 deaths; in 1867, 320; in 1868, 224; in 1869, 205. The great increase in 1867 was exclusively due to scarlatina in the last three quarters of the year, as is seen in the following table.

1867.	Deaths from Scarlatina.				Deaths from all causes.
	Under 12 yrs.	Above 12 yrs.	Total.	Per Quarter.	
January...	0	—	—	First Quarter, none.	First Quarter, 71
February...	0	—	—		
March...	0	—	—		
April.....	1	—	1	Second Quarter, 18	Second Quarter, 78
May.....	4	—	4		
June.....	13	—	13		
July.....	12	—	12	Third Quarter, 28	Third Quarter, 86
August...	8	—	8		
September	8	—	8		
October...	13	2	15	Fourth Quarter, 28	Fourth Quarter, 86
November	9	—	9		
December	3	1	4		
	71	3	74	74	320

The total of deaths from scarlatina in the year 1867 was 74. The mortality ceased with the last quarter of 1867, for I find no deaths from scarlatina proper in the first quarter of 1868.

It must be conceded, that these cases which I have related must have originated from some description of intercourse with the infected dairy. Was it by means of the milk-carriers? I hardly think so. These persons had not themselves the fever; they were not in attendance on the sick child; their presence at the entrance of the different houses was very transient; in most of the cases they were never near to or even saw those who fell ill. I believe, rather, that the milk itself was the medium of the hurtful virus. All the sick were proved to have drank the milk. Consider how readily contamination of the milk might have happened. A person has nursed a child through scarlatina for three weeks; she milks the cows; she leans over the pail, into which, by the motion of her arms, the dust is shaken from her dress, or the miasm is absorbed by the thin stream of milk as it flows; and the vessels stand for a time in an apartment exposed to an infective atmosphere. This freshly drawn animal fluid imbibes effluvia with great readiness, and is in the highest degree susceptible of the least mustiness or putrescence. Meanwhile, molecular changes are going on, and such effluvia are retained with peculiar tenacity, from the property of milk throwing to the surface an impervious cream. If I am correct in my inference, the fact is an important one; and the evident value of its practical bearings has induced me to bring it before the notice of the profession.

OBSERVATIONS ON THE USE OF INTRAUTERINE INJECTIONS AND OF THE CURETTE.

By LOMBE ATTHILL, M.D.,

Fellow of the King and Queen's College of Physicians; Obstetric Physician to the Adelaide Hospital; Examiner in Midwifery, College of Physicians of Ireland.

IN the number of the BRITISH MEDICAL JOURNAL for the 5th November, there appear several extracts from the writings of Dr. T. G. Thomas of New York, on the subject of intrauterine injections. With his remarks on this particular subject I in the main concur. I disapprove of the injecting of any fluid into the cavity of the uterus, except in cases of *post partum* hæmorrhage occurring at the full period of utero-gestation, or at least not before the seventh month of pregnancy, and when, all the ordinary means of checking hæmorrhage having failed, the life of the patient is in the greatest jeopardy. In such cases, however, I have injected the liquor of the perchloride of iron, diluted with about two parts of water, with the most satisfactory results. Excepting such cases as these, Dr. Thomas's views are on this point almost identical with mine; but, further on, we meet with a paragraph to which I must take exception. Dr. Thomas there says: "I never use intrauterine injections even for the hæmorrhage of abortion. If we know anything about the pathology of uterine hæmorrhage, we know that it should be

stopped by the closure of the vessels from contraction of the tissue of the uterus itself. After delivery, we all recognise that the only proper thing to do is to empty out the clots and stimulate the uterus to contraction. Even after abortion, I look on the injection of styptics as a bad thing." In this sentence we have two entirely different forms of hæmorrhage spoken of, requiring as different modes of treatment; namely, hæmorrhage occurring after delivery at the full term of pregnancy, and that occurring after abortion; *i.e.*, before the termination of the fifth month. Now, with respect to the former, I agree with Dr. Thomas, that it "is the proper thing to stimulate the uterus to contract"; but though by many authors it is recognised as "the proper thing to empty out the clots" which form in the uterus, I much doubt if such a proceeding be always judicious. In many cases in which there is a tendency to *post partum* hæmorrhage, it is impossible to get the uterus to contract firmly; it contracts to a certain size, but any diminution beyond that point is but temporary, and it speedily relaxes again. Now, in such cases, the moment it relaxes hæmorrhage takes place into the uterus. If the uterus be not stimulated immediately to contract, coagula rapidly form round the mouths of the bleeding vessels. These coagula are Nature's plugs, formed by her to arrest for a short time the flow of blood, and give time for the tonic contraction of the uterus to occur. If we by our manipulation stimulate the uterus to contract, these coagula are thrown off, then the same process is repeated, and so the hæmorrhage may be kept up indefinitely; but if we remain content with the moderate contraction which Nature has established, retaining the hand on the fundus steadily to guard against undue relaxation, the coagula will, in the first instance, arrest the flow of blood, and then by their presence will stimulate the uterus to contract. That contraction, no doubt, expels them; but in all probability the contraction will now become permanent, and no further hæmorrhage will take place.

In such cases, if the treatment which I recommend, coupled with the judicious use of cold and the exhibition of ergot, fail to check the hæmorrhage, I have no hesitation in having recourse to the injection of the perchloride of iron; and in that other class—which, fortunately, is comparatively rare—in which the uterus becomes relaxed to such an extent that its very outline cannot be made out, I still more warmly advocate the use of the perchloride of iron, as being the only treatment which promises anything approaching to a certainty of success; but I am convinced that "the emptying out plan" is often most injurious.

Now, as to the hæmorrhage occurring *after* abortion, it very rarely is severe, unless a portion of the placenta be retained, and even then the amount lost is generally small; but, if it be necessary to check it entirely, that can be effected at once by the use of the plug. In these cases there is no risk of excessive intrauterine hæmorrhage, for the uterus can contain but a small quantity of blood, and will not relax to any extent.

But Dr. Thomas proceeds to relate a case of quite a different class, in which "a woman had been bleeding for three months after an abortion." "It seemed to me," he goes on to say, "that there must be something in the uterus to cause the flow, for otherwise, what is there in an abortion to keep up hæmorrhage for such a length of time in such a case? You may take it for granted that something has been left behind. The doctor in charge of the case consented to my dilating the cervix and introducing the curette. I took away a number of little bulbous bodies, remains of the placenta, those little granulations which bleed if you look at them, and pour out blood profusely if you touch them with a probe." This sentence is full of fallacies. I am far from admitting "that it may be taken for granted" that, because hæmorrhage persists for weeks after an abortion, therefore "something must have been left behind"; and to his query, "What else is there in an abortion to keep up hæmorrhage?" I reply, that frequently granular erosion of the cervix, or subinvolution of the uterus, is met with as a consequence of abortion, and that either, or possibly both conjointly, were present in the case which he relates, and were the cause of the long-continued hæmorrhage. I think Dr. Thomas proves this for me; for he goes on to say that he introduced a curette, having previously dilated the cervix uteri; but did he find, on doing so, a portion of placenta, or of the membranes, remaining? No such thing; but "he scraped off a number of little bulbous bodies, remains of the placenta, those little granulations which pour out blood when you touch them with a probe." Are we to understand from this that Dr. Thomas asserts that the placenta, which is a product of conception, and in no way forming a portion of the uterus, is capable of giving origin to "granulations"? Such a view of the pathology of uterine disease is altogether new, and will not, I fear, stand the test of scientific investigation. In my opinion, the case just related was an ordinary case of subinvolution of the uterus; that the so-called "granulations, the remains of the placenta," were but portions of the mucous membrane lining the cavity and cervix

uteri, thickened and hypertrophied; that, by scraping the unhealthy surface with the curette, he stimulated the entire organ; and that healthy interstitial absorption followed. If such a case had presented itself to me, I should adopt a practice which I have followed on several occasions with success, namely, to introduce up to the furthest point of the uterine cavity, by means of Simpson's "porte caustique," eight or ten grains of the solid nitrate of silver, which, dissolving, would blister the entire of the intrauterine mucous membrane. This treatment, if carried out with due caution, is perfectly safe. It causes some pain, seldom, however, severe, and sometimes a little hæmorrhage follows; but, if care be taken to keep the patient in bed for a few days, and nothing but mild unstimulating diet allowed, I believe it to be perfectly safe, and it is generally followed by a permanent cure. It is very analogous to that which Dr. Thomas mentions as having been recommended by Dr. Lente, but it is more certain than his method. As to the instrument called the "curette," I altogether condemn its use under any circumstance.

There is one other matter introduced by Dr. Thomas which is open to comment. He relates the particulars of a case which terminated fatally after the introduction into the uterus of three of Dr. Peaslee's dilators. These are steel instruments, and act mechanically, and of course rapidly, the very rapidity of their action being the point which Dr. Peaslee insists on as being satisfactory. This is the very principle to which I object. No matter how scientifically used, rapid dilatation of the cervix is not a safe proceeding, and there is always considerable risk of doing injury to the uterine tissues.

For my own part, I invariably adopt the plan which is, I believe, followed universally in the Dublin School of Obstetric Surgery, of dilating the cervix uteri with sea-tangle tents; they exert a slow and continuous pressure from within outwards, and their use has never, so far as I am aware, been followed by any injurious consequences. But even these I never think of using without confining the patient to bed. The American practice seems to be to dilate the cervix at the physician's residence; at least, Dr. Thomas's patient returned home after the operation, and the fatal effects which followed may possibly have been in no small degree attributable to want of due care in this particular.

THE VALUE OF THE LIQUOR OF THE PERNITRATE OF IRON, IN COMBINATION WITH CALUMBA, IN CASES OF CHRONIC MUCOUS DIARRHŒA.

By EDWARD J. COOKE, A.B., M.B.T.C.D.; Surgeon to the Workop Dispensary and Cottage Hospital.

THE following facts may be interesting to some members of the profession, as affording evidence as to the use of the liquor ferri pernitratæ, in combination with calumba, in cases of chronic mucous diarrhœa, which mode of treatment was, I believe, first recommended by the late Dr. Graves of Dublin.

CASE I.—In April last, a married woman, aged 34, applied to me for advice relative to a most troublesome diarrhœa, which gave her much annoyance. She stated that shortly after her last confinement, which was some months previous to her application, she began to suffer from pain and uneasiness in her bowels, followed shortly afterwards by diarrhœa, which got better for short periods and then broke out again, each fresh attack being more severe than the previous one. She had taken several mixtures from the druggists' shops, almost without any relief; and when she came under my care she was purged daily eight or ten times, which had necessarily much reduced her in strength. I treated her at first with castor-oil and compound tincture of rhubarb to remove any foreign body, if anything existed as such, from the mucous membrane of the intestinal tract. This treatment caused much tenesmus and uneasiness. I then tried almost all the vegetable astringents, but without effect. I then put her on sulphuric acid and opium, but with alike result. Acetate of lead and opium appeared to check it somewhat, but not satisfactorily. At last I examined the excreta, and found that they were passed in small quantities, each evacuation being mixed with mucous shreds. I put her on fifteen-minim doses of liquor ferri pernitratæ, with one ounce of infusion of calumba, every three or four hours; and in about a week she went from under my care perfectly well.

CASE II.—About the first week in October, I had under my care a somewhat similar case of a woman aged 53, who for months previous to her application had been much troubled with diarrhœa, which gradually became worse. When she applied to me she was much reduced in strength, and stated that her bowels were moved on an average twelve or thirteen times daily; no mixture that she got previously

from the druggists' shops doing her any permanent good. Having examined her evacuations, I found that they were small in quantity, and contained mucous shreds. I at once put her on the same treatment as in the former case (of course regulating the diet in each), and in less than a fortnight she left perfectly well.

I could mention other cases of a similar nature treated most successfully in this manner, but I would be taking up too much valuable space. I may mention, however, that out of upwards of five hundred cases of diarrhoea which have come under my care since June last, some few have assumed the chronic mucous form, though not to the same extent as the cases above recorded; and my experience is this, that in the combination of the liquor ferri pernitratidis with calumba, we possess a most invaluable remedy in the treatment of this form of diarrhoea, and most particularly when met with in persons who are constitutionally weak; the iron in such case curing the diarrhoea as much, perhaps, by its strengthening as by its astringent effect. I have seen a few cases in which this treatment has not succeeded as satisfactorily as one would wish, the iron sometimes causing nausea, etc.; such cases being, however, very exceptional.

In conclusion, I may state that I have never known a relapse in any case I have ever seen treated successfully; and that when this combination is applied to the form of diarrhoea above mentioned, its application will, as a rule, be attended with the happiest results.

ON PARALYSIS IN RELATION TO TREATMENT.*

By D. DE BERDT HOVELL, F.R.C.S.E., Clapton.

INDEFATIGABLE research has still left much concerning this disease undetermined, and some discovered points require confirmation. The locality once assigned to aphasia has been subverted and disproved; and, although Dr. H. Maudsley has recently given to volition "a local habitation and a name" in the supreme cerebral centres, that important faculty does not readily accept a definite location, and continues to hold an uncertain position between the material and immaterial.

The medical treatment of a disease whose precise conditions are still imperfectly ascertained must necessarily partake of the same imperfect character. The object of this paper is briefly—for time admits of a mere outline—to refer the application of usual remedies to a simple classification of the recognised forms of the disease.

In this country, paralysis is generally understood to represent loss of muscular power, not necessarily associated with loss of sensation, affecting a certain part. The correctness of the nomenclature which attributed the death of the late Emperor of Russia to "paralysis of the lungs" was generally considered to be questionable. At the same time, it might be said with propriety that the effect of enteritis is to cause "paralysis of the bowel". I propose to accept the definition of Dr. Aitken, who says, "As a co-relative statement, it may be written, that whatever interferes materially with the generating power of nerve-vesicle, or the conducting power of nerve-fibre, constitutes a paralyzing lesion."

Before the time of Sir Charles Bell, Prochaska, and Dr. Marshall Hall, all forms of paralysis were referred to lesion of the brain; the independent faculty of excito-motory action, the special attribute of the medulla, not having been ascertained. This was followed by the recognition of the particular form known by the term reflex paralysis, which implies that the cause of paralysis does not exist in the nerve-centre, but is referred to it. Leaving this, however, for future notice, we pass on to another form of paralysis, which I propose to consider as a third division; namely, that from concussion or shock, the most familiar form of which results from railway accidents. One peculiar feature of this class of cases is, that the results do not follow immediately, but after the lapse of a shorter or longer time. "The collapse," which is, of course, immediate, "is accompanied by insensibility, but without evidence of injury to the head. Reaction is tardy and irregular, attended with numbness and tingling. Other symptoms are, rigor, continued sickness, spasm of the limbs, throbbing sensations, want of sleep or continued drowsiness, enfeebled muscular power, deafness, defective sight, ocular spectra, hyperæsthesia, great emotional excitability. Some of these patients entirely recover; in others, the health is permanently enfeebled." The effect of physical shock *per se* is attributed by Mr. Le Gros Clark to the vaso-motory system. To the circumstance that some interval of time elapses between the action of the cause and its effects, is probably due the fact that the results of this

form of injury have not met with their due recognition, but have been received with doubt and incredulity. It thus becomes evident that accidents attended or followed by loss of consciousness and functional power must not only be regarded with reference to injury to the brain and medulla, but also to the effects of shock, expressed in its effects on the third great nerve-centre—the vaso-motory system. But there is another form of shock similar, if not, indeed, identical, in respect of the effects produced by physical shock: I mean moral shock. And there are many reasons for attributing the seat of this injurious action to the same division of the nervous system—the sympathetic or vaso-motory. There are always hesitation and difficulty in acknowledging truths which we do not see, because they are not immediately subjected to faithful sight; and to this is probably due the fact that the effects of moral as well as physical shock until recently have not met with due recognition. The following history, although not derived from medical works, was yet "written for our learning".

"And lo! Eli sat by the wayside watching, for his heart trembled for the ark of God. And there ran a man of Benjamin out of the army with his clothes rent," etc. "And the messenger said, 'Israel is fled, and thy two sons, Hophni and Phineas, are dead; and the ark of God is taken.' And it came to pass, when he made mention of the ark of God, that Eli fell off the seat backwards, and his neck brake, and he died. And his daughter-in-law was with child, near to be delivered; and, when she heard the tidings, she bowed her head and travailed."

It is impossible not to admit the loss of controlling power which ensued upon moral shock in both these instances. The effect of shock, both physical and moral, although it comes within the definition of paralysis given above, would be better represented by the term paresis, which implies the remission or letting down of strength or nerve-power. Unfortunately, this term has been somewhat prematurely appropriated by the alienists, and has been brought to represent a particular form of insanity. We are thus driven to adopt the term neurosis, which is almost synonymous. Both words may be considered to mean a condition of the nervous system predisposing to, rather than actually causing, that loss of function which is generally understood by paralysis. Insolation, or heat-stroke, which is generally unattended by paralysis, may be quoted as an instance of this.

We pass on to consider the conditions producing paralysis a little more in detail.

I. In a state of health, we are quite unconscious of the generation of nerve-power. It is not until some interruption or deviation from the normal supply takes place, that our attention is called to it individually or professionally. As, on the one hand, nerve-power is essential to regulate the circulation of the blood, so, on the other, a normal supply of healthy blood is indispensable to the generation of a normal supply of nerve-power. Thus irregularity of circulation and the attendant alterations of structure constitute the first cause of that interrupted supply of nerve-power and consequent failure of function which has long been designated paralysis. In proportion as the morbid state or injury thus induced makes alteration of structure permanent or complete, treatment becomes of correspondingly little avail. Apoplexy is perhaps the most familiar cause of paralysis so induced, by causing lesion of a nerve-centre. But this division also includes all forms of congestion of nerve-centres, of anæmia, spanæmia, toxæmia; all forms of paralysis connected with cardiac disease and disturbance, renal and hepatic complications. It follows as a necessary consequence that, in the very large proportion of cases comprehended in the division, not only the brain and medulla are concerned, but the sympathetic also, and, according to the late researches of Dr. Meryon, especially the terminal motor fibres which supply the arterioles, and the fibres of Remak, or sympathetic proper, which regulate cell-secretion and nutrition. I must here ask permission to digress for one minute, in order to notice the question between vital force and nerve-power, on which the opinions of the profession have been divided. It has been asserted that there is no *vis medicatrix nature*—no special vital force. The dead body has the properties of inanimate matter; it still has nerves, but no nerve-power. The living body has the properties of animate as well as of inanimate matter; the properties of animate matter are essentially vital, depend upon nerve-power, and are regulated by it; they do not exist the one without the other, and practically are simply identical. Vital power finds its expression by means of nerve-power; and the *vis medicatrix nature* is simply the resumption of the normal action of nerve-power, which has been deranged by abnormal causes.

II. Interruptions of supply, owing (1) to lesion or other imperfection of conducting media, or (2) to diversion or disturbance of nerve-power properly generated and supplied, constitute the next division of paralysis which presents itself for consideration. The arm or leg falling asleep from pressure in an after-dinner nap is the most familiar form of the one, irritation of the other. Irritation is a term somewhat difficult to

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

define. Practically, it may be presumed to signify disturbance of the normal supply of nerve-power which regulates action, converting it into the abnormal and irregular distribution which alters and perverts natural function. In a word, irritation implies a disturbing cause tending to produce abnormal action. To illustrate by a case: a lady, about thirty-five years of age, complained of a difficulty of swallowing affecting the left side of the pharynx. A few days afterwards, a want of symmetry became obvious, the arch of the palate on that side having dropped about three-sixteenths of an inch below the level of the other. She called attention to a lower molar tooth on the same side, which, she thought, had been stopped with some improper stopping, because it looked green. Her dentist removed the stopping, which he thought might possibly have been accidentally mixed with some particles of brass. The arch of the palate gradually resumed its proper position; but it was remarkable that the power of swallowing, which gradually returned, was better at the beginning than at the end of a meal. The disability in swallowing was also increased by fatigue. The relation between the irritation set up by improper stopping of the tooth and the loss of power in swallowing appeared to be that of cause and effect; because, notwithstanding that the health was benefited by general treatment, the specific ailment not only continued, but became more marked by the alteration in the form of the palate; and it was not relieved until the objectionable stopping had been removed. Even after this, the exhaustion of fatigue sufficed to bring about a recurrence of the disability, although in a slighter degree. The anatomical explanation depends upon the communication between the divisions of the fifth pair and the other nerves which form the pharyngeal plexus. The inferior maxillary nerve, besides supplying the teeth of the lower jaw, gives filaments from its internal pterygoid branch to the tensor palati. This muscular supply is not sufficient to account for the difficulty of swallowing, without admitting the connexion with the facial, hypoglossal, and pneumogastric nerves. It would be difficult to assert that the sympathetic was not involved in the production of the paralysis, either by conveying the irritation or withholding some element of power from the nerves affected, and thus interfering with their normal function. In the case of intestinal irritation, which is a fertile source of disorder, affecting all ages, and as Protean in its different forms of derangement as the various functions of the nervous system can make it, the very large share which this division of the nervous system has in the supply of the intestines makes its implication in these disorders more than a matter of probability.

III. We now come to consider a third class of cases of paralysis, in which nerve-power is fairly generated and duly supplied, but improperly wasted. In the *Medical Gazette* of August 1842 is published the case of a patient to whom mercury was largely given for ptosis; paraplegia resulted from this, and the patient recovered by means of tonics and galvanism. This last remedy I applied seventy times, for an hour each time, without apparent benefit; but eventually succeeded, and the patient is able to walk to this day. In April 1858, I saw a woman aged 50, who had been confined to her bed for three years with partial paraplegia, unattended with loss of sensation. Her motor power was very limited and feeble. Slight alteration of position, even when in bed, and particularly any attempt to stand, brought on severe attacks of pain in her back and limbs. The urine was slightly phosphatic. Eight years before, she had fallen downstairs and hurt her back, since which her health had gradually declined. She had been under the care of several medical men, all of whom had told her that nothing more could be done for her. I prescribed fifteen drops of dilute hydrochloric acid three times a day in a glass of water, and a pill containing one-eighth of a grain of morphia and four grains of dilute aloes pill whenever pain or spasm occurred. In ten weeks, she began to sit up; after three weeks more, she began to walk; and, at the expiration of six months, was able to nurse her mother, on whose care she had so long been entirely dependent.

"The excessive loss of phosphates is found to be coincident with acute mania, paralysis from waste, and that caused by lesion of the spinal cord. The main object of treatment is obviously the restoration to the system of the lost material; and the internal administration of phosphoric acid has been advocated as the readiest means of accomplishing this. It is worthy of remark, that several cases of paralysis, taking most frequently the form of paraplegia, have come under my notice in which treatment by direct tonics, steel, quinine, and even strychnia, has failed to produce a good effect; but the administration of dilute hydrochloric acid, persevered in for some length of time, has been followed by steady and gradual improvement." (Address to Hunterian Society for 1866.)

In the Harveian Oration for 1869, Dr. Owen Rees remarks "that the cerebro-spinal and sympathetic systems have their distribution so arranged that the cerebro-spinal branches terminate in acid fluid,

whereas the sympathetic nerve is distributed over surfaces having an alkaline reaction." This very interesting fact is calculated to lead to valuable indications of treatment in different forms of paralysis. Although hydrochloric acid is invaluable in some cases, it has not only proved useless in others, but has disagreed with the patient, and so become contraindicated. I have noticed this intolerance in more than one case of illness connected with worry and anxiety; and in these cases ammonia has proved of great service. It would be highly interesting if we could trace the nervous lesion to the sympathetic or cerebro-spinal system respectively in cases where ammonia and hydrochloric acid are relatively efficacious.

In depressed and exhausted conditions of nerve-power, there is no doubt more or less disintegration of structure and loss of constituents. Although this may be in the direction of excessive loss of phosphates, the immediate supply of phosphoric acid does not appear to remedy this so effectually as the administration of hydrochloric acid, which, by improving digestion, or in some other way, tends to prevent waste. This proves a more effectual remedy than iron, which would simply improve the state of the blood; strychnia, which stimulates exhausted power; or ergot of rye, which tends to restore the tone of vaso-motory control. All this tends to show how much skill and judgment are required in the selection of the right remedy; and that, until an intimate knowledge of the facts of the case is acquired, prescribing is more or less a matter of hap-hazard.

Reflex paralysis next claims to be considered, both in respect of the division of the nervous system affected and the way in which causes operate to produce it. It is generally understood to imply interference with excito-motory action. This is not strictly correct; it applies rather to disturbance of function by irritation, and may relate to nerves of special sense, and even to the brain itself, as well as to excito-motory power, as in the frequent instance of cerebral disturbance arising from intestinal irritation from worms. Reflex paralysis, strictly speaking, belongs to the second division—namely, that of interruption of supply of nerve-power by irritation; but it implies also a partial condition of paresis or neurosis; and in the majority of cases it will be found that a depressed condition of nerve-power, arising frequently from emotional causes, lays, as it were the foundation for the disease. The indication of treatment is, therefore, obviously twofold—to raise power, and to remove the cause of irritation. Neither mode of treatment will succeed, if adopted singly and to the exclusion of the other. Irritative paralysis is occasionally met with. This, again, depends essentially upon a condition of neurosis, arising very frequently from emotional causes. Irritation implies the absence of that initiative power which marks the leading character. It is the ready resource of those in whom the power of volition is lowered below the point of initiative action.

The paralysis which ensues upon diphtheria has been called peripheral—a vague and unsatisfactory term, which does not clearly express its true conditions. Peripheral paralysis would imply that some morbid action at the ultimate distribution of certain nerves is referred to a nerve-centre, and thus interferes with function. This would, therefore, more properly come under the head of paralysis from irritation. This explanation may be partially correct; but the exhausted condition of nerve-power which results from diphtheria is also probably an essential condition. The combination of causes would bring diphtheria under the head of reflex paralysis. Although it is very difficult in some cases to define the circumstances exactly, it is not the less important to do this as far as is practicable. There are many cases which present a mixed character. Thus an apoplectic clot would operate under Class I as a foreign body interfering with generating power from pressure, and under Class II as interfering with the conducting power in the same way, or as a cause of irritation.

The treatment of disease is obviously regulated by the appreciation of it, from the most superficial observation to the deepest intellectual research into its causes and conditions. Thus the physical symptoms of the apoplexy which so frequently accompanied paralysis appeared for some length of time to be most appropriately met by bleeding and purging. As the sailor, who had expended two of his wishes upon all the rum and tobacco in the world, was at a loss how to proceed with the third, so the routine practitioner, having failed to relieve by these two potent remedies, had frequently no further resource beyond a little more bleeding by cupping, and purging again. Then mercury arose a panacea in medicine, and powerfully supplemented the bleeding, purging, and blistering which preceded it. Undoubtedly a remedy of great use and power, mercury may be prescribed (1) as a purgative, (2) as directly or indirectly promoting secretion of bile, (3) for its effect on inflammatory action depositing fibrine, (4) for its specific influence over syphilis. But the treatment of apoplexy indicated for the patient who ate and drank to repletion, and never "cudgelled his brains", was quite

inappropriate for him who habitually "spread his brains upon paper"; and the frequent occurrence of paralysis in the latter class of patients led to a complete revolution in its treatment. The virtual recognition of exhaustion as a cause of paralysis led to the administration of stimulants as the remedy; and this practice was pushed to excess in scientific hands. Then the superficial sceptics determined to do nothing, forgetting that negative inaction becomes absolutely injurious in all cases requiring positive treatment. So practice settled down with many into the compromise of giving ammonia and administering an enema. Let me say of an enema, that it is a remedy of no mean value; that it does good beyond removing sources of irritation from the lower bowel. It almost seems to set up healthy normal action instead of the morbid action of irritation which it supersedes. I only wish it were more generally used in the convulsions of children, instead of the frequent warm bath, which depresses, and so increases the susceptibility of the patient. But I am going away from my subject. Every remedy has its specific value; the difficulty lies in discovering and applying it. Therapeutics have never received, even if they have claimed, the labour and attention which have been bestowed upon investigating and mapping out the morbid conditions which give rise to disease. The want of definite principles of action is very unsatisfactory to all who are called upon to treat disease. This want, long felt, has resulted in these observations and in a simple classification which has tended much to relieve my individual want. Lastly, it has been the fashion rather to depreciate therapeutics, and to prefer pathology. Some years ago, a better and higher pathological knowledge was felt to be necessary to the advance of therapeutics. In the present day, I, with many others, may perhaps be allowed to think that advanced therapeutic knowledge and experience are looked for, in order to construct a fit capital to the pathological column which has been so laboriously and skilfully raised. More than this, it is the Art of Healing which approaches the Divine, much more than the Science of Disease. I have ventured to draw a description of disease from sacred writ, because it presented a clear and unmistakeable picture. From the same source we may raise a standard of practice, which, although unattainable, is yet an example of what we may laudably aspire to. However much we may fairly congratulate ourselves on success in treating cases, we cannot pretend to the perfect skill which "restored" the withered and paralytic hand "*whole, like as the other.*"

NOTES ON THE EPIDEMIC OR RELAPSING FEVER IN LIVERPOOL.

BY ROBERT GEE, M.D., M.R.C.P.,
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VI.

THE progress of the epidemic during the month of November will be learned from a glance at the following return, shewing a decrease of 203 as compared with the report of November 5.

	Admitted.	Discharged.	Died.	Remaining.
Week ending Nov. 12	370	384	16	1309
" " 19	377	363	24	1299
" " 26	271	336	18	1242
" Dec. 3	253	340	19	1136
Total.....	1271	1423	77	

There have been eighteen cases of small-pox admitted during the above period, and four of scarlatina. Of the former there are now twenty-two cases in hospital, and of the latter twelve. It should be observed that these numbers do not include those cases within the borough resident in the Toxteth Park or West Derby parochial districts.

Two house-surgeons have been attacked with fever, whose principal symptom was headache of very acute character. They have made a satisfactory convalescence. The new nurses have taken fever in the usual proportion, but all have done well, with the exception of one who died of intercurrent pneumonia. The hospitals have been much relieved by the diminution in the number of cases, and the general aspect of things has consequently improved. When the hospitals were full, the pressure from without great, the admissions numerous, and the nursing staff barely sufficient for the emergency, there were more or less anxiety and irregularity; but these have disappeared under present more favourable circumstances.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. MARY'S HOSPITAL.

NOTE ON TWO CASES OF ABDOMINAL ANEURISM.

(Under the care of Dr. SIBSON.)

THERE were recently two interesting cases of aneurism of the abdominal aorta in Dr. Sibson's wards. The history of both presented the interesting peculiarity of the existence of an aneurism of one of the great arteries of the lower extremity; in one the external iliac being affected, in the other the popliteal. In both cases also the aneurism was cured by treatment. The popliteal aneurism speedily disappeared under the influence of pressure, a seven-pound weight being permanently allowed to rest upon the femoral artery at the inguinal region; the iliac aneurism being cured by ligature of the external iliac. In both cases, after recovery from these aneurisms, the symptoms and signs of abdominal aneurism set in.

THE HOSPITAL FOR SICK CHILDREN.

CARIES OF SPINE, PRODUCED BY SWALLOWING A NAIL: DIRECT COMMUNICATION BETWEEN THE ŒSOPHAGUS AND CERVICAL SPINE: SECONDARY CONSOLIDATION OF LUNG: AMYLOID DISEASE OF THE LIVER AND SPLEEN: DEATH.

(Under the care of Dr. DICKINSON and Mr. THOMAS SMITH.)

WE are indebted for the report of the following interesting case to Dr. Alexander Steven, Registrar to the Hospital.

The patient, a boy four years of age, was admitted to the Children's Hospital on November 26th, 1869. He had always enjoyed good health till six weeks previously, when he swallowed a large carpet-pin whilst playing with it in his mouth; the disc of the pin was about three-quarters of an inch in diameter; the nail, about half an inch in length. He was taken the following day to the Middlesex Hospital, where he remained a few days. He then complained of much pain in the throat, about the cricoid and thyroid cartilages, especially in deglutition; and had more pain in drinking than in eating. There was no hæmoptysis. There was no retching or vomiting till a fortnight afterwards, when one morning he began retching, and brought the nail up easily with a cough. There was no vomiting. The nail was apparently not altered in appearance. The boy thought it was in the throat, but no prominence could be felt there. Since then he had been laid up with debility and weakness. His appetite fell away. Pain in deglutition persisted till a short time before he entered the Children's Hospital, and he had wasted much. He had constantly complained of pain in the head. He had no fever, no diarrhoea, but occasional slight pains in the abdomen. His breath had been offensive since the accident.

On admission, there were feverishness, much debility, emaciation, and oppression. The tongue was moist and furred; the pulse 144, weak, but regular; the respirations 24, unequal. The respiration and heart sounds were good; as were also the percussion-sounds. The throat was clean; the fauces healthy, perhaps somewhat relaxed. The abdomen was soft and flaccid. There was no enlargement of the liver or spleen; no pain on palpation. His general position was on the left side, with the left leg drawn up on the belly, his hands clasping the back of his neck. He complained of pain in the head. His breath was very foetid. The conjunctivæ were not injected, and the pupils were equal. He was ordered a mixture containing chlorate of potash every four hours.

Dec. 1st. There was some general swelling and thickening at the back of the neck; this seemed equal on the two sides. There was no glandular swelling of the neck. He had no pain in deglutition. He was now kept more on his back, with sand-bags to fix his head. His hands were still kept clasping his neck. There was loss of power and nutrition of the deltoid muscles. When his arm was flexed over his abdomen, he returned it to its original position entirely by using the muscles of the forearm and arm, by shuffling it along. Both legs were drawn up on the abdomen, the left more so. He was now ordered a teaspoonful of cod-liver oil, and a mixture containing nitro-hydrochloric acid, twice a day.

On December 17th, there was marked wasting of the deltoids and trapezii muscles on both sides; and some atrophy of the muscles of the

upper arm persisted; also the thickening and stiffness of the back of the neck.

On February 9th, 1870, he still lay in the same constrained position. The deltoids and trapezii were much wasted, but they contracted under the induced current.

On July 6th, he still lay on his back, with sand-bags on each side of the neck. A fortnight previously, he had expectorated a considerable quantity of pus, and was continually coughing up small quantities now. There was dulness at the right apex anteriorly, with tubular breathing.

On August 10th, he spat a little blood.

Aug. 17th. He had been gradually wasting. There was dulness on percussion over the upper half of the right lung anteriorly. The breathing was feeble. There was excessively little movement of the walls of the chest on respiration. There was dulness also to a limited extent under the left clavicle, with harsh breathing. The bowels were relaxed. From this time till his death, he had more or less diarrhoea. Various astringents were given, as decoction of logwood with tincture of kino and tincture of opium, etc.; and occasional enemata with two minims of tincture of opium. For a time the diarrhoea was held in check by a powder containing two grains of compound ipecacuanha powder and one grain of hydrargyrum cum cretâ twice a day. On September 8th, the urine was examined, but found to contain no albumen. On September 13th, he coughed up about four ounces of bright arterial blood. He had but little cough. The diarrhoea became excessive, and he grew more and more prostrated and emaciated. Dulness remained at the upper half of the right lung. No crepitation was heard, and the breath-sounds were almost absent. The breath remained foetid. He gradually sank, and died on September 21st.

Post Mortem Examination, made thirty-four hours after death.—There was extreme emaciation. The body weighed twenty pounds. The rigor mortis was slight. The larynx and trachea were healthy. The posterior wall of the œsophagus at its commencement, opposite to the base of the epiglottis, was perforated by a small round orifice with dark-coloured edges, which adhered to the underlying cervical spine. The bodies of the vertebræ, from the third cervical to the third dorsal inclusive, were extensively diseased. The bony tissue was dilated, softened, and easily broken down; sanious pus and *débris* escaping at one or two points. The intervertebral cartilages, partly detached, had lost their elasticity, and were yellow, dim, friable discs. A probe passed through the orifice in the œsophagus, which was situated over the interspace between the third and fourth cervical vertebræ, and passed downwards through the diseased bodies of the vertebræ for two inches or so. The ends of one or two ribs on each side, attached to the diseased dorsal vertebræ, were also the seat of carious enlargement. The spinal cord in the diseased portion of the column appeared healthy. The upper portion of the right lung was intimately adherent to the posterior ends of the upper second and third ribs, and to the adjoining diseased vertebræ. The lung here had become broken down, an irregular cavity being formed, filled with flaky pus and *débris* of lung-tissue, of most offensive odour; the lung immediately adjoining this was green, soft, and putrilaginous. Beyond this again, however, the lung was firmly consolidated, soft, and hepatized; and at one point about its upper third a thick band of fibrous tissue spread inwards from the pleura; altogether, nearly one-half of the lung was diseased. There was no trace of tubercle. The left lung was for the most part healthy, except a small portion at the apex, which was consolidated and adherent to the left side of the diseased portion of the spine. The heart was healthy. The liver weighed over twenty-five ounces. It yielded the amyloid reaction with iodine. It was firm and somewhat translucent. The spleen weighed two ounces, and was markedly amyloid, showing on section the translucent sago-like grains, which became of a deep brown hue with iodine. The kidneys appeared healthy. There was some injection of the mucous membrane of the larger intestine below the ileo-cæcal valve; otherwise, the bowel appeared healthy.

LEEDS GENERAL INFIRMARY.

REPORT OF SEVERAL CASES OF SKIN-GRAFTING.

(Under the care of Mr. HEY and Mr. JESSOP.)

For the following report we are indebted to Mr. A. F. McGill.

In this Infirmary, cuticle has during the last two months been transplanted into granulating sores in nearly twenty cases. Most of the patients have been suffering from ulcerated legs; a few from burns, sloughing of skin after compound fracture, etc. The methods adopted have been various, both as regards the size of the pieces transplanted

and the mode of fixing them. Three sizes have been tried: first, pieces about the size of canary-seeds; second, about the size of fourpenny-bits; and, thirdly, these last have been divided on the thumb-nail to as small a size as possible. On the whole, this last size seems to have answered best; and it possesses this advantage, that it gives the patient less pain, as only one piece of cuticle has to be removed to make a large number of grafts. Sometimes the graft has been laid on the granulations; sometimes in a nick made in them. Simple dressing has been used to keep them in position, the dressing being changed carefully every day. Gelatine plaster has also been used; then oiled silk, with adhesive plaster over it; and, lastly, adhesive plaster by itself. The portions of cuticle are placed in a row across the ulcer; a narrow strip is placed over them, and not removed for four or five days; the ulcer in the meantime being dressed as before. When the transplantation is successful, the graft commences to grow at the end of a week, and is about half an inch in diameter by the end of another week or ten days.

The following cases are at present in the Infirmary.

CASE I.—A man aged 40 was admitted under the care of Mr. Hey on October 7th, with an ulcer of a year's standing on the anterior surface of the leg, seven inches long, and extending two-thirds round its circumference. On October 24th, the ulcer being in a healthy condition, four pieces of cuticle of the size of fourpenny-bits were transplanted from his thigh, and kept in position by gelatine plaster. Red lotion, which had been used before, was continued. Two pieces lived, and grew to the fourth of an inch in diameter, when they reached the sides of the ulcer. On November 1st, a piece of the same size as those used on the former occasion was divided into eight; these were placed on the granulations, and fixed by oiled silk, with a strip of plaster over it.

Nov. 11th. Four of the pieces were growing. Eight more transplantations similar to the last were fixed by adhesive plaster, without any oiled silk beneath it; seven of these took.

Dec. 1st. The twelve grafts have grown together and to the sides of the ulcer, which is entirely healed, except at two places, each about the size of a shilling.

CASE II.—A woman aged 51 was admitted under the care of Mr. Jessop in September. Her left leg was ulcerated all round, the ulcer varying from one to five inches in width. It had not been healed for eleven years. The patient came in with the idea of having amputation performed. On September 25th, four pieces of the size of canary-seeds were transplanted into incisions in the granulations. Simple cerate was used as a dressing. All the grafts lived, and in six weeks each had attained the size of a half-crown. On November 20th, the ulcer was nearly healed. It has, however, not improved, but rather gone back since that date—no doubt owing to the patient getting out of bed whenever she has an opportunity, and also to her applying some specific ointment of her own.

CASE III.—A woman, aged 66, was admitted under the care of Mr. Jessop on the 28th October. There was a large ulcer (four and a half by two and a quarter inches) upon the left leg: this was in such an unhealthy sloughing condition, that the patient was placed in a private ward. Carbolic acid lotion and poultices were applied. On November 4th, the sloughing having stopped, and the granulations looking healthy, she was removed to the general ward, and four pieces of cuticle (of the same size as in the last case) were planted. They were fixed by oiled silk, with plaster over it; red lotion was used as a dressing. All the pieces grew, and now (December 1st) have filled up the ulcer, which is almost entirely healed.

There are eight other cases at present in the Infirmary in whom this method of treatment has been pursued, with more or less benefit in each instance; but none are complete enough to warrant publication. Further reports shall be forwarded.

THE CHILDREN'S HOSPITAL, BIRMINGHAM.

TRANSPLANTATION OF SKIN.

(Under the care of Mr. C. J. BRACEY, M.B.)

In a granulating wound, the result of a burn in a child four years old, the skin of the whole circumference of the thigh being destroyed, Mr. Bracey implanted seven pieces of skin about the size of linseed, four taken from the arm and three from corresponding parts of the opposite thigh. All the latter and three of the former are growing; the largest is now (fourteenth day) nearly half an inch in diameter, and one has joined the surrounding skin. After removal, the portions of skin dwindled down to mere points, and became blue and thin, but they did not altogether disappear.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 10TH, 1870.

THE LONDON COLLEGES IN CONFERENCE.

ONE of the great professional evils at the present moment is the inequality of the examinations for the licence. This inequality of the test of efficiency is the more unfortunate as every licence confers an equality or the right to exercise everywhere. The easy examination of one licensing body tends to depress the standard of all the rest. Visitations of examination, doubtless, partly remedy this state of things, but to completely remove it a bolder course is necessary. The time has now arrived when an attempt should be made to effect such combinations of the licensing bodies as may form a conjoint examining board for each division of the kingdom, before which every person who desires a licence to practise should appear, and by which he should be examined on all subjects. Any higher degrees he may wish to take should come after, and should be optional. These remarks will, we believe, command universal assent. They have not, however, the advantage of being original either in form or spirit. They are quoted from the Report of Mr. Syme's Education Committee of the General Medical Council appointed in 1868.* The Medical Council in December of 1869, while repeating the substance of this declaration, further pointed out to the President of the Privy Council that such combined divisional examining boards would probably also prevent any further and most undesirable multiplication of licences to practise. This multiplication they attributed to the absence of a compulsory power of amalgamation.† The above resolutions of the Council having been brought under the notice of the licensing bodies, the committee appointed to digest their answers reported in February of the present year‡ that the carefully expressed answers of the Universities of Oxford, Cambridge, London, and Durham, and the decided resolutions of the Royal College of Physicians of London, and of the Royal College of Surgeons of England, in favour of the formation of such conjoint examining bodies, are decisive evidence of the opinion which prevails in England. The College of Physicians of London at once proceeded to act on its resolution by framing a scheme and by inviting a conference with the College of Surgeons and subsequently with the Society of Apothecaries; and afterwards communications were made to the English Universities. The results of these conferences and the final arrangement of the details of the plan were not officially made known, but enough had transpired to show that the anticipated difficulties had been nearly surmounted. The details of the draft scheme referred to which had not then transpired were, we believe, as follows.

"Draft scheme for an Examining Board for England, prepared by the Committee of the Royal College of Physicians of London, and the Committee of the Royal College of Surgeons of England, and under the consideration of the Society of Apothecaries.

"1. That full liberty being left to the Universities and Corporations to deal as they please with their honorary distinctions and degrees, an examining board should be formed for each division of the kingdom, before which every person who desires a licence to practise medicine, surgery, and midwifery, should appear and be examined on all subjects that may be required by the Medical Council. Any higher distinctions or degrees he may wish to take should come after, and should be optional.

"2. That the Examining Board for England should be constituted of assessors or examiners appointed by the several Universities and Medical Corporations in England.

"3. That examiners be appointed as follows. In medicine, by the Royal College of Physicians; in surgery, by the Royal College of Surgeons; in anatomy and physiology, by the Royal College of Physicians and the Royal College of Surgeons; in midwifery, by the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries; in pharmacy and medical botany, by the Society of Apothecaries; in chemistry, and in Forensic medicine, by the Royal College of Physicians.

"4. That each University in England shall have the power of appointing assessors or examiners, and assessors.

"5. That any person who has passed the examinations shall be entitled either to the licence of the Royal College of Physicians and the membership of the Royal College of Surgeons, or to the membership of the Royal College of Surgeons and the licence of the Society of Apothecaries, or to any one of them singly, on payment of the required fees.

"6. That there be two or more examinations on professional subjects, and that the fees for the examinations be thirty guineas, to be paid in two or more payments.

"7. That every matriculated student of an English University be admitted to the examinations on the payment of a fee of ten guineas, but shall not be thereby entitled to the diploma of either of the three above-mentioned licensing bodies without the payment of an additional fee of twenty guineas.

To this draft scheme, which was printed, Sir James Alderson, as President, on the part of the College of Physicians, and Mr. Cock on the part of the College of Surgeons, of which he was then President, appended their names. As we have already intimated, the difficulty was found in treating with the Society of Apothecaries, on account of their claim to appoint some of the examiners in medicine. The English Universities have behaved with great liberality; they have assented to give their aid as assessors in the examinations; and they have declared their willingness to waive their right to bestow a licence to practise if it be understood that the Colleges will do the same, and that this conjoint examination shall be the English licence to practise. This conjoint examination would then be the one portal for practice; all the Universities and Corporations retaining their right to give their examinations for degrees and fellowships, which would come after, and should be optional. The introduction of the Medical Bill stopped the settlement of this admirable scheme; but, as we intimated last week, the Committees of the Colleges of Physicians and Surgeons met again on Friday evening last to renew, and, if possible, complete, the negotiation, now that the Bill has been withdrawn. The excellent character of this scheme is patent on the face of it. It has one cardinal virtue; it supplies an uniform standard and complete examination in England, which confers the licence to practise under sufficient guarantees; and it diminishes, by amalgamation, the number of examinations. We learn with regret that the joint Committees at their meeting on Friday showed a tendency to be diverted from this great object, and seemed to be entering upon a scheme which is something very different in essence and much inferior, although retaining some semblance of the old draft of Sir James Alderson and Mr. Cock. The suggested scheme proposes not one uniform examination for a licence preliminary to higher degrees or distinctions, but solely an union for granting a licence to general practitioners. By omitting to avail themselves of the assistance of the Universities, they would fail to make the licence to practise dependent upon this examination; they rob themselves of an important co-operation and sanction, and fail to effect the main object of examination. Instead of diminishing the number of licences, they would add another to the many which exist. They fall away from the principle of reform, to which they had given a notable adhesion, and which has received the emphatic sanction of the profession, the Government, and the Medical Council. Moreover, by the example thus set, they would make the cause of reform by voluntary amalgamation impossible in Scotland and Ireland, where it is already more difficult and less mature than in England. They would furnish the best argument which their enemies could desire for taking the whole question out of their hands. It would be a proof of hopeless blindness to the first principles of reform if this amalgamation were carried out without the effort to make this examination the one portal licence preliminary to practice, and

* Minutes of the General Medical Council, vol. vii, p. 92.

† Minutes of Executive Committee, Dec. 13th, 1869, No. 89.

‡ Minutes of the General Medical Council for 1870, p. 12.

to carry with it the promised co-operation of the English Universities. Whatever arguments might be employed to explain this course, it would be difficult not to see in it the irrepressible and tortuous influence of corporate jealousies overwhelming large public and professional interests. The Corporations would appear as though incapable of learning the most obvious lessons, and only quick to digest their pledges and fall away from their good intentions. There could be no surer way of inviting a justifiably severe fate in any future legislative scheme for governing the profession and regulating its education. We last week hinted that the Government were not disinclined to take in hand once more the task of medical legislation. Their conditions were already much more radical than the Corporations approved. The whole weight of the opinions of the profession at large supported them, and the main reason of the want of success of the last Medical Bill was that it was held not to go far enough. This year it would have less difficulty in playing the part of King Stork. The Colleges should not only be wise, but be wise in time.

A WORD WITH PROFESSOR TYNDALL.

IN reprinting his *Essays on the Use and Limit of Imagination in Science*, Professor Tyndall has rendered an acceptable service. The furthest reaching speculations on the relations of life and consciousness to matter and force are presented here by this able physicist with great power and clearness, and in all the pomp of "beautiful language". The beauty of the language will not, however, conceal a certain poverty of information on some of the most important subjects discussed with magistral emphasis. In some former utterances, Dr. Tyndall had astonished men "mainly occupied with observation"—a class for whom he expresses some contempt—by employing, in public, words tending to confound atmospheric particles with organic germs. He now observes that, compared with these atoms, the smallest vibrios and bacteria of the microscopic field are as behemoth and leviathan; and asks the President of the British Association, "whom untoward circumstances have made a biologist," but who was intended by Nature for the higher gradational development of a physicist, to "excuse him to his brethren" in the inferior class, when he descends from the seat in the skies which he for the moment shares with Professor Tyndall, and to explain to them that they form an inadequate estimate of the distance between the microscopic and molecular limit, and that they employ a phraseology which is calculated to mislead. The particular person to whom Professor Huxley is requested, in the first instance, to convey this information, is defined as a person by whom, "for example, the contents of a cell are described as perfectly homogeneous, as absolutely structureless, because the microscope fails to distinguish any structure." The horrid example selected is apparently Dr. Charlton Bastian, whose words are here referred to. As he did not exhibit the submission which this communication might have been expected to inspire, stronger measures were subsequently taken, to which he proved equally recalcitrant; and he is at this moment, we believe, in a state of alarming rebellion, and displays something more than Galilean obstinacy. We may be assisted in understanding that attitude by observing that, so far as anything contained in these very interesting essays is concerned, Dr. Tyndall does not appear to have been at the pains to appreciate the elements of a problem on which he could no doubt have thrown much light, but which he at present unconsciously involves in a mist of words. Granting all that extreme evolutionists could deduce from Dr. Bastian's observations, nothing more could be claimed than that they should suggest that independent particles of living matter, at first less than $\frac{1}{1000000}$ in diameter, are capable of springing up, owing to the *colligation* of imperceptible molecules such as those of distilled water, which "cease contracting at 39 deg. Fahrenheit, and grow bigger until it freezes." This, Dr. Tyndall observes, is "a structural process, of which a microscope can take no note." It is difficult to understand how Dr. Tyndall has failed to see that he has put upon the word "structural" in Dr. Bastian's sentence a meaning altogether different from that which it bears there. If a discussion is to have any value, the words

employed must be used in the same sense. Of course, it was used here in its ordinary histological sense. By "a homogeneous structureless fluid" the biologist means a fluid which, with the highest powers of the microscope has no perceptible differentiation or outline of structure. Distilled water is, of course, a very extreme case answering to such a histological description. Here the biologist was speaking of an organic fluid, or of a measured mineral solution, in which the existence of molecules was not for a moment in doubt. On the contrary, what was described as observed was a process of molecular aggregation, change, or growth, by which they passed into the ken of vision, and assumed visible shapes and modes of growth, with forms which are capable of producing ova, and going through what have been commonly known as vital processes, such as cell-division, fructification, etc. The most extreme interpretation of the experiments of the abiogenists would ask for no other concession; and to this concession Professor Tyndall, in spite of the pompous procession of words which precedes his meaning, offers no objection. It is by no means to be inferred that there are none which can be offered by persons who have studied the question more closely; but only that Professor Tyndall does not combat, as he supposes, the views of Dr. Bastian, but merely a phantom of his own creation; and of this windmill he very effectually disposes with sounding blows. We can, however, state fearlessly that the molecular composition of water, distilled or undistilled, does not come before biologists as an absolute novelty. *Nec deus intersit*: a revelation of this elementary fact in physics hardly needed to be accompanied with the thunders of a terrifying eloquence, and entrusted as a message to so illustrious an envoy.

So far as Professor Tyndall is concerned, biologists may, we think, pursue their investigations into the origin of life secure from more than brilliant summer-storms, which may startle, but will not impede their pursuits; and we are even disposed to think that, when he brings his great mind to "occupy itself with observation", which really, in respect to histological research, is not to be despised even by physicists of the highest imagination, if they wish to grapple with the beginnings of organic life, he will ultimately find reason to look with some favour, and without contempt, upon inquiries with which further familiarity on his part will, we anticipate, breed greater veneration. Meantime, it is satisfactory to have his promise that he will "continue to practise tolerance towards microscopists ignorant alike of philosophy and biology". There is the greater reason to be grateful for it, as there is no doubt that his intolerance would be attended with very dreadful consequences. The particular culprit selected for the display of tolerance is Professor Lionel Beale, described as "a Doctor of Medicine, lately professor in a London College famous for its orthodoxy." It has been said of a well known political controversialist, that his tone towards those who differed with him was so arrogant that "it would have been offensive in the Almighty towards a beetle". We hope that Professor Tyndall will not object to the saying because it is profane. We trust our readers will excuse it, because it is apt. On reflection, Dr. Tyndall will agree with us that the difference in scientific intelligence and achievement between himself and the eminent biologists named—eminent, we mean, in the subordinate spheres of biology and medicine—is considerably within the wide limits suggested in the quotation. This will perhaps suggest that his tone might be modified with advantage. We are quite sure that science will lose nothing by the change; and that his excursions from the territory of physics beyond "the utmost bounds of matter on to the infinite shores of the unknown" will be none the less profitable. The pleasure to be derived from the display of his large knowledge of physical facts and phenomena, his considerable powers of thought and imagination, and his charming turn of expression, will be more completely unalloyed.

DR. THORNE THORNE has been at Stevington, near Bedford, making inquiry, on behalf of the Medical Department of the Privy Council, into the causes of the outbreak of fever to which we a short time since adverted.

PROFESSOR BLOXAM has been appointed to the Chair of Chemistry at King's College, rendered vacant by the death of Professor Miller.

WE are glad to hear that the whole edition of the *Manchester Medical and Surgical Reports* was sold off within five weeks.

MR. LAWSON TAIT having withdrawn from his candidature for the office of Assistant-Surgeon at the Birmingham General Hospital, Dr. Jolly was the only candidate, and was unanimously elected.

THE next Medical Club Dinner will be held on Tuesday, December 20th, at seven o'clock, on which occasion the chair will be taken by Dr. Lory Marsh.

DR. DOBELL has in the press a second volume of his *Reports on the Progress of Practical and Scientific Medicine in Different Parts of the World* (for the year 1870).

A CONFERENCE of gentlemen interested in scientific education was held in the Royal Institution, Liverpool, on Tuesday night, and passed unanimously a resolution declaring the advisability of establishing a Science College in that town, the cost of which was estimated at about £50,000, and a committee was appointed to take steps with the view of carrying out the object.

THE FEVER HOSPITAL AT STOCKWELL.

WE are glad to hear that the Metropolitan Asylums' Board have unanimously elected Dr. Barbour Resident Medical Officer to the Stockwell Fever Hospital. Dr. Barbour's long experience and able administration at the London Fever Hospital well entitle him to the confidence of the Managers.

AN INDIAN STUDENT.

THE examination for the Fellowship of the Royal College of Surgeons which has just taken place exhibits a feature of unusual interest, it having afforded the first instance of a native Indian gentleman being admitted to the Fellowship. The gentleman alluded to, Mr. Gopaul Chunder Roy, is the cousin of Baboo Gopaul Chunder Sen, who has recently become well known here in relation to the new religious doctrines of which he has been the exponent.

THE NATIONAL ANTI-CONTAGIOUS DISEASES ACT ASSOCIATION.

A MEDICAL colleague, holding an important official position, writes: "This association has just sent out to some, perhaps to all, members of our profession a circular containing some very doubtful statements called by them 'facts', and inviting signatures to a protest against the application of the Acts to the women of this country. It is somewhat remarkable that the issuing of this circular was almost exactly contemporaneous with the appointment by her Majesty, as announced last week, of a Commission, comprising some of the most eminent members of our own and of other professions, to inquire and report as to whether those Acts should be maintained, or extended, or amended, or repealed; and I would strongly advise all who wish to act prudently and wisely, before they protest against Acts which most, if not all, of those familiar with their operation declare to be beneficial, to await the result of the inquiry about to be commenced by those whose ability and impartiality cannot be justly disputed. There is great difference of opinion amongst those who are convinced of the good effect produced by the Acts in garrison towns, as to the expediency of extending their operation to the population generally; and most sensible people have, by a sort of tacit consent, agreed to suspend judgment on that point until trustworthy evidence on the whole subject has been obtained and fairly considered. This prudent and common-sense decision does not, however, suit the designs of the fanatical objectors to the Acts, who, not content with awaiting the result of the inquiry which has been conceded, seek to anticipate the decision by asking for signatures to a protest from many who must of necessity be as yet not perfectly informed of the facts. Such an attempt is palpably unjust. Even the opponents of the Acts who are not fanatical will do well to await the result of the inquiry now commencing under such favourable auspices."

UNIVERSITY DEGREES WITHOUT RESIDENCE.

DR. RICHARDSON, in speaking of the future of the University of St. Andrew's at the Graduates' Dinner this week, referred to the present restriction limiting to ten the number of degrees conferred upon practitioners by examination without residence, and intimated that there was a probability that this restriction would soon be relaxed. The Chancellor, the Duke of Argyll, who had ever shown a deep interest in the University, had assented to a change in this respect; and the change had always been considered logical by their member, Dr. Lyon Playfair. "They had now, therefore, a hope of seeing their honoured University free again." Its own graduates are the best judges of the interests of the University; but we are fain to think, that if the University of St. Andrew's had in the past been less free with its degrees they would now be more honoured; and as the said restriction has decidedly raised their prospective, and even present, estimate, no doubt the graduates will take care that this relaxation shall be accompanied with safeguards, in the way of very complete and adequate examinations, of which they will be particularly well fitted to estimate the importance.

THE GOVERNMENT AND MEDICAL REFORM.

AT the annual dinner of the St. Andrew's Graduates' Association, Dr. Lyon Playfair was present, and, in responding for the House of Commons, mentioned the great difficulty under which private members laboured in passing Bills through the House of Commons. More than one Bill having for its object the promotion of medical reforms had failed from the fact that they were not in the hands of the Government. One Bill of last session—that to effect a reform in the General Medical Council of the United Kingdom—had been shipwrecked; and he regretted that the offer of the Government to have the subject inquired into by a Select Committee had not been accepted, as it was not unlikely that the Government would have taken the matter up with a view to give effect to the recommendations of the Committee. He had within the last few days, he was glad to say, ascertained that the Government did not make such objections to the bringing in of a Bill as he had anticipated.—Dr. Seaton inquired who would have had to pay the expense of the inquiry before the Select Committee, had it taken place.—Dr. Lyon Playfair said that the expense would have been borne by the Treasury.—Dr. Seaton said that question had been discussed; and the reason assigned for objecting to the Committee was, that the expense would have to be borne by the promoters.

WHAT IS AN ACCIDENT?

SOME unfavourable comment was excited a few months since by a decision of the Court of Exchequer in favour of the Accidental Insurance Company, in a case where death was caused by erysipelas following an accidental injury of the foot. By a clause contained in the policies of this company, various diseases, including erysipelas, were named as exceptions to the general liability of insurance against death, and it was thought that the representatives of the plaintiff, who insured his life, had been hardly treated, although legally the Company might be protected by its policy. There is a similar clause in the conditions of insurance of the Norwich and London Accident Insurance Association, by which exception is made in cases of death or disability arising from rheumatism, gout, hernia, erysipelas, or any other disease or cause arising within the system of the assured, before, or at the time, or following any accidental injury; but this company has, on more than one occasion within a short period, paid compensation to the amount of £1000 in each case to the representatives of persons dying of erysipelas, where it has been proved to be the direct result of the accident, however simple; once, for instance, from the prick of the finger by a rose-bush, and another after a slight injury to the hand by a piece of iron. This goes to prove that the Norwich Office inserted the clause for their own protection against deaths from erysipelas, etc., when previously existing or lurking in the system; and, as some apprehension has been caused by the exceptions since the legal decision to which we have re-

ferred, we are glad to learn that the directors of the Norwich Company have recently removed all the nominal exceptions from their policies, and worded the clause as follows; namely, "This policy does not insure against death or disability from any natural disease, or cause of disease, arising within the system of the assured, before, or at the time, or following any accidental injury, etc." We think the directors have been wise thus to define their meaning, although their practice appears to have always been liberal to the public.

THE BROMPTON CONSUMPTION HOSPITAL.

THE governors of the Brompton Consumption Hospital have carried out a very desirable reform in connection with that much sought charity. The number of applicants has for many years been far beyond the capacity of the wards; it has been the practice to keep lists of the applicants, and inform them in turns as vacancies occurred. The result has been, in too many instances, that cases which were in the condition likely to derive the greatest benefit from admission have been hopelessly deferred, while numerous patients have been admitted because they had waited long, when they were in an utterly hopeless state, and could derive no benefit. More than one patient has died immediately on being brought to the wards, and even on the stairs, the exertion of being carried to the hospital having sufficed to determine death. Under these circumstances, it is satisfactory to know that the governors have concerted with the medical officers a plan of admission, not by virtue of this sorrowful seniority, but of the real urgency of the case, and of the probability that the treatment and care to be given in the hospital may prove advantageous or curative.

MR. JAMES LANE ON THE CONTAGIOUS DISEASES ACTS.

MR. JAMES LANE has, on more than one occasion, rendered good service to the cause of truth by his clear, plain, and able statements of facts connected with the Contagious Diseases Acts. All his writings on this and other scientific subjects are marked by a scrupulous exactness and unvarnished accuracy. In a pamphlet which he has just printed, in answer to a speech by Mr. Duncan McLaren, entitled *Facts respecting the Contagious Diseases Acts*, he completely annihilates that juggle by which Mr. McLaren attempted to pervert the official figures illustrating the valuable sanitary effects of the Acts in the subjected districts. A full inquiry will do justice to all the facts; meanwhile Mr. James Lane has done a public service by re-establishing thus far the truth—*coute que coute*. No one can read this perfectly clear and convincing statement without feeling assured that the diminution of disease at Devonport, Aldershot, Portsmouth, and Chatham, has been very considerable, and that Mr. McLaren is entirely in error in asserting the contrary. Nor can it be denied that the prevalent form of disease has become much milder. He justly stigmatises the description of the speculum as an instrument of "torture".

A CONDEMNATION OF CHARPIE.

DR. VON NUSSBAUM, writing from Orleans on November 24th, regarding the wounded there, says that, above all things, charpie should be avoided; and sponges also, if syringes are at hand. He is, he says, always horrified when he finds gun-shot wounds or amputation wounds covered with dry charpie. Nothing worse, said Medical Councillor von Pettenkofer to him twelve years ago, can be found; and from that time Dr. von Nussbaum has avoided charpie. Charpie, like sponge, is a very porous substance; its extensive surface greatly favours the process of decomposition. Apart from its dangerous porosity, charpie is in itself rather dirty and disgusting. It is likely to have been made, he says, from shirts and other linen clothes, which perhaps have been soiled with typhus stools. From these, compresses have been cut, which have been again and again fouled with pus, and washed. Finally, the patients have pulled these into charpie, in their dirty wards; and the charpie has lain there for a longer or shorter time until it has become poisoned,—and it is then laid on wounds. Even allowing that some charpie has a better history, it cannot be denied that thousands of patients are every day engaged in preparing this material. But even

the best and cleanest charpie is dangerous on account of its great porosity, especially when it has been long kept in a hospital ward. If there be not a syringe at hand, sponges may be used for pouring on water, but not for touching the wound.

THE PATHOLOGICAL SOCIETY.

AT the Pathological Society on Tuesday night, considerable interest was excited by the ophthalmoscopic demonstrations of Professor Liebreich, and the remarkable specimens of gun-shot injuries to bones exhibited by Dr. Mac Cormac, Surgeon of Belfast Hospital, at the courteous invitation of Dr. Quain, the President. Dr. Mac Cormac, who has long been esteemed as a highly able operator and accomplished surgeon, did honour to British surgery by the coolness and skill which he displayed at the Anglo-American Hospital at Sédan. We see it stated in the Irish papers that he may not improbably enter upon surgical practice in London, for which he has undoubtedly high personal and scientific qualifications.

DISTRIBUTION OF SMALL-POX IN THE METROPOLIS.

IT is not yet sufficiently known that the Metropolitan District Asylums Board has opened the temporary hospital at Hampstead to relieve the pressure caused by the prevalence of small-pox in the metropolis. By the courtesy of the authorities, we learn that, since the opening of the hospital on Thursday last, thirty-one patients have been admitted under the care of the Medical Superintendent, Dr. Robert Graves. They have come from the following parishes or unions of the metropolis. St. Leonard, Shoreditch, has sent 9; St. George's-in-the-East, 5; Holborn, 5; Fulham, 3; St. George's Union, 3; Hamlet of Mile End Old Town, 2; St. Matthew, Bethnal Green, 2; Strand, 1; and St. Saviour, 1.

URIC-ACID INFARCTION AS A SIGN OF LIVE OR DEAD BIRTH.

DR. H. RAPHAEL read a paper before the Medico-Legal Society of New York in February last, in which he called especial attention to the so-called uric-acid infarction of the kidney as an important aid in deciding the question whether a child had been born alive or dead. He said:

"It is a comparatively recent discovery, and, according to Virchow, Martin, Hessling, and others, is observed almost invariably in children dying between the first and tenth days of life. Engel says it is an extremely exceptional occurrence in still-born children, and a very rare one in those who have respired but one day. The deposit consists of sharply defined golden-yellow streaks of crystallised uric acid, and is found in the greatest abundance in the papillæ of the kidney. Under the microscope, says Vogel, it is seen to be composed of small cylindrical columns, which, on pressure, readily crumble down into a reddish-brown amorphous lithate, containing some epithelium-cells from the straight urinary tubules and minute rhomboid crystals of uric acid. Whenever these golden-yellow crystals are found in the papillæ, some of them will also be found precipitated as a carmine-red powder in the pelvis of the kidney, and in the most dependent part of the bladder. Virchow explains this phenomenon in the following manner. Immediately after birth, a more rapid oxidation of the tissues takes place, in consequence of the establishment of the process of respiration; and, as a result thereof, among other products, uric acid is formed. This substance, combined with the alkaline bases, is excreted by the kidney, but as yet does not find in the child the requisite quantity of water to dissolve it. The large quantities of the excreted urates accumulate in the straight tubules, and appear yellow, for they are combined with the colouring matter of the urine. The urine, which is subsequently excreted in larger quantities, and consequently more diluted, partly dissolves this uric acid, partly washes it onward into the bladder, and thence outwardly. Indeed, a red powder is now and then also found in the diapers of most new-born children, which, on close examination, is seen to be uric-acid infarction. 'Regarded from a medico-legal point of view,' says Vogel, 'lithic-acid infarction is not devoid of importance; for it is as positive a proof of life as the dilatation of the lungs by air, and has the additional advantage over the latter sign in not becoming so quickly changed with commencing putrescence.' I do not think that the importance of this sign is forcibly enough expressed by these words. A phenomenon that occurs between the first and tenth days of life, very rarely after that period, and

scarcely ever in still-born, may almost justify one in regarding its presence or absence as proof positive of life or death. For myself, I have only to add that, in six cases of still-births carefully examined this winter, I failed to discover the least trace of it either in the kidneys or bladder."

THE ARSENIC-EATERS OF STYRIA.

A GOOD deal of doubt has rested upon the alleged practice of arsenic eating in Styria, notwithstanding some very positive statements which have been made on the subject, and it has been affirmed that the white mineral matter which was swallowed was nothing but chalk. In order to clear up this curious and important subject, the Royal Medical Councillor, Dr. Von Vest, caused a circular to be issued to the physicians of Styria, requesting them to communicate their experiences with regard thereto. Seventeen reports were obtained, from which the following is an extract. The principal seat of the arsenic-eaters, according to these, is in the northern and north-western part; the southern part, however, is free from them. The district of Hartberg, in the former, counts not fewer than forty individuals who indulge in that habit. Of the various sorts of arsenic, the white arsenic, or ratsbane, is mostly taken; less so the commercial yellow, and still less the natural red arsenic or orpiment. The arsenic-eaters begin with a dose of the size of a millet, and increase this quantity gradually to the dose of the size of a pea, the weight of these quantities being 0.22, 0.56, and 0.62 grain avoirdupois, respectively. These doses are either taken daily, or every other day, or only once or twice a week. In the district of Hartberg the custom prevails to suspend this unwise usage at the time of the new moon, to commence at the time when she is on her increase with the relative smallest dose, and to increase with it to the time of the full moon. From this period the quantity is diminished, but aloes is taken in increased doses till strong diarrhoea is produced. Directly after the administering of arsenic, most people abstain from drinking; and with regard to aliment, some prefer pastry to meat, while others abstain from the taking of fat. However, the majority will take all kinds of food, indulging also considerably in the use of alcoholic beverages. Older persons who have been accustomed to that habit from their boyhood feel a sensation of warmth in their stomach shortly after taking the poison, complaining only of dizziness in the head after excessive use. The ratsbane-eaters belong mostly to the lower classes—wood-cleavers, stable-grooms, and charcoal-burners. They fall into the habit at the early age of fifteen, and continue it until the ages of seventy and seventy-six. Although the female sex is not averse to it, the majority belong to the male sex. They are generally strong and healthy persons, courageous, pugnacious, and of strong sexual disposition. The reason of this habit is very probably attributable to the fact of its apparent favourable action upon horses. If requested to explain the reason of their indulging in it, they will say that it is to make them strong and healthy.

THE COST OF DIMPLES.

HAMBURG has been conspicuous during the present war for its extensive love-gifts to the German army, and its large consignments of comestibles to the hospitals and camps. We could wish, but have very little hope, that it had exhausted in donations to its countrymen the wines prepared there in bulk from Hamburg spirit, "after the Spanish model," by processes which, to use the euphemistic language of a well-known trade circular, the excise regulation of England, France, and Germany, renders commercially imprudent in either of these respective countries. Many thousand gallons of this stuff are, however, annually cleared for the benefit of British consumers; and, so long as people insist on drinking excessively cheap wines, they must expect to be on their guard against such compounds. Those who pay fair prices for good wines should be equally alive to another kind of imposition which makes them pay nearly twice the nominal price for what they drink. Six bottles of brandy or wine are popularly supposed to make a gallon, and six reputed quarts do fairly make up the gallon. Mr. A. H. Church has been at the pains to measure the contents of some reputed quart bottles in which different wines and brandy were sent out by a respectable house. They contained in nearly every instance less than two-thirds of

the full measure. Port at sixty-six shillings a dozen was really sold at eighty-two shillings full measure. Cognac at sixty shillings was sold at the rate of eighty-six shillings full measure. *Santo* was sold at forty-eight shillings a dozen; the bottle consisted of only twenty-two ounces, instead of forty, and the cost was, therefore, at the rate of eighty-seven shillings. Even the twenty-shilling Roussillon bought by the bottle counts up to thirty shillings a dozen. The kick or dimple in each bottle often holds as much as a small tumbler. Evidently dimples are a considerable and probably a not sufficiently considered item in our family expenditure. In this estimate, we take no account of the probably counterfeit and almost certainly artificial character of the attractive fluids to which they introduce us.

CURIOUS MALFORMATION OF THE FINGERS.

DR. VON MOSENTEIL of Bonn describes and figures in the last number of Langenbeck's *Archiv* an unusual malformation existing in the left hand of a man who came into hospital on account of a dorsal subluxation of the trapezium. There were five fingers on the hand, but no thumb: in the place of the latter was a finger having a metacarpal bone and three phalanges. There was no trace of the ball of the thumb; and the supernumerary finger, which resembled the little finger, was not capable of being brought into opposition to the others. For prehensile purposes, the man had acquired the habit of bringing the fore-finger and the additional finger into opposition with the others; hence there was a greater width between the index and middle fingers than between the others: these two were curved one towards the other, and their basal phalanges were very strong. The thumb on the right hand was normally formed; the thenar eminence, however, was small.

ANTISEPTIC TREATMENT OF WOUNDS.

A REMARKABLE series of cases are recorded in the Appendix to the *Statistical Report of the Navy* for 1867, by Dr. J. G. Bernard, R.N., illustrating the singular value of Professor Lister's carbolic acid treatment, carefully employed. They are worthy of careful consideration, and of a more extensive perusal than they would find in the covers of a blue-book.—Case I. *An Excision of a Curious Elbow-joint*, performed on April 1st, with all the instruments, etc., carbolised at the time of operation, and the dressings and wound during dressing properly protected by carbolised solutions. The dressings were first renewed ten days after the operation. Not a drachm of pus had been secreted, and the wound had become quite superficial. On the 22nd, it was quite healed, and all the fistulous openings closed.—Case II. *An Oblique Compound Fracture of the Tibia and Fibula, Protrusion of the Tibia, Laceration of the Soft Parts, and much Effusion of Blood*. The clots were removed; the wound was syringed with carbolised oil, and dressed with carbolised oil, and putty with the sheet-lead. The wound was examined the twenty-second day, under the protection of carbolic acid solution. It was nearly closed, and quite superficial: no discharge whatever.—Case III (*Amputation for Gangrene of Foot*) gives an equally satisfactory result.—Case IV. *Ligature of External Iliac Artery for Inguinal Aneurism*. The iliac was tied on July 27th with carbolised ligature, the proper antiseptic precautions being observed during the operation. The wound was brought together with deep wire-sutures, and dressed with the iac and carbolic acid plaster. On July 31st, the lips of the wound were in close apposition, except where the ligature passed. No purulent discharge whatever. On August 25th, the ligature fell, the wound being already closed, except on its back. The tumour could scarcely be felt.—Case V. *Partial Amputation of Hand*. The bones were fractured, and the soft parts lacerated and charred, by the explosion of a gun. Partial amputation August 27th, with careful antiseptic precautions during operation and in the dressings. The charred integument recovered itself under the carbolic dressing, and the wound healed without any sloughing.—Case VI. *Teale's Amputation of the Leg*. Carbolic cat-gut ligatures cut close to the knots. "They were not seen again in the progress of the case, and doubtless became

absorbed or reorganised."—Case VII. *Chopart's Amputation of the Foot*. The arteries were tied as before, and the stump dressed antiseptically. "The case did admirably. The wound became almost immediately superficial, and the ligatures were not again seen."—Case VII. *Syme's Amputation of the Ankle*, for strumous disease of the ankle-joint, with tuberculosis of lung. The ligatures were not again seen; but some abscesses formed along the sheath of the tendon, which retarded the cure. The results of Case IX (Amputation of Thigh), Case X (Amputation of Leg), Case XI (Amputation of Wrist), are not less remarkable; the wounds rapidly healing (except in Case IX, where the flaps had to be opened for hæmorrhage, etc.) by first intention; the ligatures also giving no further trouble. The opening of buboes and abscesses with antiseptic precautions and dressings is illustrated by Case XII. These precautions are of a very careful and complete character; and they are rewarded by finding, on renewing the dressings two days afterwards, under the protection of carbolic acid solution, that not a particle of purulent matter could be observed, and seeing the wound heal soundly, without any further discharge from what was a large abscess in the right groin.

DR. PAGE AND THE SOUTHSEA GUARDIANS.

THE Poor-law Board have affirmed the principle that a medical officer is only bound to attend the Board of Guardians when specially summoned, in the case of Dr. Page of Southsea, to which we recently referred. Dr. Page's conduct in the matter has been excellent. We trust that the pretty speeches made on the occasion will lead to satisfactory results. The Guardians have an excellent officer in Dr. Page, and should know how to value his services.

YELLOW FEVER IN SPAIN.

THE *Gibraltar Chronicle* of the 26th ultimo, states that an official despatch from the Minister of the Interior had been received in all ports of Spain declaring that of Valentia "clean". In Alicante, on the 22nd, there were five fresh cases of yellow fever, 33 discharged from hospital cured, and five deaths; cases still under treatment, 110. In Barcelona on the same day there were four admissions into hospital and three deaths. During the month of September in the latter town, 415 persons succumbed to the epidemic, and in October 589, making a total of 1004. In Alicante, according to the *Eco* of that place, the ravages of the disease were still more extensive.

THE EPIDEMIC OF SMALL-POX IN LONDON.

A WELL-INFORMED correspondent writes:—Small-pox is committing frightful havoc in the City; but it is satisfactory to know that the Guardians are alive to the insufficiency in the existing arrangements for vaccination. The clerk to the Guardians of the City Union explained at their last meeting that the Privy Council considered one vaccinator adequate for the entire Union of the City of London; and that, after considerable difficulty, the Guardians had obtained consent to appoint two. Mr. Cox now showed that two were totally inadequate, and, had they only appointed one, as recommended by the Privy Council, they would have been in a still worse position to prevent and check the epidemic of small-pox. Mr. Whiteside moved "That a request be forwarded to the Poor-law Board to sanction the re-appointment of all the district medical officers for six months, and authorise the payment to them of one shilling and sixpence per case successfully vaccinated". Mr. Cox observed "that it would be unfair to the district medical officers to require them to vaccinate without being paid for it." Poor-law medical officers ought not only to be called upon to heal small-pox, but to prevent it by a thorough system of vaccination. They doubtless have opportunities of vaccinating those who are liable to this terrible pest which no other officer can possibly have. The appointment of only one vaccinator to a large and populous district must in the time of an epidemic of small-pox prove a failure. Everyone who is liable to the contagion should be vaccinated or revaccinated; and this power to check the spread of small-pox is evidently in the hands of those who attend the sick. Any system of vaccination which is not equal to the emer-

gency of an epidemic is faulty. The appointment of all the district medical officers in Ireland has proved a complete success. This is attested by the fact that there has not been a death from small-pox in the city of Dublin Union during the past year. They manage these things better in Ireland than we do.

LE BON DOCTEUR NOIR.

THE sad announcement of the death at Pont Maugy of Dr. Davis calls for a tribute of sincere acknowledgment to the good work in which he was engaged, and the noble self-devotion with which he fulfilled his self-appointed task of charity and of danger. Acting in concert with Mr. Bullock, Dr. Davis has for some months devoted himself to the alleviation of the sufferings of the victims of the war, first in the military hospitals at Pont Maugy and Balan, and then in the establishment of a soup-kitchen and dispensary for the famine and fever stricken peasantry of the ruined districts. One of his hospital friends writes to us: "He was the most highly intelligent member of the coloured race I ever met, and one of the most able students at St. Bartholomew's, where he was recently house-physician. He went to the seat of war to work from the purest and highest motives. He refused all remuneration, and, owing to the sympathy of friends and others in England, he was able to supply, in addition, nearly all the funds which kept up his hospital and other works of charity. He was as good a man, in the highest sense of the word, as ever lived, and he died in harness, owing to self-denying efforts to do good to others." Even in a profession rich in deeds of self-devotion and counting its daily martyrs to their devotion to duty, such an example deserves commemoration.

VACCINATION: A WARNING TO BOARDS OF GUARDIANS.

AT the instigation of the Privy Council a rule has been obtained in the Queen's Bench against the Hastings Guardians, calling upon them to shew cause why a *mandamus* should not issue to require them to perform the duties imposed upon them by the twenty-seventh section of the Vaccination Act of 1867, which enacts that they (on receipt from the Registrar of the half-yearly lists of cases in which certificates of vaccination have not been duly received) "shall forthwith make inquiry into the circumstances of the cases contained in the list, and, if they find that the provisions of the Act have been neglected, shall cause proceedings to be taken against the persons in default." The Hastings guardians defied the law; but they have found that it is too strong for them. This proceeding on the part of the Privy Council cannot fail to be productive of much good; for it will prove to those guardians who, like those at Hastings, are inclined to be swayed by the blatant rubbish of the anti-vaccination agitators, that they will not be allowed to stop the working of a beneficial Act of Parliament.

THE NEMESIS OF ALCOHOL.

DR. BOYD MUSHET writes:—As an appropriate pendant to the condemnation of tobacco by Kerckringius, cited by Dr. Embleton in the *JOURNAL* of November 26th, may I quote a graphic objurgation of our countryman, John Allen, M.D., F.R.S., on the Evils of Alcohol? (*Synopsis Universæ Medicinæ Practicæ*, Amstelodami, MDCCXXX, cap. xvi.)

"There remains another sort of poisons, such as vinous spirits and intoxicating distilled liquors. The frequent and excessive tipping of these, as is the practice of each returning day, hath destroyed myriads of mortals, nay, hundreds of thousands more than all the poisons put together; whence I am wont to style this most pernicious evil emphatically THE HARM. It proves not only the parent of very many, and those the worst of diseases, but to numbers suddenly fatal; upon which accounts, if it deserve not the appellation of poison, I must confess I know not what does. Spirit of wine, taken inwardly, is death to almost all creatures; to vegetables of all denominations without exception, when applied by way of pabulum, even to the parent vine, whence itself is derived. The generous physician hath an unpleasant task upon his hands. Men addicted to these spirituous liquors abominably sacrifice day, night, and themselves, to continually sipping, as it were, a liquid fire. When all digestion is lost, the solids unbraced, the juices corrupted; when the human fabric, which hath been long tottering, is just

falling to the ground—then are we called in to its support. What must we do? Even as town-scamengers (*scabini*); and ten to one but, after all the discharges made, after the emptying chamber-pots (*lasana*), and close stools (*scaphia*), the abandoned sot returns at once, like a sow that is washed, to wallowing in the mire. Thus he irrevocably prostitutes his health to the last, being prodigal of that life of which he ought to be most tender; and his early end is the consequence of intemperance. What advantageth then the doctor, and what the divine? Fruitless would be the endeavours even of a Luke himself in both his capacities, either as physician or as evangelist. Deaf as a rock to all counsel or persuasion, he runs into the very arms of death, and courts destruction. To this he is prompted by an eternal thirst, which he greedily indulges; and the greater the indulgence, the greater the thirst—the thirst of those pernicious distilled liquors, with which the tragic scene is expeditiously closed; and the dismal catastrophe, in the last moments, is the finishing both his bottle and himself.”

THE WESTERN MEDICAL AND SURGICAL SOCIETY.

WE regret to announce that the Western Medical and Surgical Society of London, one of the most pleasant and useful of local societies, has ceased to exist. It had comfortable reading-rooms and a good library. The immediate cause of its demise was the notice to quit its rooms or to pay an increase of rent. A meeting of the members was held, and it was left to a committee, consisting of Dr. Baines, Dr. Martyn, Dr. Godwin, Dr. Daniel, Mr. Milner, and Mr. Dickinson, to carry out the arrangements for winding up, as there appeared a difficulty in obtaining other quarters, and an indisposition on the part of the members to attend the ordinary meetings. Other societies had sprung up and taken from its ranks the leading members. It was agreed upon that the library should be presented to St. George's Hospital, on the understanding that the free use of the hospital library should be given to all the members. The hospital authorities agreed to this, and are now in possession of the books. An attempt is however being made to resuscitate the society.

SCOTLAND.

DR. ANDREW WOOD has been re-elected representative of the Royal College of Surgeons of Edinburgh in the General Medical Council.

THE *Edinburgh Medical Journal* understands that the managers of the Edinburgh Infirmary have appointed a committee to consider the possibility of allotting a ward to Dr. Thomas Keith, for the purpose of performing the operation of ovariectomy, with which his name is associated. For many years past, Dr. Keith has kept up an hospital at his own expense, and has performed the operation in question upwards of a hundred times, with remarkable success.

EPIDEMIC OF RELAPSING FEVER IN GLASGOW.

THE total number of fever patients in Glasgow on the 3rd instant is reported at 1092, and of these the greater number are cases of relapsing fever. There are altogether 315 in the Fever Hospital, and perhaps a similar number in other institutions in the city. On the new grounds at Belvidere accommodation is being erected for other 200, so that by the end of next week the total number of beds in hospital may reach over 800.

NEW LUNATIC ASYLUM FOR GLASGOW.

THE Barony parochial board has passed a resolution to erect an asylum for the pauper lunatics within its boundaries. At present these are accommodated in a building attached to the poorhouse, but this has been deemed by the Lunacy Commissioners unsuitable. It is proposed to erect a building capable of accommodating 400, and able to be extended to 600. It has also been resolved to have it on the farm-principle, both because of the greater healthiness of such an arrangement to the patients, and also because it would be cheaper to purchase a large farm in the country, than ground merely sufficient for the building and exercise grounds in the city.

LECTURES ON PATHOLOGICAL ANATOMY.

WE have pleasure, says the *Glasgow Medical Journal*, in noting the commencement of a course of Lectures on Pathological Anatomy by Dr. Joseph Coats, Pathologist to the Royal Infirmary. The event is important in an educational aspect, as the Glasgow Medical School has hitherto been remarkable through defect of a systematic course of instruction in this branch of medical education. We have also every confidence that the repair of this defect has fallen into competent hands. Dr. Coats has ample pathological material at command in virtue of his office; and his training at Leipzig and Würzburg makes him well able to turn it to profit. The lectures are to be delivered partly at the Infirmary and partly at the University; and attendance forms a necessary portion of the qualifications for an University degree.

IRELAND.

DR. DONOVAN OF SKIBBEREEN.

THIS gentleman, who is so well known by his writings on the subject of the Irish famine of 1845-47, has just been superannuated, and has been succeeded by his son.

THE APOTHECARY OF THE UNIONS.

SIR W. Carroll, Dr. Tucker of Sligo, Dr. Wheeler, and Mr. Oldham, are the candidates most spoken of for this valuable office. No pharmacist or analyst of repute has as yet applied. The competitive mode of election is suggested by some Boards of Guardians.

HEALTH OF DUBLIN.

THE death-rate for the past month was 1 in 556, against 1 in 459 in London and 1 in 326 in Liverpool. By fever, 31 deaths was caused, the form of the disease being mainly enteric. As pure Vartry water is freely distributed, the poison of this disease has not been spread by watered milk, as was lately demonstrated in London by Dr. Ballard.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE proposed Association of Poor-law Medical Officers of Ireland, of which we published recently the programme, has, as might have been expected, received very numerous adhesions throughout Ireland. The marked success which has attended the operations of the English association will no doubt encourage the Poor-law medical officers of Ireland to adopt, like it, the motto—*Aide toi et Dieu t'aidera*. It is sufficiently proved that by standing shoulder to shoulder, and joining in one universal association having their interests for its single object, the Poor-law medical officers may at the same time powerfully serve their own and the public good. The response has been, we believe, so large as to afford a hope that the Association will be not less useful than that which has had so successful a career in England.

SCARLATINA has lately appeared among the boys on board the *Impregnable* and *Foudroyant* at Devonport, and the gangers at Falmouth. It is, however, of the mildest form, and there are no fresh cases on board either vessel. The *Implacable*, the other training-ship at Devonport, is quite free from it, and all the boys newly entered are being sent on board the latter ship in consequence.

EPIDEMIC DISEASES IN LONDON.—Last week, according to the return of the Registrar-General, zymotic diseases in London caused 430 deaths, including 45 from small-pox, 36 from measles, 162 from scarlet fever, 10 from diphtheria, 13 from croup, 28 from whooping-cough, 12 from typhus, 22 from enteric (or typhoid) fever, 13 from simple continued fever, 21 from erysipelas, and 18 from diarrhoea. Small-pox showed again increased fatality, the eastern districts continuing to suffer out of all proportion to the rest of the metropolis. Of the total 45 fatal cases, 26 occurred in the east districts; Bethnal-green, Whitechapel, and Shoreditch contributing the largest number. Eight of the victims were infants in their first year, 15 were aged 1 and under 5 years, 9 were aged from 5 to 20 years, 10 were aged from 20 to 40 years, 2 aged from 40 to 60 years, and 1 aged upwards of 60 years. Fourteen were stated to be unvaccinated, and in 29 cases it was not stated whether vaccination had taken place or not.

NOTES OF THE WAR.

WARMING OF RAILWAY CARRIAGES FOR THE SICK AND WOUNDED.

THE Prussian ministry of war has determined on having means of warming supplied to the railway carriages used for the removal of the sick and wounded. These carriages are 240 in number. Two trains have been fitted up in this way; one of them has already gone to the seat of war, and returned with sick and wounded from the distant ambulances.

THE WOUNDED AT ORLEANS: CARBOLIC ACID.

DR. VON NUSSBAUM, writing from Orleans on November 24th, extols highly the use of carbolic acid as a dressing to gun-shot wounds. The method which he follows is very similar to that recommended by Professor Lister in his paper published in the JOURNAL of September 3rd. He is convinced that a solution of one part of carbolic acid in six of linseed oil forms the best dressing known; and, for slight wounds, he has several hundred times used linen compresses dipped in a solution of one part of the acid in forty of water. The death-rate among the cases at Orleans has, he says, been very favourable; and he has no doubt that this is greatly to be attributed to the use of carbolic acid, although he ascribes it mostly to the diligent emptying of the wards. He has repeatedly, he says, seen patients in a highly febrile condition, with ill-conditioned wounds, become better and their wounds clean and red, on removal into new rooms. The leaving of a room that has been overcrowded for a fortnight, and is in an offensive condition, is in itself a great gain. The good air of the meadows and woods through which the patient travels, new rooms, new bed-linen—are great and powerful means of treatment; of which, he says, "I never saw the harm, but very often the good results."

FIRING ON AND UNDER THE GENEVA BADGE.

THE neutrality of the Red Cross has been more than once violated during the present war, although generally respected. A sad instance is recorded this week. A young French doctor named Lebaude, attached to the International Ambulance at Sedan, a fortnight ago, having business which took him to Mezières, was avoiding the high road, which is occupied by the German troops, and passing along the railway embankment, when a sentinel shot at him and missed. Mr. Lebaude at once displayed a white handkerchief, but in vain, for a second shot traversed his breast, inflicting a wound of which he died within twenty-four hours. Mr. Ernest Hart has testified to having seen German soldiers go into action with loaded arms and fixed bayonets and the red cross brassard bound to their arms. It is in the interest of the wounded of both sides that the non-belligerent and strictly neutral character of the Geneva badge should be sacredly preserved; and at the conclusion of the war these circumstances must be inquired into.

MEDICAL ORGANISATION IN TIME OF WAR.

AT a meeting of the Health Section of the Social Science Association on Monday, November 28th, Lieut.-Colonel Lloyd Lindsay, M.P., in the Chair, a paper on the above subject was read by Mr. ERNEST HART.

Among the gentlemen present were General Sir George Balfour; Sir T. G. Logan, C.B.; Dr. T. G. Balfour, F.R.S.; Lord Colville; Sir Percy Herbert; Mr. Edwin Chadwick, C.B.; W. Clode, Esq.; Dr. W. Mac Cormac of Belfast; Mr. Holmes Coote; Mr. Dunn; Staff-Surgeon T. G. Fitzgerald; Mr. F. Hill; Dr. Leonard Kidd; Mr. W. R. Lane; Dr. John Murray; Mr. Robert Rawlinson, C.B., C.E.; Dr. Sieveking; Dr. Stewart; Dr. Hermann Weber; Mr. J. G. Wilkinson; etc.

The author gave a complete sketch, from personal observation, of the North German military medical system; of the voluntary aid societies in Germany, and their work in the field; and reviewed the nature and extent of the assistance given by neutral nations, including England, under the conditions of the Geneva Convention. He arrived at the following conclusions.

I. The North German military medical system of treating the medical corps as a staff-corps is one which is highly efficient, well conceived, and skilfully carried out in its details.

II. It economises the *personnel* by making them available for all varieties of medical duty—staff as well as regimental; and, if it be not adopted in our own army, either a considerable augmentation

of staff will be necessary, or a break-down must be expected in time of active warfare.

III. The hospital corps of trained bearers and transport men is in the North German army greatly more numerous than in our own, and better organised.

IV. FOR OUR RESERVE FORCES IT IS NECESSARY THAT A MEDICAL ORGANISATION SHOULD BE FRAMED AND PREPARED IN TIME OF PEACE, IT BEING AT PRESENT DESTITUTE OF ANY SUCH ORGANISATION.

V. The National Aid Society, which has rendered services which cannot be over-estimated to the sick and wounded of the belligerent armies, should be placed presently on a permanent footing, and should receive a carefully considered organisation; and part of its work should be to promote and aid the satisfactory medical organisation of the volunteer force.

The paper ended with an earnest tribute to the value of the work of the National Society, while it pointed out some of its failures and their apparent causes, and suggested considerable improvements in its machinery, especially by giving a proper share of administration to medical men.

Mr. ROBERT RAWLINSON, C.B., gave a singularly interesting account of his experience in the Crimea.—Sir T. GALBRAITH LOGAN, C.B., while agreeing with much in the paper, thought it only fair to state that in his opinion the medical men belonging to the English army would compare with any in the world; and he was opposed to the introduction of civil consultants, as now practised in the German armies. In this respect, he thought that the school at Netley was equal to any.—Captain CLODE, as a volunteer officer, could quite confirm all that had been said as to the utter want of organisation of the medical staff in the volunteer force.—Dr. JOHN MURRAY spoke of the importance of having medical organisation in the volunteer force, and hoped that the suggestions made in the paper would be adopted by that force and by the authorities.—Dr. W. MAC CORMAC said that, during his stay at Sedan, he had excellent opportunities of observing the working of the German Etappen system to which Mr. Hart had alluded. Everything connected with transport was under their care; and the way in which they managed to dispose not only of their own numerous wounded, but many of the French wounded, and the 100,000 prisoners as well, was remarkable for its completeness and celerity. In the German army, the services of the most distinguished medical men occupying civil positions in the universities and hospitals, were made available as consulting surgeons. Dr. Mac Cormac witnessed this system in operation at Sedan, and it seemed productive of much good. It appeared clearly to be of great advantage, both to surgeons and patients, to be able to have recourse to such assistance. In time of peace, the practice of military surgeons was necessarily more medical than surgical, and their experience in operative surgery could not be so extensive as that of civil hospital surgeons. This system might not be adaptable to the English service, nor did the suggestion of it in any way detract from the great and acknowledged value of the services rendered by the Netley School. Besides, Dr. Mac Cormac, from his own observation of both French and German military surgery, was in a position to affirm that our own would compare most favourably with either.—Dr. HERMANN WEBER, while agreeing with what had been said as to the efficiency of our medical school at Netley, thought that the supply of medical men, as well as their organisation, was altogether insufficient. He agreed with Mr. Hart that the German organisation was much superior to ours. It was not perfect, but it ought to be remembered that it was only just beginning. He cordially admired what England had done in aid of the German and French medical organisations; but he thought the question was, Ought so much to be left to volunteer effort? When a nation called for a loan of twenty millions in order to carry on war, it might well be left to call for an additional two or three millions to pay for the sick and wounded.—Dr. BALFOUR, of the Army Medical Department, expressed his concurrence with most of the views put forward, but said that civil surgeons had no experience of gun-shot wounds.—Mr. FITZGERALD, Staff-Surgeon, said that the cost of supplying an ample quantity of hospital stores, medicines, and surgical instruments, could surely be defrayed by the State as easily as the much greater expenditure incurred for cannon, rifles, shot, and shell, etc. Mr. Fitzgerald, in reply to a reference from the Chairman, said he had now been upwards of two months with the German armies, visiting their various hospitals at Sedan, Versailles, and in Germany, and had just returned from Metz and Strasbourg. He could assure the meeting that up to the present time there was no disease of a serious type prevalent. There was of course much general sickness arising from various incidental causes; but he had satisfied himself there was no severe spotted typhus nor severe dysentery. There were some cases of typhus in a mild form, and typhoid fever was present; but even this was not of a severe type, the

mortality being very moderate. There was also diarrhoea, with more or less dysenteric symptoms; but scorbutic or true camp dysentery did not prevail. In fact, up to the present time, the German army had not suffered from any of those diseases which had proved such scourges in former wars. This exemption was attributable, in Mr. Fitzgerald's opinion, to the circumstance that the armies were so large that the men were not overworked, in addition of course to the judicious feeding and proper clothing; the German armies now in France differing in these respects from our army in the Crimea, which was numerically quite unequal to the work it had to do, and consequently was tasked beyond the men's physical power.—The CHAIRMAN (Lieut.-Colonel Loyd Lindsay, M.P.) agreed with what several speakers had pointed out, that the State ought to do more towards giving a complete medical organisation: each belligerent ought to attend to its own sick and wounded; each ought to regard the expenses necessary to restore men to health, to bury the dead, to transport those who could bear it back to their own country, as part of the ordinary expenses of war. But when all was done that the State could do, there would still remain much which could only be effected by voluntary agency. He thought it was important that we should try to organise in time of peace for such service in time of war. As to the volunteer force, the great cause of failure was that, in medical as in other matters, there was no principle which regulated its working. It was not only deficient in the medical department, but in the transport and commissariat services. He hoped that if the volunteers came to be used they would be brigaded with the regulars. In such case they would be of use; and in the same way a skeleton medical organisation belonging to the regulars might be made available for the volunteers.—Mr. HART replied.

Mr. CLODE moved, and Mr. F. HILL seconded—"That it be recommended to the Council that the subject of Mr. Hart's paper be referred to a committee, with a view to promote the permanent organisation of the British National Aid Society."

ST. ANDREW'S MEDICAL GRADUATES' ASSOCIATION.

Officers Elected.—The Council and the Government.—Dr. Whitmore on Sanitary Legislation.—Dr. Richardson's Address.

THE fourth anniversary session of this Association was held at the Freemasons' Tavern, on December 2nd and 3rd. There was a numerous attendance on both days.

The officers and Council for 1871 are—*President*: Dr. Day, Stafford. *Vice-Presidents*: Dr. Black, Chesterfield; Dr. Crisp, London; Dr. Cholmeley, London; Dr. Seaton, Sunbury; Dr. Wynn Williams, London. *President of Council*: Dr. Richardson, F.R.S., London. *Council*: Dr. Ballard, London; Dr. Bird, London; Dr. Bloxam, London; Dr. Brewer, M.P., London; Dr. Gage Brown, London; Dr. Buchanan, Glasgow; Dr. Butler, Winchester; Dr. Lockhart Clarke, F.R.S., London; Dr. Cleveland, London; Dr. Cooke, London; Dr. Barnard Davis, F.R.S., Shelton; Dr. W. H. Day, London; Dr. Dudfield, London; Dr. Gordon, C.B., Portsmouth; Dr. Day-Goss, London; Dr. Griffith, Camberwell; Dr. Wharton Hood, London; Dr. Jencken, Dublin; Dr. Keiller, Edinburgh; Dr. Murray Lindsay, Hanwell; Dr. Lush, M.P., Salisbury; Dr. MacEwen, Chester; Dr. Morris, Spalding; Dr. Nicholls, Chelmsford; Dr. O'Connor, London; Dr. Lloyd Roberts, Manchester; Dr. J. Rogers, London; Dr. Ross, London; Dr. Royston, London; Dr. Semple, London; Dr. Stedman, Guildford. *Honorary Treasurer*: Dr. Paul, Camberwell; *Honorary Secretary*: Dr. L. W. Sedgwick, London. *Auditors*: Dr. Humby, London; Dr. Samuel Hill, London; Dr. Painter, London.

The *Report of the Council*, after congratulating the members on the continued success of the Association, proceeded to give the following account of the work of the Association during the year. "The proposed modifications of the regulations of the University of St. Andrews which had received the sanction of the Association were, in due course, brought before the University Court by the assessor, Dr. Richardson, F.R.S., and after having been submitted to, and approved by, the Senatus Academicus, were accepted by the University Court. These regulations have been sanctioned by the Chancellor of the University, His Grace the Duke of Argyll, and now only await the consent of the Queen in Council before they become valid.

"Your Council believing that the educational advantages of the University of St. Andrews were very little known generally, have sanctioned the issue of a reprint of the article entitled, 'Education and Graduation at the University of St. Andrew's,' in the third volume of the *Transactions* of the Association. They hope that this account of the opportunities offered by the University for a sound and extended education in all the subjects needed for degrees in art and theology will be a means of adding to the number of those who will avail themselves of its privi-

leges; and that a consideration of the 'Schemes of Study' which set forth the plan whereby the degree of Master of Arts may be obtained, and at the same time one year of medical study be counted, may induce many members of the Association to give to those of their children who are to be of the new generation in physic, the great preparation for their life-work which they would have made when after a teaching as deep in its foundations as it is wide in its embrace, and an examination as searching in its mode as it is honest in its end, they had received from our ancient and learned University her testimony of their knowledge." The report then went on to state that the Council had determined to ask the permission of the Association to bring its views on the subject of criminal insanity before the notice of the Government.

The Council then relate the steps they had taken to represent to the Government the objections to Clause 20 of their Medical Bill of last session, whereby degrees might be granted by a University without special examination; and the reply they received from the Privy Council that this clause would be withdrawn. The Council had also memorialised the Houses of Parliament in favour of Dr. Brady, providing a means of granting retiring allowances to Poor-law medical officers, which had already been put into force. The report concluded thus:—

"The termination of the occupancy of the President's chair by Dr. Richardson, F.R.S., cannot pass unnoticed by your Council. His world-wide scientific fame, his energetic devotion to the reputation of the University of St. Andrew's, and his watchful and ever ready care of the interests of his brother-graduates, have combined to render his four years' tenure of office as honourable to the Association as it has been beneficial to the Doctors of Medicine of St. Andrew's. The large number of the members of the Association, and the unity and good feeling which have ever characterised their sessions; the successful fight for the University and the Parliamentary franchise, by which, for the first time, the Doctors of Medicine of St. Andrew's became a real part of their University, powerful in its councils and jealous of its honour; the abolition of that regulation limiting the annual number of medical graduates to ten, by which St. Andrew's was starved, as it were, to the very lowest point compatible with existence, and the reopening, as far as the authorities can do it, to all who are able to pass its fair, and searching, and practical examination; these will ever remain proofs positive of the need of this Association, and indications complete of the manner of its working, and memorials telling of the wise guidance of its first President."

Dr. SEATON proposed, Dr. TRIPE seconded, and it was carried unanimously—"That the Council be requested to reconsider the question of criminal insanity, with the view to the amendment of the laws of the country on that subject."

Dr. WHITMORE read a paper on the Results of Sanitary Legislation on the Health of the Metropolis, and on our present urgent sanitary requirements. The author first reviewed the provisions of the Act 9 and 10 Vict., c. 96, "for the removal of certain nuisances and the prevention of contagious and epidemic disease", passed in 1845, and remarked that the great defect of the Act was, that the part of it which related to the prevention of disease could only come into operation as the necessity for its summary provisions should from time to time arise. He then considered the Act of 11 and 12 Vict., c. 63, by which the Board of Health was established; the "Nuisances Removal Amendment Act", Sir B. Hall's Public Health Acts of 1855, and the Sanitary Act of 1866. In testing the value of these Acts, the death-rate is a fallacious guide; a registration of disease is imperatively needed. Viewing the metropolis as a whole, the death-rate of the decennial period 1840-49 was 25.16 per 1,000; from 1850-59 it was 23.63; and from 1860-69 it amounted to 24.25; the mean of the 30 years being 24.35. These figures are not encouraging. Of the different districts of the metropolis, the only one which shows a definite decrease is the southern district. Examining the rate of mortality at different ages, Dr. Whitmore said that he did not altogether concur in the views entertained by many as to the important part which nuisances injurious to health play in the extension and aggravation of some of the more fatal epidemics. His experience of the last epidemic of scarlatina in St. Marylebone was to the effect that those who lived under the worst possible sanitary conditions have suffered the least from the disease. The mortality of children under the age of 5 years compared with the numbers living at that age, was, in 1851, 7.4 per cent.; in 1861, 8 per cent.; and, in 1869, 8.6 per cent. The effect of sanitary measures in reducing the death-rate has been much diminished by the great increase in population without a corresponding increase in the area occupied; but mainly by the neglect of providing proper house-accommodation for the artisan and labouring classes, so that overcrowding has greatly increased. For the future, amendments are needed to facilitate the prompt and efficient working of the Sanitary Acts; many clauses which are now permissive should be made compulsory; open recreation grounds should be pro-

vided; public dining rooms are needed; but the most urgent of all the wants is that of proper house accommodation for the labouring classes, and more stringent laws for preventing the spread of contagious diseases.—Dr. TRIPE said that the number of the Sanitary Acts and the dependance of the medical officers of health on the local authorities, are among the chief difficulties in the way of carrying out proper sanitary measures. A sufficient minimum nuisances penalty and uniformity in its application is a great want. There are many defects in the Nuisances Removal Act; great difficulty in its application has arisen where stoppage of drains has caused a nuisance in adjoining premises; and there is great defect in the powers given in regard to deficiencies in the domestic water-supply.—Dr. Swete, Mr. Lord, Dr. Crisp, Dr. Wynn Williams, Dr. Ross, and Dr. Bloxam also took part in the discussion.

MEDICAL LEGISLATION: THE DUBLIN CONFERENCE.

A CONFERENCE has been held of representatives appointed by the Board of Trinity College, Dublin, the Senate of the Queen's University, the King and Queen's College of Physicians, and the Royal College of Surgeons in Ireland; in accordance with the following resolution passed by the College of Physicians on 7th October, 1870.

"That it appears desirable, in regard to the probability of approaching legislation on medical matters, that a Conference should be held of the several Universities and other corporate bodies in Ireland, authorised to grant degrees or licences in medicine or surgery, with the object, if possible, of laying down principles or views as the united opinions of those several bodies."

The following suggestions were agreed on, to be submitted for the consideration of the respective bodies. 1. That the privilege of granting degrees or licences in medicine or surgery, as at present possessed under law or charter by the several Universities and medical or surgical Corporations, should not be interfered with. 2. That this Conference does not oppose the establishment of a General Medical Examining Board, whose certificate shall be indispensable for registration. 3. That the holders of degrees or licences in medicine and surgery, granted by any one or more of the Universities, or medical or surgical Corporations, empowered by law or charter to grant such, should be entitled to present themselves for examination before the General Medical Examining Board, on the production of such degrees or licences. 4. That no candidate should be admitted to the examination of such General Medical Board who does not previously possess a medical and surgical qualification from one or more of the Corporations legally entitled to grant the same. 5. That the General Medical Examining Board should consist of an equal number of members from England, Ireland, and Scotland; and that the meetings for examination should be held successively in England, Ireland, and Scotland, by all the members of the Board, or such as may be deemed requisite from time to time, provided always that each division of the United Kingdom shall be represented at each examination. 6. That the General Medical Examining Board shall not have any power to interfere with the general or professional education of candidates; that the regulation of the curriculum of education should remain with the several Universities and Colleges, as at present; the functions of the General Examining Board being altogether confined to the principle and details of examination. 7. That candidates should not be put to any expense in undergoing the examination of the General Examining Board; that such examination, being for the advantage and protection of the public, the State should defray the expenses, in like manner as the expenses of examination for the army and navy are paid for by the state. 8. That the examiners from each division of the kingdom should be elected by the Universities and medical Corporations entitled by law or charter to grant degrees or licences in medicine or surgery, in such division of the kingdom. 9. That the General Medical Examining Board, so elected, should be empowered and required to draw up a scheme for the examination, both in general and professional knowledge, of all candidates entitled to present themselves; such scheme of examination to be subject to the approval of the General Medical Council.

* * This scheme seems to be open to some fatal objections. It does nothing to diminish the number of licensing bodies or the variety of examinations so much and greatly complained of. It adds to the existing licences one for registration. It leaves practice without registration open to all who obtain a licence; and leaves the Corporations free to pursue a course of competition downwards in respect to such licences. No one is to be allowed to present himself for the licence of the General Medical Examining Board who has not previously paid toll to a Corporation. This is going beyond what was asked by the English Corporations last year. They only desired that every one should be

called upon to affiliate himself to one of the Corporations taking part in the examination for a licence to practice, after obtaining their conjoint licence; but without additional examination or fees. The scheme is one which concedes everything to the Corporations—nothing to the profession or to the public. It does not even profess to deal with the constitution of the Medical Council, or with the protection of the public and the registered practitioner by an improvement of the 40th clause. This document will, we believe, suggest more strongly than ever that a satisfactory scheme for legislation can only proceed from some body representing the profession, and not exclusively Corporations and Universities—such, for instance, as the British Medical Association.

THE ASSOCIATION SUBSCRIPTIONS.

At a meeting of the Council of the Metropolitan Counties Branch on November 25th, Mr. T. Heckstall Smith, President, in the Chair, the following resolutions were passed.

1. That it is the opinion of this Council that the JOURNAL should not be sent to members who are more than six months in arrear; and that, in regard to new members, the first clause of Law xv should be strictly enforced.
2. That, in the opinion of this Council, it is advisable that steps should be taken as early as possible to obtain a charter of incorporation for the Association.
3. That the foregoing resolutions be sent to the Editor of the BRITISH MEDICAL JOURNAL, with a request for their publication.

SPECIAL CORRESPONDENCE.

THE AMBULANCES AT THE SEAT OF WAR.

The Ambulance at Orleans: its Location and Installation.—Statistics of Major Operations.—Pyæmia.—Convalescence of Penetrating Chest-Wounds.—Remarkable Case of Gun-shot Wound of Brain.

WE have received the following from Mr. Robert W. Parker, of the Anglo-American Ambulance at Orleans, under date November 27th. The staff of this section of the ambulance now consists of Dr. T. T. Pratt, Chief of the Ambulance; Drs. May, Tilghman, Sherwell, McKellar, and Robert W. Parker; Assistants, Dr. Warren, and Messrs. Hayden, Ryan, Waller, and Adam.

Before commencing the history of any cases, I will just remind some of my readers of the difficulties of field-hospital practice, and thus secure an indulgence which I am afraid would otherwise be withheld.

When the Bavarian wounded here were handed over to the care of this ambulance—about the middle of October—we found them at the railway-station, in a large open engine-house, where they had been placed temporarily. The weather at the time being fine and bright, they were allowed to remain. In the course of a few days, however, the nights began to be very cold, and the patients complained bitterly of being left here any longer; and so they were transferred to the waiting-rooms and offices about the station. Windows and doors were closed as soon as the surgeons were out of sight, and all fresh air was thus effectually excluded. The effect is easily imagined. The wards, ill adapted to their use, sometimes low, always overcrowded, soon became foul and foetid. The men, too, were frequently obliged to lie on beds saturated through and through with pus, urine, and fæces, owing to our inability procure others for them. The best we could do was to cover up the mattresses with clean draw-sheets, when these were to be had—a proceeding somewhat questionable in principle, I admit, but the only one at our disposal. Then, again, the old dressings are a source of difficulty and danger; they are frequently left lying about the wards, or huddled up in some corner to be out of sight, instead of being burnt according to the standing orders of our *chef d'ambulance*. The water, too, both for drinking and dressing purposes, has to remain in open jars in this polluted atmosphere, and may thus be a vehicle of infection both internally and externally.

Among the cases, we have excisions, amputations, compound gun-shot fractures both of thigh and leg, flesh-wounds, shell-wounds, etc., each discharging a foul foetid pus peculiar to this kind of injury. According to scientific principles of cubic inches, ventilation, and so on, every patient ought to have died; and, although the death-rate has been high, I think it will bear comparison with others. Up to November 10th, out of twenty-eight operations, we have had thirteen deaths, as under.

12 amputations of thigh, all in upper third, of which only one primary—8 deaths.

6 amputations of thigh through the knee-joint, of which 2 primary—3 deaths.

6 amputations below the knee, of which 3 primary—no deaths.

2 amputations of the arm, of which 1 primary—1 death (the primary).

1 Disarticulation of shoulder—fatal.

1 case of ligature of femoral for traumatic aneurism—doing very well.

Some of these deaths are put down to exhaustion, two or three to secondary hæmorrhage, and the remainder to pyæmia.

Pyæmia, or rather what we have called pyæmia, has shown itself under a variety of forms. In some cases, we have not been able to find any *post mortem* evidences of its presence, in spite of the best examination which circumstances have allowed us to make. We have certified pyæmia as the cause of death in all cases where death has been preceded by rigors, sweats, a high temperature, and a yellowish tint of skin, even if we have not found any more tangible proof at the *post mortem* examination. I would fain reserve this word exclusively for cases where *post mortem* evidence of its presence could be found, such as secondary deposits in some of the internal organs, or thrombi in the veins.

We have at this present time more than one example of recovery from pyæmia. I will quote one. At the time when we transferred our cases from the open engine-shed to the waiting-rooms, we had a soldier of the 12th Regiment of Bavarian Infantry, named Martin Dilge. He was under the care of Mr. Ryan. The patient had been amputated in the upper third of the right thigh. His condition at the time was considered so hopeless that it was decided not to move him, as it was much doubted whether he would survive the transport. The stump discharged a thin, scanty ichorous pus; he had rigors; his skin and sclerotics were as yellow as a guinea; and, moreover, he had about him that strange smell which is considered peculiar to pyæmia. As if to defy our prognosis, the man, after lying in this apparently hopeless condition for about a week, gradually began to recover. In the meantime, his right wrist and hand began to be painful, and swell. In a day or two, indistinct fluctuation was felt. Quinine and brandy were ordered, and the affected joint was painted with tincture of iodine. To-day the stump is nearly healed, and the wrist is gradually yielding to treatment.

Apropos of rigors, among the wounded here, as also at Sedan, I have noticed that a great many, at some part of the day or other, have a more or less well marked rigor. This cannot be a pyæmic rigor, because it is too general. It must be rather a miasmatic condition of the system generally, dependent on some peculiar condition of the atmosphere. A good dose of quinine has generally done wonders. We have given our *opérés* frequent doses of it. After a ten-grain dose, I have noticed a considerable diminution in their temperature; but it has not always saved them.

In some of the French ambulances, chloral has been recommended and used as a remedy against pyæmia. We have not yet had much opportunity of testing its efficacy, although we are making trials with it.

We have one case of ligature of the femoral artery for traumatic aneurism in the lower part of Scarpa's triangle. Dr. Tilghman cut down on and tied the two ends of the artery, and turned out an immense quantity of clot. The man is doing remarkably well. The wound was dressed with marine lint (oakum)—with us a very favourite dressing.

Our chest-cases have been most satisfactory. We have five patients in the hospital now whose lungs have been traversed by balls. Three of them are just about ready to be evacuated, and the other two will also soon be ready.

We are trying conservative surgery in gun-shot fractures of the leg and thigh. Dr. May introduced Dr. Smith's American "anterior splint". It seems to answer very well indeed so far; but it is as yet too soon to speculate on the ultimate issue of the cases. I have also put some cases in "interrupted splints" similar to those used in the London Hospital. I will enter more fully into these cases on a future occasion.

Among the head-cases, we had one of peculiar interest. The ball had entered below and just behind the left parietal eminence. A probe dropped into the wound to half its length; and, with the least guiding, buried itself to three-fourths of its length. This patient was quite collected; he ate, slept, and expressed himself as being exceedingly well—a state of things which lasted ten or twelve days. One day, about noon, he complained of a little headache, and, without any other warning, was taken the same afternoon with a sudden and very severe convulsive fit. He was quite sensible during the fit, and asked most piteously whatever could be the meaning of such violent involuntary spasms. They lasted for half an hour or more; and with each spasm a large mass of brain-substance, partially decomposed, welled out through the external wound. He died next day. I opened the skull, and found the bullet deeply buried in the brain-substance, which, on the corresponding side, was considerably decomposed and full of

pus. I mention this case, as it was peculiar that a man with such an injury should be free from symptoms for such a length of time.

I am indebted to my co-surgical registrar, Dr. McKellar, for the statistics of the operations, etc., mentioned.

The accompanying letter has the following postscript: "A tremendous fight is hourly expected. We are busy fitting up a church for two to three hundred beds, and are expecting a great influx of wounded."

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

THE second ordinary meeting of the session will be held at the York House, Bath, on Thursday, December 15th, at 7 P.M.; CHARLES BLEECK, Esq., President.

R. S. FOWLER, }
E. C. BOARD, } *Honorary Secretaries.*

6, Belmont, Bath, November 1870.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT SOCIETY.

THE next meeting of this Society will be held at the Greyhound Hotel, Croydon, on Thursday, December 15th. The Chair will be taken at at 4 P.M. by H. T. WHITLING, Esq. Dinner at 6 P.M.

Papers, etc., are promised by Dr. Tilbury Fox, Mr. A. G. Roper, Mr. Johnson, Dr. Adams, and the Honorary Secretary.

HENRY T. LANCHESTER, M.D., *Hon. Secretary.*

Croydon, December 3rd, 1870.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 22ND, 1870.

GEORGE BURROWS, M.D., F.R.S., President, in the Chair.

A THIRD COMMUNICATION ON THE ENDEMIC HÆMATURIA OF THE SOUTH-EASTERN COAST OF AFRICA, WITH REMARKS ON THE TOPICAL MEDICATION OF THE BLADDER.

BY JOHN HARLEY, M.D.

AN almost daily opportunity of watching a case of this disease for nearly a year enabled the author to give precise information concerning, firstly, the prostatic form of the disease and its treatment; and, secondly, the structure and development of the parasite. The prostatic form of the disease was attended by an intermittent discharge of venous blood, never exceeding a teaspoonful, and always mixed with urine, recurring after variable intervals of from two to fourteen days, and continuing for several days in succession. The morbid appearances were confined to the last tablespoonful of urine, which contained the blood and casts (composed of mucus or blood) of the passages in which the parasites lay. Apart from the passage of blood, and the egg-bearing casts, there was no inconvenience—no impediment to the flow of urine, nor the slightest irritation of the genito-urinary apparatus. The treatment was, at first, general, consisting in the use of such remedies as iodide of potassium, henbane, etc., which were eliminated unchanged by the kidneys. This general treatment affected the parasite to a limited extent only, and was, therefore, supplemented by local medication in the form of injections of strong infusions of wormwood and quassia, emulsions of oil of male fern in these solutions, and of solutions of iodide of potassium and some other salts. The author described the effect of each of these drugs, and relied most of all on iodide of potassium, which was given in quantities varying from ten to thirty grains in five ounces of infusion of quassia as a daily injection. Evidence of the absorption of this remedy was manifest, and the effect was very beneficial; and, by the intercurrent use of injections of oil of male fern, the parasitic products with which the tunnels in the mucous membrane were stuffed were thrown off and the parasites destroyed. Morbid products, including portions of the adult animals, and laminated corpuscles, derived from the prostate, were figured and described.

With a view to its detection in the waters of the infected districts, the author had very carefully described and delineated the embryo of the parasite, which is a little ciliated animalcule strongly resembling some of these found in stagnant water in this country. He had several times succeeded in liberating simultaneously from the egg as many as twenty embryos, and watched their movements in a drop of water under the

microscope. Experiments were made to determine whether the parasite might be developed from ova introduced into the body. The author concluded that, as a rule, this did not happen, from some cause which prevented, or too long retarded, the liberation of the embryo from the egg. He was, however, inclined to think that, if the hatching were timely effected, or if the liberated embryo were artificially introduced into certain parts of the body, more especially the blood-vessels, its further development into the adult parasite might proceed. As to the primary mode of invasion, the author mentioned the fact that the colonists of the infected districts were early attacked by a peculiar kind of boil, which passed into an indolent ulcer, and which, ultimately healing, left a large and indelible scar. He thought it very probable that these boils resulted from the insertion of ova beneath the skin in the act of bathing, and that the subsequent progress of the ulcer, and the infection of the genito-urinary organs, were due to the liberation of embryos, and their convection or ascent to the pelvic organs along the veins.

The PRESIDENT complimented the author of the paper, and remarked that the investigations made by Dr. Harley might lead to the discovery of the causes of serous and sanguineous discharges from other mucous surfaces as well as those of the urinary organs. In Asiatic cholera, especially, perhaps a parasite might at some time be found.—Mr. JOHN WOOD asked whether Dr. John Harley had had an opportunity of examining a prostate affected with the disease described; and whether any other part of the urinary organs was affected in a similar way.—Dr. JOHN HARLEY hoped soon to receive a paper on the subject from a medical practitioner at the Cape, with specimens of the prostatic and vesical organs. He had known some aggravated cases where the pelvis of the kidney was affected: in these cases there was no discharge of blood with the urine, but small renal calculi were passed, consisting of oxalate of lime with the embryos of *Bilharzia* as nuclei. The first two patients whom he saw with the disease described, the sons of a medical man, both passed renal calculi; and he found the eggs of the parasite in their urine.—Mr. FAIRLIE CLARKE asked whether Dr. Harley had ever tried the application of solid nitrate of silver to the prostate.—Dr. SYMES THOMPSON had made inquiries among his friends in South Africa concerning the disease, but not with so much success as Dr. Harley. Many persons, especially in Natal and the interior of the Orange River Free State, appeared to know nothing of it. Port Elizabeth was infested with the *Bilharzia* and with tænia.—Dr. JOHN WEBSTER asked whether the localities where the hæmaturia prevailed were mountainous or low. Loss of blood was more common in mountainous districts than in plains. A knowledge of the atmospheric condition was also important; a low pressure was favourable to hæmorrhages, especially with a south-west wind. The state of the water also was liable to have an influence on the urine.—Dr. CHURCH asked whether there were grounds for believing that the parasite affected man only. Might there be a second host, where it had a temporary resting place?—Dr. JOHN HARLEY did not think that the application of solid nitrate of silver, or any styptic, would reach the parasite in its long burrows. It was remarkable that the malady was so little noticed in Africa: probably this arose from familiarity with it. Dr. Lyell of Victoria had recognised it in many cases. In his last paper, Dr. Harley had pointed out that the hæmaturia occurred in stations within twenty miles of the coast, at elevations not exceeding about three hundred feet. In the higher grounds it did not appear to prevail. Where it existed, the water was brackish. He thought that the parasite might undergo the usual process of alternation of generation—perhaps in the body of some mollusk.

A CASE OF TRAUMATIC TETANUS: RECOVERY AFTER THE REMOVAL OF A FOREIGN BODY FROM THE WOUND, AND THE ADMINISTRATION OF CHLORAL. BY GEORGE JOHNSON, M.D.

H. N., aged 13, a newspaper boy, was admitted into King's College Hospital on the 24th June. Three weeks before, whilst getting over a hedge, he ran a sharp piece of wood into his thigh. He stopped the bleeding by tying a handkerchief round the thigh. The wound soon healed, and he was confident that no portion of the pointed wood remained beneath the skin. About nine days before his admission, the lower jaw began to feel stiff; this gradually increased until it interfered with mastication. Then the muscles of the trunk and limbs began to be affected with spasm, and he came into the hospital. On his admission, he was well nourished, with a healthy colour. There was a peculiar expression of the face, resulting from spasm of the occipito-frontalis, corrugator supercilii, and other facial muscles. He could separate the incisor teeth only to the extent of about half an inch. There was some rigidity of the abdominal and erector spinæ muscles, and movement of the body occasionally increased this rigidity to a painful degree of spasm, the pain being especially severe in the back. The spasm also implicated the muscles of the legs. The temperature, pulse, and respiration,

were normal. At the upper third of the thigh there was a cicatrix about half an inch long; the scar and the tissues beneath felt unusually hard, and pressure caused considerable pain. It was suspected that there might be some foreign body beneath the skin, therefore chloroform was given; and an incision was made through the cicatrix by the house-surgeon, Mr. Whitmore, who discovered and removed a piece of woollen stuff from the boy's trousers, which had been driven in and lodged beneath the skin. The piece of wool was about the size of a small pea. A poultice was applied to the wound, and during the next twenty-four hours no medicine was given. There was continuous rigidity of the muscles, with occasional paroxysms of spasm and pain. He was now ordered to take fifteen grains of chloral hydrate—at first every four hours, afterwards at longer intervals. Between the 26th June and the 9th July, he had twenty-four doses of the chloral, amounting in all to 360 grains. The symptoms gradually subsided, the spasms became less frequent and less severe; the last slight attack of spasm occurring on the 13th July. The wound healed, and he was discharged cured on the 27th July.

Dr. CHOLMELEY asked whether tetanus, when once excited, had not a natural term of cessation. In some of the cases which had been reported, the disease had lasted just a month. This had been the case in recoveries after the use of chloral, haschisch, or atropia. It seemed as if the sleep produced by the medicine enabled the patient to bear up against the disease, which ran its natural course.—A MEMBER referred to the diminution of the temperature of the body under the influence of chloral. The idea as to the wearing out of the disease might possibly be correct. At the same time when Dr. Johnson's case occurred, there were several cases of tetanus under Mr. Birkett's care at Guy's Hospital. The temperature of the atmosphere was then very high.—Mr. R. B. CARTER asked whether any examination of the retina had been made while the patient was under the influence of chloral, so as to ascertain the condition of the retinal veins.—Dr. GRIGG mentioned a case where tetanic symptoms appeared to have been excited by one of the sutures used after amputation. They ceased on the removal of the suture.—Dr. JOHNSON, in reply, said that he had not examined the retina in his case; but there would be many other opportunities of making the examination on persons under the influence of chloral. There was no doubt a natural tendency in tetanus to cease; but he questioned whether recovery would have taken place in his case if the patient had been left without medicine.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 25TH.

HENRY LEE, Esq., Vice-President, in the Chair.

MR. R. B. CARTER read particulars of a case of presumed Injury to the Ciliary Nerves from a Blow, and exhibited the patient, a little boy aged 7, who had received a blow from a bat upon the right eye eight months previously. Enormous dilatation of the pupil followed the injury. The ophthalmoscope showed that the choroidal pigment around the optic nerve entrance (which formed a well-defined ring in the uninjured eye) had been scattered by the shock, and that an annulus of chorio round the nerve, and reaching nearly to the yellow spot, was undergoing atrophic changes. The inference was that the coats of the eyeball in this region had been strained and injured by *contre-coup*, and that the ciliary nerves had participated in the injury at their entrance into the globe. The dilatation of the pupil was greater than paralysis of the filaments from the third nerve would explain; and seemed to suggest active irritation of the sympathetic filaments of the dilator. There was no impairment of vision, and no paralysis of the external ocular muscles.

Mr. CALLENDER, for Dr. Martin Payne, read a paper on Tertiary Syphilis.

Mr. DURHAM related a case of Spontaneous Fracture of the Femur. When first seen by him in March 1867, the patient, a professional man, aged 44, was seated, half-dressed, in an easy chair. He was not capable of walking. The right femur was broken at the junction of the upper and middle thirds, the limb being shortened by three inches. Three months previously, the patient had fallen downstairs and hurt his thigh. Seven weeks later, he began to have aching pain in the thigh, which was treated as neuralgic; when this had lasted three weeks, he felt, on going to bed one night, a sudden increase in the pain. Next morning he could not move the thigh, which was much swollen. He was quite unconscious of having subjected the limb to any sudden strain. After a few days, the swelling and pain diminished, and he got up, but could not walk; and it was about ten days afterwards that Mr. Durham, visiting him for the first time, in consultation, found his thigh broken. Under treatment the bone united; in the course of four months the patient could move

about; two months later, he returned to professional work. He remained quite well. Mr. Durham thought it probable that at the time of the fall some injury of the bone had taken place, which had been followed by gradual interstitial degeneration and absorption of bony tissue, instead of healthy repair, leading to spontaneous fracture of the bone. The patient had, it seemed, been subjected to great worry and wear and tear of brain, and Mr. Durham suggested, as a topic for discussion, the relation which might exist between overwork or excitement of brain and defective nutrition of bone.—Mr. HEATH mentioned the case of a medical gentleman, aged 60, who, in turning in bed, broke his thigh. He recovered, and narrated his own case to the Royal Medical and Chirurgical Society. A member referred to the case of a boy, aged 14, who broke his humerus in firing a squib. He was quite well in six weeks.—Mr. CALLENDER had seen several examples of spontaneous fracture of long bones; in most instances, the patient had been cognisant of the injury. A case occurred some years ago to a man who was roughing it in Australia, but returned to England for advice. It was supposed to be disease of the knee-joint, and amputation became necessary. It was found that the end of the femur was expanded and atrophied, and that there was a fracture just above the epiphysis. Nevertheless, he had been able to get about.—Mr. CARTER narrated the case of a corpulent woman who slipped and apparently sustained no injury. Six days afterwards, on bending, she felt something give way, and she could no longer walk. She could produce erepitis by muscular action, though it could not be produced otherwise. She tried to get about on crutches, but fell again, and the bone protruded above the knee. She died, and it was found that a fracture extended the whole length of the bones from the great trochanter to just above the knee, where the portion had protruded and been broken off.—Mr. GASCOYEN had seen a similar case. A woman, aged 55, fell, but walked home. Going up stairs, she felt something give way, and she fell again. There was fracture of the thigh, which did not unite, and she died. The bone was softened—fatty, not in the condition of mollities.—Mr. HULKE gave the case of a young woman of a phthisical family—herself very feeble—who was being carried from her bed to a couch; a snap was heard, and the thigh was broken. Sometime after, the other broke in like manner. It was put up in a long splint, and did well; the former, which was put in short splints, did not.—Mr. CROFT noticed the fact of there being impaired nerve-force and yet reparation of bone.—Mr. CALLENDER said there was a case now in St. Bartholomew's where the patient, though suffering from paralysis, recovered after a fracture in the ordinary time.—Mr. DURHAM noted that in the cases mentioned there was some accident to which to refer the injury; here, there was only mental worry.—Mr. LEE said he was not aware of any case of fracture from syphilis alone; in that disease the bones really became thicker.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 21ST, 1870.

JOHN GAY, Esq., President, in the Chair.

MR. CLEMENT GODSON showed part of a Fibrous Polypus removed from the anterior wall of the Vagina of a woman aged 52. The polypus was removed by the wire *écraseur* ten days previously. No pains or hæmorrhage took place, and the patient made an excellent recovery.

MR. DAVY showed a plan which he had devised for the more easy and speedy Removal of the Skull-Cap at *post mortem* examinations. A screw fitted to a T-shaped handle was introduced into the vertex, then a grasp of the handle enabled the operator to keep the head steady, while he sawed through the skull. Mr. Davy's plan was to use a saw with a moveable back, with which he sawed through skull and brain at once. After washing with water, a good section of the brain was thus obtained.

DR. JOHN MACPHERSON read a paper on the Analogies of Cholera Nostras and Cholera Indica. After pointing out the diseases with which cholera had been confounded, it was shown by a historical sketch that cholera nostras had often been epidemic in Europe, and some of the opinions respecting it were mentioned. It was shown that the symptoms of the two diseases during life resembled each other closely, and as yet no difference had been found between them after death. The indications for treatment were the same in both. The two affections had been ascribed to the same predisposing and existing causes. They had the same character of season and prevalence, and they both exercised a distinct action on other diseases. Contagiousness had been attributed to both; neither gave immunity against future attacks. A relapse or a repetition of the disease might occur in either from imprudence. The existence of a poison in both had been suspected; supposing the poison

of cholera Indica to have been discovered, there might remain one to be discovered for cholera nostras. For the present their leading differences were of degree. Cholera Indica had increased intensity of symptoms and increased power of spreading. A few points of analogy with other diseases were also pointed out.—Dr. SUTTON thought at one time he could distinguish between English and Indian cholera. Sudden violent invasion, rice-water stools, and a temperature rising above 100 deg., he at one time thought to be characteristics of cholera Indica; but in the years 1868-69-70, he had met with three cases of English cholera that disproved the hypothesis. Some thought cramp in the calves of the legs, as well as in the belly, to be characteristic of Indian cholera; but cases of English cholera had disproved this. One case of English cholera was seen by Dr. Sutton last summer, that had all the characters of epidemic Indian cholera. The patient had come from Italy, and was taken suddenly in London with vomiting, rice-water stools, temperature over 100 deg., collapse, and death. English cholera generally ended in recovery; and death from uncomplicated diarrhoea Dr. Sutton thought to be rare.—Mr. RADCLIFFE said that, had the case quoted by Dr. Sutton come from St. Petersburg last summer, it might have been imported Indian cholera.—Mr. BARNES had seen cases of cholera in 1849 and in 1854. He asked Dr. Macpherson if he had seen trismus and tetanus accompany cholera; for he had observed trismus in some cases.—Dr. MACPHERSON had not seen this complication in cholera, but was familiar with it as not being rare.—Dr. WALLER LEWIS never knew a case of cholera that was not preceded by premonitory diarrhoea; and it was in detecting and checking this symptom that a system of house to house visitation had proved so eminently successful.—Dr. BLOXAM believed it to be very rarely that cholera was not preceded by diarrhoea.—Dr. MAC OSCAR saw much of cholera in 1854. One case was that of a man seized suddenly with violent vomiting; he died in an hour without any diarrhoea.—Dr. SEMPLER agreed with Dr. Sutton that cases did occur where English cholera presented all the characters of the Asiatic disease. He, however, believed the two diseases to be distinct. English cholera was an undue flux from the mucous membrane; Asiatic cholera was due to a poison acting on the nervous centres and causing decomposition of the blood, the serous part of which was evacuated as rice-water stools by the bowels. Cases of English cholera were always met with sporadically in the summer months.—Dr. SIMMS suggested that possibly cholera Indica might have developed from cholera nostras originally.—Inspector-General LAURENCE had seen many epidemics of cholera. In 1836 there was a severe epidemic of cholera in Sicily. He was at that time at Malta, and there were many cases of sporadic cholera nostras.—Dr. MACPHERSON briefly replied, and the meeting adjourned.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, NOV. 26TH.

GEORGE H. PORTER, M.D., President, in the Chair.

DR. HAYDEN presented a specimen illustrative of a rapidly fatal case of Pneumonia. The patient, a woman aged 20, was five days ill. The upper and middle lobes of the right lung were first affected, and in them resolution seemed to be commencing when the upper lobe of the left lung became engaged. The chief point of interest in the case consisted in the "insulating" property, so to speak, possessed by the various lobes, and shown in the present instance by the well-defined isolation of disease. A microscopical examination of the affected part merely showed engorgement of the areolar tissue of the lung, with an universal excess of epithelium.

DR. JAMES LITTLE showed the thoracic and abdominal viscera of a lad affected with General Tuberculosis. The appearances observed went to confirm the opinions as to the nature of tubercular disease recently advanced by Buhl and others. According to these views, tubercles were not depositions of cheesy or other matters, but new growths derived from the degeneration of the so-called "corpuscular elements". In the case before the Society, the liver, spleen, and lungs, were studded with minute tubercles, while the bronchial glands had undergone extreme cheesy metamorphosis.

DR. ROBERT McDONNELL detailed the particulars of a fatal Spinal Injury, which happened to a man aged 40. The symptoms were those of a fracture of the vertebræ in the lower cervical region. From this level down there was complete paralysis of motion, while sensation existed as far down as the line of the nipples, and subsequently returned to some extent in the hands. The pulse for some time varied from 50 to 60, though afterwards, on the establishment of an irritative fever, it rose much higher. The remarkable elevations and changes of temperature often observed in similar cases were almost absent here—the highest recorded temperature being only 99.6 deg. Priapism was present for a day or two after the occurrence of the accident. The

bladder was completely paralysed; and, in passing the catheter, most remarkable reflex phenomena were observed, the hand moving convulsively downwards and over the genital organs. The patient lived *two months* from the receipt of the injury. The autopsy presented several features of interest. No fractures of the bony structures could be detected, nor had any such occurred. The bodies, laminae, and oblique processes of the fifth and sixth cervical vertebrae were firmly ankylosed together. On examining the cord itself, it was found to have suffered fracture, the posterior columns and grey matter being entirely severed, as if cut by a knife. The anterior columns, on the other hand, were continuous.

Dr. J. K. BARTON showed a large Scirrhus Tumour involving the Oesophagus from its commencement to a level with the posterior mediastinum. Below this, the tube was quite healthy. In the middle of the tumour there was a large area of ulceration. The train of symptoms which accompanied the development of the disease was hoarseness; aphonia; fixed pain posteriorly between the scapulae, and, anteriorly, in the larynx; dysphagia. Although all the symptoms were referred to the larynx, this part was healthy, as was also the pharynx.

Subject of Prize.—The PRESIDENT (Dr. George H. Porter, Surgeon in Ordinary to the Queen) announced that the Council of the Society had selected as the subject for the Gold Medal, to be given at the close of the session, the "Diagnosis and Pathology of Injuries of the Vertebral Column and Spinal Marrow".

Officers.—The following officers for 1871 were elected. *President:* James Stannus Hughes, M.D. *Vice-Presidents:* Robert Adams, M.D.; Sir Dominic J. Corrigan, Bart., M.D., M.P.; Thomas E. Beatty, M.D.; Samuel Gordon, M.B.; Edward Hamilton, M.D.; Henry Kennedy, M.B. *Council:* J. T. Banks, M.D.; John Denham, M.D.; C. Fleming, M.D.; John Hamilton, M.D.; T. Hayden, M.D.; George Kidd, M.D.; Robert Law, M.D.; B. G. MacDowel, M.D.; R. McDonnell, M.D.; A. H. McClintock, M.D.; G. H. Porter, M.D.; T. Joliffe Tufnell, Esq. *Honorary Secretary:* William Stokes, jun., M.D. *Secretary and Treasurer:* R. W. Smith, M.D. *Secretary for Foreign Correspondence:* Robert D. Lyons, M.D.

Dr. Porter, the outgoing President, then vacated the Chair, which was taken by Dr. Hughes. A vote of thanks to the ex-President was proposed by Sir D. Corrigan, seconded by Dr. Beatty, and carried by acclamation. The Society then adjourned.

CORRESPONDENCE.

THE ASSOCIATION AND THE MEDICAL COUNCIL.

SIR,—The eminent men who lead the British Medical Association, and who are in favour of the "direct representation" of practitioners on the Medical Council, induced that Association to reject a very fair instalment of medical reform, offered by the Government, because it did not contain their favourite proposal. Some of these gentlemen have rather vehemently asserted that they express the all but unanimous demand of the whole medical profession.

At the Newcastle Meeting, I ventured to question the accuracy of that assertion, for I had not discovered any such unanimity among the many with whom I had conversed or corresponded on the subject. In support of my opinion, I mentioned the fact that, when the question of direct representation was brought before a special meeting of this County Branch of the Association, called to consider the late Bill, the members present refrained from committing themselves on so doubtful a point. A recent event has confirmed remarkably the correctness of my obvious inference from that fact. At the annual meeting of the Branch, held on the 17th ultimo, the able and energetic secretary—having proposed a resolution (see notice of motion, p. 542, BRITISH MEDICAL JOURNAL) in favour of "direct representation"—did not even meet with a seconder, and the matter quietly dropped.

On being previously informed that such a proposition was to be brought forward, I determined, as on the former occasion, not to attend the meeting, for I felt unwilling to embarrass the discussion by personal considerations, and did not choose to vote upon the question. But I am not disposed to allow the occasion to pass without asking your permission thus publicly to express my belief (with some reasons for that belief) that the demand, whether made by a majority or by a minority of the profession, has arisen from a very general misconception of the objects and duties of the General Medical Council, and of its relations to the Government, the public, and the profession.

So far as the Council may be considered a governing body, those who are in any way governed by it are also represented on it. For the only controlling power which it can by law exercise—and this merely under the Privy Council—is that of regulating the examinations and

courses of education required by the licensing bodies, which accordingly are all represented on the Council. It is not empowered to exercise any control whatever over medical practitioners. Not one of us is in the smallest degree governed by the Council. We, each and all, do as we please (so that we do not act illegally) in our respective spheres of practice, without the possibility of any interference on the part of the Council. On what theory, then, do practitioners claim to be represented thereon?

The Imperial Parliament and the Municipal Councils of the realm are constituted by popular election, not only because they govern the country or the boroughs, but also because they spend money raised by general or local taxation.

Now, no medical practitioner is taxed by, or pays a farthing to, the Council, unless he may wish to have an additional qualification registered for five shillings. The fee for primary registration is, in fact, that part of the cost of education which secures to the registered person certain social and professional privileges *not to be had without registration*. He receives his *quid pro quo* when he is registered. After having obtained this *quid* and entered the profession, he is not obliged to pay anything to the Council. The argument for representation on the theory of *taxation* is, therefore, as fallacious as that derived from the theory of *government*.

Further, I may say that those who have sat for some years on the Council know from experience that its duties are such as no representative body in the kingdom is required to fulfil. Yet the lengthiness of discussions in the Council, and the alleged tardiness of its action, about which there have been reasonable complaints, depend mainly on the predominance of the representative element in its composition. If there were fewer representative members, as there might well be, the business would probably be done more quickly, more effectively, and at less expense. On the other hand, an addition to the representative element such as is proposed would but increase the force of these complaints.

Again, unmerited blame has been absurdly cast on the Medical Council for not promoting the enactment of provisions for a material change in its own constitution. Now, the Council was appointed by Act of Parliament to perform certain specified duties. And the members of that Council would certainly have acted unjustifiably if, instead of discharging those duties to the best of their ability, or even devising such amendments of the statute as might enable them to act more efficiently, they had spent their time in framing or supporting a proposition, which means, if it mean anything, that they are unfit and incompetent to administer the Medical Acts, and that a differently constituted body must be created for the purpose. Certainly, the legislature never intended the Council to dissipate its efforts and its income in stultifying itself by planning how *others* might be chosen to do its appointed work.

That which medical practitioners really need is to be more fully and satisfactorily represented in the several corporate bodies of which they are members. If each member had a fair share in the government of his own College, as he ought to have, he might, if he wished, influence the choice of its representative in the Medical Council. This would be a reality of reform which the British Medical Association might have consistently supported.

I am far from assuming that a superior constitution for the Medical Council is not a desideratum, or that it ought not to be taken into serious consideration by the entire profession: but this is a very large and difficult question. For instance, it has been suggested that there might be a future division of the Council into *two* bodies—the one being representative and consultative, perhaps as numerous as the present Council, and the cost of its sessions being defrayed by those whom it might represent; the other being a small executive body, sitting more frequently, always ready for action, and appointed and paid by the Crown. But there is no absolute necessity for such a change of constitution; and if the Council should continue a single authority, with an executive committee, as at present, probably the number of Corporation-representatives might be advantageously reduced by grouping the Colleges in each division of the kingdom, and by limiting the number of University-representatives on the same principle. The Crown nominees might be partly or wholly superseded by the chiefs of certain public departments, sitting *ex officio*, such as the medical directors of the Army and Navy Boards. In this manner, the Poor-Law Board, the Public Health Department, the authorities in lunacy, and other matters of legal medicine, might be similarly represented. Some such reforms might be practicable and rational. But any demand more irrational than that simply for "direct representation" could hardly have been raised. It has been noticed by statesmen as a proof of the unfitness of medical men to deal with public questions. And if it should be granted merely to satisfy a popular clamour, Parliament will doubtless take care to neutraise its intended operation either by depriving a body so formed of all executive power, or by adding so large a force of laymen and offi-

cial authorities as to counteract what may be called the "trade-union" proclivities of such an assembly.

I have no personal feeling in the settlement of this question. My seat on the Council may be vacant before my term of office expires; and I can, therefore, look on the future composition of the Council perhaps more indifferently than those who have viewed it only from the outside.

When I consider the many important public questions which require our thoughtful attention—the state of the public medical services generally, and in particular (1) the Poor-law medical department, (2) the medical charity system, (3) an impending medico-sanitary organisation of some sort, (4) the proposed registration of disease, and (5) the action of the profession in medico-legal inquiries and in courts of justice—I confess my astonishment that any number of sensible men should waste their valuable time and energies in struggling to obtain the right of electing some members of a Council which at present has no power whatever to effect any reforms in the civil medical service, and which, if constituted by direct representation, would never be entrusted with any such power.

Nevertheless, in raising the standard of medical education, and in thus augmenting the difficulty of entering the profession, the Council might still do, *as it has already done*, much to improve the status and increase the legitimate influence of the whole medical body.

I am, etc., H. W. RUMSEY.

Cheltenham, December 3rd, 1870.

SIR,—I have to thank you for your consideration in forwarding me a proof of Dr. Rumsey's letter in this week's issue, and shall feel obliged by your insertion of a few observations in respect of it.

At the annual meeting at Leeds in 1869, Dr. Rumsey, in moving the adoption of the report of the Council of the Association, is reported to have said, "that he had always considered the constitution of the Medical Council as defective." Dr. Paget, the President of the General Medical Council, Sir D. Corrigan, Dr. Andrew Wood, and Dr. Parkes, have proposed resolutions within the Council, in the sense of remedying its defective constitution; but success did not crown their efforts, probably because, as Dr. Rumsey states in his letter of to-day, "the members of the Council would certainly have acted unjustifiably if.....they had spent their time in framing or supporting a proposition; which means, if it mean anything, that they are unfit and incompetent to administer the Medical Act, and that a differently constituted body must be created for the purpose."

Dr. Rumsey, farther on, suggests a variety of alterations in the constitution of the Council, which, if they do not imply grave condemnation of its present constitution and of its unfitness and incompetence to administer the Medical Act, mean nothing; but as there is no chance of these propositions assuming a legislative form, it is clear that some body without the Council must take action. Now, sir, as the British Medical Association occupied a prominent part in the framing of the first Medical Act, it is inevitable that, with greatly increased numbers and influence, it should not be inactive at the present crisis. What, heretofore, has been the action of the British Medical Association? It has urged that representatives elected by the profession generally should be admitted in the proportion of one-fourth of the members of the Council. Surely this is a conservative, and not a radical proposition; for it will give the Medical Council a weight it does not at present possess, through enlisting in its favour—the support of the medical profession.

Dr. Rumsey's arguments apply rather to a Medical Council to be wholly elected by the registered members of the profession, and not to one intended to contain only one-fourth of such representatives. The British Medical Association, while not disregarding the fair interests of the universities and the corporations, seeks a Bill in the interest of the public and of the profession. That men of defective education and attainments, owing to the conflicting interests of the universities and corporations, still enter the profession, is undeniable; men who are not permitted to practise on Her Majesty's soldiers and sailors, are still let loose on the general public; and it is manifest that, during the past twelve years of the existence of the Medical Council, the representatives of the various corporations have been powerless to control each other.

Dr. Rumsey states that the profession is divided as to the advisableness of direct representation. Admitted that there may be one or two crotchety individuals who deem the present constitution of the General Medical Council needs no alteration; admitted that there may be two branches of the Association which are divided as to whether the representation of the profession should be effected by the indirect or direct method; still Dr. Rumsey cannot deny that the British Medical Association has done its best to ascertain the will of the Association. At

four general annual meetings, and at a special general meeting summoned in London in July last, for the express purpose of considering the Medical Amendment Act of the Government, the demand for direct representation was insisted upon as a *sine qui non*. At the last anniversary at Newcastle, Dr. Rumsey, with his colleagues, opposed the principle. Dr. Rumsey, on that occasion, stated what he now repeats, that "a very large number of the profession" was opposed to direct representation. This he might be justified in stating before the division, which subsequently took place after the discussion; but when that division revealed that only two or three hands besides those of the members of the Medical Council were held up against the principle, it is scarcely justifiable to reiterate a statement proved to be so decidedly wrong.

Dr. Rumsey states that the profession is not taxed to defray the expenses of the Medical Council. It is certain that the government, the university, and the corporations are one and all represented in the General Medical Council; it is equally certain that the bodies so represented do not contribute a single farthing towards the expenses of the Council. How, then, are these expenses met? A fee is exacted from each member of the profession on being placed on the *Register*; this payment has nothing to do with professional education or the costs of diploma. It was fixed as the readiest mode of defraying the expenses of the Council; and the five shilling fee for registration of an additional qualification, which Dr. Rumsey concedes to be a tax, is precisely of the same character; and Dr. Rumsey must be aware that, after the passing of the Medical Act of 1858, each member of the profession had to make this payment, which had nothing to do with education, in order to be registered.

I leave it to Dr. Rumsey to decide whether it accords with his position of a member of the General Medical Council, to apply the term of "trades-union" proceedings to the conduct and objects of our great Association.

The Medical Reform Committee of the Association has had confided to it the trust of securing a good literary and scientific education, and a thoroughly sound and uniform professional examination, on the part of every one entering the profession; and to secure these objects and to control the representatives of the corporations, it holds that one-fourth of the Medical Council must be elected by the registered medical practitioners resident in the United Kingdom.

Chester.

I am, etc.,

EDWARD WATERS.

THE COLLEGES OF PHYSICIANS AND SURGEONS.

SIR,—About five years have elapsed since I offered, through the columns of the BRITISH MEDICAL JOURNAL, a suggestion to the effect that a further examination in midwifery might reasonably be dispensed with in the case of a candidate for the license of the College of Physicians who already held the midwifery diploma of the College of Surgeons.

I now venture to repeat the suggestion, which I hope may be noticed by the authorities at Pall Mall East. At the same time, I would remark, that to accept the diploma of Member of the College of Surgeons as an exemption from further examination in surgery, and at the same time to demand a re-examination in midwifery from candidates holding the license in midwifery of the College of Surgeons, appears to be a proceeding most anomalous, not to say arbitrary.

I am, etc.,

M. and L.M.R.C.S. Eng.

OBITUARY.

JAMES LUMLEY EARLE, M.D., BIRMINGHAM.

DR. JAMES LUMLEY EARLE died at his residence, Newhall Street, Birmingham, on Wednesday, November 23rd, in his thirtieth year. Dr. Earle was educated at King's College, London, and held the post of Resident Physician Accoucheur-Assistant at King's College Hospital. He held the office of Resident Surgeon-Accoucheur at the Birmingham General Dispensary for some years, to the great advantage of the charity and the poor under his care.

Dr. Earle from the commencement of his professional career directed his attention especially to obstetrics, in which branch of medicine he succeeded in gaining a high reputation. He was for some time Surgeon-Accoucheur to the Queen's Hospital, until the department was given up, and was, up to the time of his illness, a candidate for the same office, which the authorities of the Queen's Hospital had decided to restore under more suitable regulation. On his being suddenly attacked with hæmoptysis, Dr. Earle's friends counselled his retirement from the

contest, though, had his health permitted, there was very little doubt of his success. He was also one of the Acting Physicians to the Birmingham Children's Hospital.

Dr. Earle was a member of the Council of the Obstetrical Society of London, and a member of the Medical Societies of Birmingham, and for some years acted as Honorary Secretary of the Midland Medical Society. He was the author of several valuable monographs on obstetric subjects, and the inventor and improver of several midwifery instruments. Among the improvements which he made in obstetric instruments may be mentioned, "a new pelvimeter," and "an uterine sound with a moveable head:" and at the time of his death he was engaged in perfecting an obstetric case which would have proved a very valuable addition to the *armamentarium* of the accoucheur. Among his contributions to the literature of obstetric medicine may be mentioned his book on *Flooding after Delivery and its Scientific Treatment*, and *A new method of Inducing Premature Labour*, which, with other papers, led to his being placed on the Council of the Obstetrical Society. Dr. Earle's enthusiasm for his special department of his profession was great, and his manners were singularly quiet and unobtrusive. By his industry, kindness of heart, and honourable conduct, he had earned the respect and esteem of his professional brethren. His loss will be felt deeply by his private patients, his hospital patients, and by his many friends, to whom he was always ready lend to a helping hand.

His fatal illness commenced with a severe and most unexpected attack of pulmonary hæmorrhage, followed by great febrile reaction and depression of the vital power. This occurring, with his constitution already weakened by overwork, rapidly proved fatal, and he died after an illness of little more than three weeks. His remains were followed to their resting-place, in the old cemetery at Birmingham, by many of his former colleagues and friends.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—On December 6th, the following gentleman passed the first professional examination.

Moore, John Bartholomew Giles Gidley, St. George's Hospital

ROYAL COLLEGE OF SURGEONS.—The following members of this institution having undergone the necessary examinations for the fellowship on the 23rd, 24th, and 25th ultimo, were reported to have acquitted themselves to the satisfaction of the Court of Examiners; and, at a meeting of the Council yesterday, the 8th instant, were admitted Fellows of the College.

Messrs. Edward Mason Wrench, L.S.A., Baslow, Derbyshire, diploma of membership dated July 17th, 1854 (of St. Thomas's Hospital); Frederic Edward Manley, L.S.A., King Street, Wolverhampton, January 23rd, 1866 (of Guy's Hospital); William Stanger, L.S.A., Nottingham, January 23rd, 1867 (of Guy's Hospital); William Bartlett Dalby, M.B.Cantab., Sackville Street, Piccadilly, May 22nd, 1867 (of Paris, Cambridge, and St. George's Hospitals); James Ryall Rouch, L.R.C.P., and L.S.A.Lond., Norfolk Street, Strand, May 5th, 1868 (of St. Bartholomew's Hospital); Edward Nettleship, L.S.A., Finsbury Pavement, November 17th, 1868 (of King's College); and Gopaul Chunder Roy, L.M. & S. Calcutta, Grosvenor Park, Camberwell, May 4th, 1870 (of the University of Calcutta).

Four candidates out of the eleven examined failed to acquit themselves to the satisfaction of the Court, and were therefore referred to their hospital studies for twelve months.

Licentiate in Midwifery.—The following members of the Royal College of Surgeons having undergone the necessary examinations, were admitted licentiate in midwifery at a meeting of the Board on the 7th instant.

John Desborough Robinson, Syston, Leicestershire, diploma of membership dated July 27th, 1870 (of the Charing Cross Hospital); Samuel Tillcott Huggins, L.S.A., Banbury, Oxon, November 17th, 1870 (of St. Bartholomew's Hospital); and Barrington Syer White, L.S.A., Lavenham, Suffolk, November 18th, 1870 (of King's College).

Three other candidates having failed to acquit themselves to the satisfaction of the Board, were referred to their obstetrical studies for three months.

UNIVERSITY OF LONDON.—M.D. Examination, 1870. (* Obtained the number of marks qualifying for the Medal.)

Allen, Bryan Holme, University College

*Baxter, Evan Buchanan, King's College

De Liefde, John, Guy's Hospital

Dessé, Ethelrid, University College

Gowers, William Richard (Gold Medal), University College

Grimes, John, B.Sc., King's College

Hooper, John Harward, M.S., St. Thomas's Hospital

Parsons, Henry Franklin, St. Mary's Hospital.

Rayner, Edwin, B.A., Paris, and University College

*Roberts, Frederick Thomas, B.Sc., University College
Taylor, Frederick, Guy's Hospital

Logic and Moral Philosophy only.

Haynes, Frederick Harry, St. Bartholomew's Hospital

Snow, Herbert Lumley, Queen's College, Birmingham, and University College
Tayler, George Christopher, St. Bartholomew's Hospital

B.Sc. Examination.

First Division.

Carter, Charles Henry, B.A., University College

Parker, Rushton, University College

Stocker, James Reginald, Guy's Hospital

UNIVERSITY OF CAMBRIDGE.—Second M.B. Examination. The following have been examined and approved.

Galabin, A. L., M.A., Trinity

Humphreys, H., M.A., John's

Ralfe, C. H., M.A., Caius

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, December 1st, 1870.

Claridge, William, 51, Brook Street, W.

Duke, Bernard, Little Hampton

Newton, Charles John, Alconbury Hill

Smith, Samuel, Clifton, Bristol

The following gentlemen also on the same day passed their first professional examination.

Langdale, Henry Marmaduke, Guy's Hospital

Power, George Edward, Guy's Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

BALLYCASTLE UNION, co. Antrim—Medical Officer for the Cushendall Dispensary District: applications, 14th.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Acting Physician: applications, 23rd; election, 27th.

BIRMINGHAM GENERAL DISPENSARY—Resident-Surgeon: applications, 28th.

CASTLEBAR UNION, co. Mayo—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the North Division (No. 2) of the Castlebar Dispensary District: 17th.

CHESTERFIELD UNION, Derbyshire—Medical Officer for the Bolsover District.

CORK NORTH CHARITABLE INFIRMARY—House-Surgeon and Resident Apothecary: 12th.

COUNTY DOWN INFIRMARY, Downpatrick—Resident Surgeon's Assistant and Registrar: election, Jan. 10th.

EVESHAM UNION—Medical Officers and Public Vaccinators for District No. 3, and the Parish of Pebworth: applications, 12th; duties, 26th.

FEVER HOSPITAL AND HOUSE OF RECOVERY, Cork Street, Dublin—Temporary Physician: applications, Jan. 4th.

GUISBOROUGH UNION, Yorkshire—Medical Officer for the Danby District: 13th.

HACKNEY UNION—Dispenser at the Workhouse, Homerton: applications, 14th.

LONDON SCHOOL OF DENTAL SURGERY, Soho Square—Lecturer on Dental Anatomy and Physiology: applications, 14th.

MANCHESTER ROYAL INFIRMARY—House-Surgeon; Two Physician's Assistants: applications, 10th; election, 10th.

MANCHESTER TOWNSHIP—Assistant Medical Officer at the new Workhouse.

MEDWAY UNION, Kent—Medical Officer for the Workhouse and District No. 2: applications, 13th; election, 14th.

METROPOLITAN FREE HOSPITAL, Devonshire Square—Surgeon: applications, 15th.

NEWCASTLE-UPON-TYNE BOROUGH LUNATIC ASYLUM—Resident Medical Superintendent.

PERSHORE UNION, Worcestershire—Medical Officer for the Upper Snodsbury District: election, 13th; duties, Christmas. Medical Officer for the Eckington District: election, 17th; duties, Christmas.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY—House-Surgeon: applications, Jan. 2nd.

ST. MARYLEBONE, Parish of—Public Vaccinator: applications, 16th.

ST. PANCRAS—Medical Officers for Districts 1, 2, 3, 4, 5, 6, 7, 8: applications, 12th; election, 15th.

SCOTTISH NATIONAL INSTITUTION FOR IMBECILE CHILDREN, Larbert, Stirlingshire—Superintendent: applications, 15th.

SHETLAND, DELLING, AND NORTHMAVINE PARISHES—Medical Officer: applications, 17th.

STAMFORD AND RUTLAND GENERAL INFIRMARY—Apothecary and Secretary: applications, 31st; election, Jan. 31st.

STRANORLAR UNION, co. Donegal—Medical Officer for the Workhouse: applications, 16th; election, 26th.

WATERFORD UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Tramore Dispensary District.

WIGAN DISPENSARY—Surgeon.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*Goss, Tregenna Riddulph, Esq., appointed Medical Officer to the Post Office, Bath.

HARDING, T. H. G., Esq., appointed Surgeon to the Dental Hospital of London.

HUGHES, N., Esq., appointed Honorary Consulting Surgeon to the Staffordshire General Infirmary.

*LOMAX, H. T., Esq., appointed Surgeon to the Staffordshire General Infirmary.

*MOORE, John W., M.B., Ch.M.Dub., L.K.Q.C.P.I., elected Physician to the Molyneux Asylum for Blind Females, Dublin, *vice* M. D. Moore, M.D.Dub., et Cantab., resigned.

MARRIAGES.

FAGGE, Herbert W., Esq., Surgeon, of Lutterworth, to Alice, youngest daughter of the late Thomas WATSON, Esq., of Bitteswell, at Husband's Bosworth, on November 30th.

TURNER, George Brown, M.D., St. Leonard's-on-Sea, to Catherine, daughter of the late Rev. Richard PARKINSON, D.D., Principal of St. Bees College, Cumberland, at St. George's, Hanover Square, on November 24th.

DEATHS.

BINDLEY, Frank Lane, Esq., Surgeon, at Kilmore, Victoria, aged 40, on Sept. 26th.

DAVIES, Thomas, Esq., Surgeon, at Snettisham, Norfolk, aged 68, on Nov. 21st.

PRICE.—On November 28th, at Leeds, Catherine, widow of William Price, Esq., Surgeon.

STUCKEY, George, Esq., Surgeon, late of Martock, at Bath, aged 66, on Nov. 29th.

WALKER, George, M.D., late of Hurworth-on-Tees, Durham, aged 39, at Sydney, New South Wales, on September 18th.

THE MIDDLESEX HOSPITAL.—A dramatic performance will be given at St. George's Hall, Langham Place, in aid of the funds of the Middlesex Hospital, on Monday, Dec. 19th, by the members of the Philo-Dramatic Society.

TESTIMONIAL.—A handsome testimonial, consisting of a microscope and service of silver plate, has been presented to Mr. Robert Jolly by the students of the Queen's Hospital, on his resignation of the office of Resident Surgeon to that institution, and election as Honorary Surgeon to the General Hospital. The presentation was made at a supper, at which Mr. Sampson Gamgee presided, and forty students and many medical men were present, and appropriate addresses were delivered.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Sir Duncan Gibb, Bart., London; Dr. Lionel S. Beale, London; Dr. Gilchrist, Dumfries; Messrs. Calvert and Co., Manchester; Dr. Septimus Gibbon, London; Mr. Morell Mackenzie, London; Dr. W. Squire, London; Dr. C. J. Gibb, New-castle-upon-Tyne; Dr. Barham, Truro; Mr. E. Chapman, London; M.D. Edin.; Dr. Edis, London; Mr. Fawcett, Cambridge; A Sanitarian, Kensington; Mr. Redmayne, Bradford; Mr. Morratt Baker, London; Dr. J. Macpherson, London; Dr. Tilt, London; Dr. E. Mackey, Birmingham; Dr. Wilson, Cheltenham; Dr. T. Snow Beck, London; Mr. Bernard Walker, Rotherham; Dr. Samelson, Manchester; Dr. Clay, Plymouth; Dr. J. P. Colles, Dublin; Dr. Edwards, Birmingham; Mr. Wheelhouse, Leeds; Dr. Campbell, Carlisle; Mr. Crosby Leonard, Bristol; Mr. S. M. Bradley, Manchester; Dr. McCall Anderson, Glasgow; Dr. R. H. Taylor, Liverpool; Dr. W. Murray, Newcastle-upon-Tyne; Dr. Balthazar Foster, Birmingham; Mr. T. Annandale, Edinburgh; Mr. T. P. Teale, Leeds; Dr. Joseph Bell, Edinburgh; Dr. J. B. Nevins, Liverpool; Mr. Samuel Berry, Birmingham; Dr. C. Handfield Jones, London; Dr. Thorburn, Manchester; Mr. W. H. Cross, London; Dr. Lombe Atthill, Dublin; Mr. W. J. Nixon, London; Mr. J. G. Wilkinson, London; Mr. Jessop, Leeds; Dr. John Harley, London; Dr. Wolfe, Glasgow; Dr. Embleton, Newcastle-upon-Tyne; Dr. Stewart Lockie, Carlisle; Mr. C. J. Bracey, Birmingham; Dr. J. Popham, Cork; Mr. Weeden Cooke, London; Mr. Augustin Prichard, Clifton; Dr. Ransome, Manchester; Mr. John Marshall, London; Dr. R. Douglas Powell, London; Dr. H. Barnes, Carlisle; Mr. Holthouse, London; Dr. T. Hawksley, London; Dr. H. W. Fuller, London; Mr. Meade, Bradford; Dr. George Johnson, London; Dr. J. Hughlings Jackson, London; Dr. Langmore, Algeria; Dr. Nicolson, Portland; Dr. Gee, London; Mr. Durham, London; Dr. Barclay, Leicester; Mr. Whitehead, Manchester; Anodyne; Dr. Philpots, Poole; Dr. Philipson, Newcastle-upon-Tyne; Mr. J. Lister, Edinburgh; Dr. Althaus, London; Dr. Hughes Bennett, Edinburgh; Mr. Lund, Manchester; etc.

LETTERS, ETC. (with enclosures) from:—

Mr. C. Steele, Bristol; Dr. Webb, Wirksworth; Mr. Lowndes, Liverpool; Mr. W. Lindsay, Edinburgh; Messrs. Abbott, Barton, & Co., London; Dr. G. Reed, Manchester; Mr. Furneaux Jordan, Birmingham; Mr. David Page, Edinburgh; The Registrar-General of England; The Secretary of Apothecaries' Hall; T. h Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; The Secretary of the Harveian Society; Dr. J. C. Hall, Sheffield; Dr. C. Roberts, London; Dr. Waring-Curran, Mansfield; Dr. Whytehead, Hastings; Mr. J. Wilson, Chatteris; Dr. J. Roberts, Manchester; Dr. M. W. Taylor, Penrith; Mr. Spencer Watson, London; Dr. Harvey, Aberdeen; Mr. E. Lloyd, London; Mr. A. Davies, Swansea; Mr. R. Gillard, Hovingham; The Secretary of the Dental Hospital; Mr. P. J. Cooke, Worksop; Mr. R. W. Parker, Orleans; Dr. Rumsey, Cheltenham; Dr. Waters, Chester; Mr. Lomax, Stafford; Surgeon Major Atchison, London; Dr. Boulton, Leicester; Our Dublin Correspondent; Mr. F. Waterhouse, Pontypridd; Messrs. Smith and Co., London; Dr. W. Burnie, Bradford; Mr. F. P. Lansdown, Clifton; Dr. J. G. Swayne, Clifton; Dr. Wm. Mac Cormac, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. Lanchester, Croydon; The Secretary of the Royal Microscopical Society; Mr. T. Watkin Williams, Birmingham; The Secretary of the Ethnological Society; Dr. Gee, Liverpool; The Secretary of the Royal College of Physicians; Dr. Mapother, Dublin; Dr. Buszard, Northampton; Sir Henry Thompson, London; Dr. Charlton, Newcastle-on-Tyne; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Teevan, "Practical Remarks on Stone, with an Analysis of Twenty-four Cases"; Mr. Spencer Watson, "A Case of Ectropium treated by Plastic Operation".

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. W. Sedgwick, "On Temporary Glycosuria as a sequel of Cholera."—Ethnological Society of London, 8 P.M. Sir John Lubbock, Bart., M.P., "On Stone Implements from Africa"; Mr. Edgar Layard, "On Stone Implements from the Cape of Good Hope"; Mr. C. Spence Bate, "Second Report on the Prehistoric Monuments of Dartmoor."

WEDNESDAY.—Epidemiological Society, 8 P.M. Dr. Christie (of Zanzibar), "On Cholera in East Africa."—Royal Microscopical Society, 8 P.M. Mr. B. T. Lowne, M.R.C.S., "On the Anatomy of *Ascarus Lumbricoides*"; Dr. Maddox, "Observations on the Aëroscope."—Hunterian Society, 7.30. Meeting of Council. 8 P.M., The adjourned discussion on Mr. Hovell's paper on "Hysteria"; Dr. Phillips, "Cases of Puerperal Convulsions, with Remarks on Treatment".

THURSDAY.—Harveian Society of London, 8 P.M. Dr. W. Fairlie Clarke, "On Surgical Dressings."—Royal Society.—Linnæan Society.—Chemical Society.

SATURDAY.—Association of Medical Officers of Health, 7.30 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

DR. JOHN A. BOLTON (Leicester) gives an indignant account of his difficulties in attempting to get the hieroglyphic prescriptions dispensed of a patient who had consulted Mr. Watson Bradshaw, after having purchased his *Anatomy of Dyspepsia*, as advertised in the *Times*, and paid £2 : 2 for his consultation.

DR. TILT's request shall be complied with.

MR. W. WHITEHEAD (Manchester).—See page 301 of the JOURNAL for September 17th. Proof shall be sent, as desired.

DR. ROBERTS.—With great pleasure.

THE appearance of the following papers has been delayed by pressure of material; they are marked for early insertion:—Dr. Gairdner, Glasgow, Clinical Studies, No. 1; Dr. Hyde Salter, Clinical Notes; Mr. William Adams, on Subcutaneous Section of the Neck of the Femur; Dr. Sansom, London, on Sulphocarbolates; Mr. Whitehead, Manchester, on Mucous Disease; Dr. Page, Edinburgh, on Skin-grafting; Dr. Symes Thompson, Abstract of Gresham Lecture on Hay-Fever; also letters from Mr. Paul Swain, Dr. Cordwent, and other correspondents.

M.R.C.S. writes:—I have been very much annoyed, ever since I have been practising in this village, by an unqualified man who was formerly assistant to some medical man in this neighbourhood. A week or two ago, he attended a case of scarlet fever, which proved fatal; and he consequently gave a certificate of death, signed with his name, and adding "Surgeon" under the head of professional titles. Is there no means by which he can be got rid of? He is a great nuisance to me, as he deprives me of nearly all midwifery fees from the guardians by undertaking them as low, in some cases, as 2s. 6d. If you will kindly advise me in Saturday's JOURNAL as to the best course to pursue to rid this village of such a pest, you will greatly oblige.

** Our correspondent should address the Registrar of the General Medical Council, stating the circumstances; and he will be able, no doubt, to advise him as to the probability of successful prosecution. Some prosecutions have succeeded under such circumstances; but more have failed, owing to the lax wording of the fortieth clause of the Medical Act.

ERRATUM.—In our notice of the outbreak of enteric fever at Stevington (*JOURNAL*, November 26th, page 586), the statement that "in one house six fatal cases occurred" was an error. These cases were not fatal. The name of the author of the report is "Dr. Charles E. Prior," not "Dr. Robert Prior."

THE PREVENTION OF DISEASE.

AT a meeting of the Kensington Vestry last week, the following detailed and excellent scheme of sanitary work was adopted at the instance of Dr. Dudfield, by whom it had been drawn up. We quote it as a good model.

1. That the medical officer of health be requested to report at each ordinary meeting of the Committee, in a book to be provided for the purpose, the number of deaths from small-pox, scarlet fever, and fever, that have been registered since the preceding meeting; and all cases of sickness from these diseases that have come to his knowledge, specifying the age, sex, and residence of the deceased, or sick persons as the case may be.

2. That it be the duty of the sanitary inspectors to visit immediately, and from time to time, as often as may be necessary, every house in which death may have occurred from small-pox, scarlet-fever, or fever; or in which either of these diseases may be known to exist; and to report forthwith to the medical officer of health, in a book to be provided for the purpose, as follows, viz.:—*a.* The name and residence of the head of the family, stating whether he or she is a householder or a lodger. *b.* The number of the family, and the number of rooms inhabited by them. If the family live in one room, the dimensions of such room and the number, size, and position of the windows, and whether they open at the top and bottom, to be stated; also, whether there is a fireplace. *c.* The age and sex of the sick or deceased person or persons. *d.* The apparent origin of the disease. *e.* The steps (if any) taken with a view to the removal of the sick to a hospital, if the home accommodation be insufficient. *f.* The mode of disposal of the corpse while awaiting burial of any person who had died by any of the above-mentioned diseases. *g.* The sanitary condition of the house in regard to ventilation, drainage, w.c., water supply, dust-bin, etc. *h.* The steps taken (if any) to ensure the disinfection of (1) the house, (2) the clothes, bedding, etc.

3. That it be the duty of the sanitary inspectors to apply every Tuesday morning to the medical officers of the Kensington and Notting Hill Dispensaries, and to the District Poor-law Medical Officers, for information relative to cases of small pox, scarlet fever, and fever; and to co-operate as far as practicable with those gentlemen in measures for the prevention of the spread of the disease in question, and all other zymotic diseases.

4. That the several Registrars of births and deaths be requested to furnish the Medical Officer of Health with daily information, on a form to be provided for the purpose, relative to all deaths registered from small-pox, scarlet fever, and fever.

5. That the attention of the Sanitary Inspectors be specially drawn to the "Sanitary Act, 1866", and more particularly to the sections which provide for—*i.* The cleansing and disinfection of the house, and anything in it, where contagious disease has existed, at the expense of the landlord or householder, as the case may be; or at the expense of the Nuisance Authority, when the owner or occupier is unable from poverty to do the same (Section 22). *j.* The prosecution of those who use public conveyances while suffering under any dangerous, contagious, or infectious disorder (Section 25). *k.* The prosecution of any person suffering from any dangerous or infectious disorder who wilfully exposes himself, without proper precaution against spreading such disorder, in any street, etc.; and also of the driver of any public conveyance who knowingly conveys such sufferer, and does not immediately afterwards provide for the disinfection of such conveyance (Section 38). *l.* The conveyance to a hospital, under magisterial order if necessary, of any person suffering under a contagious or infectious disorder, who is without proper lodging or accommodation (Section 26). *m.* The prosecution of any person who knowingly lets a house, a part of a house, or a room, in which any person suffering from any dangerous, contagious, or infectious disorder has been, without first having it, and all articles therein, disinfected (Section 39).—The Inspectors to be directed to report to the Medical Officer of Health, without delay, any case that may come to their knowledge involving a breach of the law, as set out in the foregoing or any other Sections of the Act; and in which it appears that the powers conferred on the Nuisance Authority may be exercised beneficially in the public interests.

6. That in the opinion of this Committee it is desirable to enforce the provisions of the Sanitary Act, 1866, already cited; and with a view to checking the spread of contagious and infectious diseases it is necessary to provide:—*n.* A proper place where clothing, bedding, etc., may be disinfected (Section 23). *o.* A carriage for the conveyance to a hospital, or to their own homes, of persons suffering under any contagious or infectious disease (Section 24). *p.* A proper place (mortuary) for the reception of the corpses of persons who have died of any contagious or infectious disease, as well as for the corpses of poor persons whose relatives are not in a position to provide a separate room for the reception of the same while awaiting burial (Sections 27 and 28).

We earnestly hope that the Sanitary Committee will not shrink from the first cost and trouble of carrying out this system by a properly salaried staff. There has been a considerable amount of zymotic disease in Kensington—seventy-five deaths in the last two months from scarlet fever alone. There can be no doubt that the result will be, not only a saving of life, but an ultimate economy in rates. The resolutions seem to us worthy to be adopted as a model in other parishes.

THE MEDICAL REGISTER.

SIR,—In searching for a trade advertisement in the columns of the *JOURNAL* set apart for such notices, I stumbled upon one from the Registration Office, which, in consideration of the penalty attached to non-compliance with its requisitions, seems worthy of a more prominent position. Your readers cannot be officially expected to undertake a searching study of advertisement columns, except when they please or need to do so, and thus they might easily omit to give notice of change of residence to the Registrar; this omission being punishable by exclusion from the *Register* of 1871 (with the privileges thereto attached), might cause much inconvenience and loss. I myself have experienced difficulty in getting fees from clerks of courts owing to errors in the *Register*.

Perhaps you might be able to inform me, and the profession generally, by what authority the Medical Registration Office, having compelled us to pay an exorbitant fee for the privilege (?) of having our names on its lists, now arrogates to itself the right of excluding from them any one of us who should fail to comply with a regulation the existence of which he can only know of by a careful study of advertisement columns.

Amongst the many reforms required in the whole system of medical registration, this loose way of making known important regulations seems to me one which might be effected by a little pressure from the medical journals. Of course

we have all given up hope of seeing, during the present century, any steps taken by the Medical Council towards giving in return for our registration fee any proper definition of, or legal protection for, the rights of registered practitioners *versus* quacks.

I am, etc., EXPECTANS.

** Our correspondent need not fear that his name will be erased from the *Register* without some inquiry. The fourteenth section of the Medical Act says: "To enable the respective registrars duly to fulfil the duties imposed on them, it shall be lawful for the Registrar to write a letter to any registered person, addressed to him according to his address on the *Register*, to inquire whether he has ceased to practise or has changed his residence; and if no answer shall be returned to such letter within the period of six months from the sending of the letter, it shall be lawful to erase the name of such person from the *Register*; provided always, that the same may be restored by direction of the General Council, should they think fit to make an order to that effect." The errors in the *Register* to which our correspondent alludes are, we believe, often chargeable to the registered persons themselves, who have omitted to give notice of change of address.

CAN A SURGEON CHARGE FOR MEDICINES?

SIR,—I have had occasion to sue a person for an account due for attendance and medicines, on the patient himself, his wife, infant, and servant maid. He disputes my right to charge for medicines (I being only M.R.C.S.). The cases in question are secondary syphilis, syphilitic iritis, gonorrhoea; gonorrhoea in the wife, gonorrhoeal ophthalmia in the infant, midwifery, and vaccination. The charges are most reasonable, as I can prove by professional evidence, but would not recompense me without the fees for medicines. I am, etc., AN ASSOCIATE.

26th November, 1870.

** The administration of medicines is as necessary in the practice of a surgeon as in that of a physician—especially in cases of the kind which our correspondent describes. He has therefore a clear right to charge for medicines.

"VACCINATION, OR BLOOD-POISONING BY LAW."

SIR,—The above is one of numerous flaming placards hanging on the railings of Messrs. Morison's establishment in the Euston Road, warning the public against vaccination; there are also coloured lithographs showing diseases produced by vaccination; pamphlets are likewise sold within to the public on the same subject. This week we observe an inquest held by Dr. Lankester on a case of death from "small-pox" in an unvaccinated child. How can we expect people to submit to vaccination, when such advertisements are permitted by the authorities to remain unchecked? There are many people whose minds are already prejudiced against vaccination, and, therefore, seeing these public announcements from, as they suppose, a company of duly qualified medical men, determine, at any risk, opposing the law.

I am, etc.,

20, Great Coram Street, Russell Square, W.C.

GEO. CHAS. COLES.

A SENSELESS HOAX.

SIR,—Will you kindly permit me to state a case, and give me your opinion upon it? Last Saturday evening, a woman, whom I was engaged to attend in her confinement, sent for me about seven o'clock. The messenger, who was a stranger to me, went by mistake to a house three doors from my residence. She asked if Dr. Greene lived there, and was answered in the affirmative by a servant who opened the door, and showed her into a private surgery. After a few minutes, a "gentleman" came in, and she said "Dr. Greene, I presume?" or words to that effect. He nodded, and asked her what she wanted. She replied that she came from Mrs. —, in — Street, whose pains were very bad, and who wanted him directly. He wrote down the name and address, and promised to be there directly. The messenger returned, and the poor woman waited and waited, expecting me every minute, until at last the child was born. When they sent again, this time the messenger, a little girl who knew me, came direct to my house. I went with her at once, and only upon arriving did I hear of the mistake that had been made. Now, this is not the first time I have been similarly served, though I cannot conceive what the man's motive can be.

I am, etc.,

218, Old Kent Road, November 29th, 1870.

W. T. GREENE, M.B.

** It is not easy to assign any motive for the conduct which Dr. Greene describes. If it be intended as a practical joke, it is one of a most unwarrantable kind. Dr. Greene would do right if he gave the person alluded to a warning, that he would be held responsible for any mischief that might occur to Dr. Greene's patients in consequence of his proceedings.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Indian Medical Gazette, Nov. 7th; The New York Medical Gazette, Nov. 19th; The New York Medical Record, Nov. 24th; The Boston Medical and Surgical Journal, Nov. 24th; The Madras Mail, Sept. 26th; The Shield, Dec. 3rd; The Cambridge Chronicle and University Journal, Nov. 26th; The Bedford Times and Bedfordshire Independent, Nov. 12th; etc.

BOOKS, ETC., RECEIVED.

Periscope of Midwifery and Diseases of Women. By Dr. A. B. Steele.
Departmental Reports on the Sanitary State of Llanely and other Districts. By Mr. Radcliffe, Dr. Thorne Thorne, and Dr. Buchanan.
Introductory Address delivered at Queen's Hospital, Birmingham, on opening of the Session 1870-71. By Alexander Fleming, M.D.
Some Points in the Physiological and Medical Aspect of Sewage-Irrigation. By A. Carpenter, M.D.
American Journal of the Medical Sciences for October. Philadelphia: 1870.
Third Report of the Health and Meteorology of Newcastle and Gateshead for 1870. By G. H. Philipson, M.A., M.D.
Report on the Sanitary Administration of the Panjab for 1869. Lahore: 1870.
On Chloroform in its Medico-Legal Bearings. By Charles Kidd, M.D.
On Supracondyloid Amputation of the Thigh. By W. Stokes, jun., M.D.
The Treatment of Surgical Inflammations by a New Method which greatly shortens their Duration. By Furneaux Jordan, F.R.C.S. London: 1870.
The Causes and Treatment of Lateral Curvature of the Spine. By Richard Barwell, F.R.C.S. Second Edition. London: Macmillan and Co. 1870.

CLINICAL STUDIES

IN

THE GLASGOW ROYAL INFIRMARY.

BY W. T. GAIRDNER, M.D.,

Professor of the Practice of Medicine in the University of Glasgow.

No. I.

Bronchitis, with Slight Dropsy: Albuminuria: Hypertrophy of Left Ventricle of Heart, and Degenerated Arteries: Arcus Senilis: Relief under Diuretics, etc., well-marked Alteration in Cardiac Percussion, and in Position of Apex.—J. B., aged 47, labourer, was admitted to Ward 7, Glasgow Royal Infirmary, October 14th, 1870. This man, after having been under treatment for nearly a month, was submitted to the class for clinical examination on November 12th. A few simple questions brought out the details of a history of bronchitis, with râles, formerly sibilant, now mostly bubbling, in the lungs, the percussion being nearly unchanged throughout. Slight puffiness of the eyelids was then noticed, together with a certain amount of dropsy of the legs, feet, and back. The urine was then examined, and found to be of specific gravity 1.012, slightly albuminous (it had been much more so, and had contained granular tube-casts with epithelium). Dr. Gairdner directed attention to the flabby state of the muscular system, and the pallid complexion (the patient had lost two stones in weight). Upon the basis of these elementary facts tending to establish chronic organic disease, an examination was called for into the state of the organs and functions in detail.

The first fact that attracted attention in this more minute examination was the presence of *arcus senilis* in the corneæ to a considerable extent. Pursuing this line of inquiry, it was found that the anterior temporal arteries on both sides were tortuous and unduly resistant to the touch. A similar condition was discovered in both radial arteries, and, although not so distinctly, in the vessels of the thyroid axis. The superficial femoral on the left side was also distinctly indurated in the greater part of its course. These observations on the arterial system gave special importance to the examination of the heart.

In regard to the percussion of the heart, difficulties had been experienced in the earlier examinations, partly owing to the presumed overlapping of the more or less emphysematous lungs, and partly from the presence of a degree of dulness (perhaps from fluid effusion in the pleura) diffused in the left lateral region. With due care as to details, however, evidence had been obtained of a certain amount of hypertrophy of left ventricle, and the facts recorded with great care on the 1st November supplied an interesting comparison with the results of examination on the 12th.

At the former date, the cardiac apex-beat was felt most strongly in the fifth intercostal space, and more feebly in the sixth, from an inch to an inch and a quarter to the left of the vertical line of the nipple. Both these points had been accurately marked with nitrate of silver. By placing the patient on his left side, the impulse of the apex could be distinctly followed to nearly two inches to the left of the line of nipple. The left margin of the cardiac dulness, so far as could be made out, was in correspondence with the more remote of these two situations, and the upper margin passed through the nipple, affording evidence of a lowered position of the heart, or of slight pulmonary encroachment. The transverse measurement of the dulness at its broadest part was fully six inches.

In almost all these particulars, slight alterations were observed on the 12th November. The apex-beat was chiefly appreciable at a point about half an inch nearer the nipple than the nearest of the points above noticed; and in the sixth intercostal space no impulse could be detected. The percussion-dulness was correspondingly altered. The fact of the marking with nitrate of silver, and the exceedingly distinct character of the apex-beat on the second, though not on the first occasion, made the inference inevitable—either that a diminution in the size of the heart had occurred between the two observations, or that the lung, by being less expanded with air, had permitted the heart to rise up in the thorax, and so brought the apex nearer the nipple.

The sounds of the heart, though not greatly altered, and quite free from murmur, were in harmony with the idea of a certain amount of hypertrophy of the left ventricle. It was noted in the report of November 1st, that "the first sound is a little dull in tone, even at the apex, and the second is somewhat abnormally deepened in tone over the aortic

cartilage." These facts continued to be observed on November 12th. Neither the liver nor the spleen showed any distinct abnormality to percussion or otherwise. There was no fever; pulse 70.

Under the administration of cream of tartar in electuary, and of a stimulating mixture of spirit of chloroform and camphor mixture, this patient had been improving since admission to November 1st, when a partial check occurred, and the bronchitis seemed to relapse, though not nearly so bad as at first. This was gradually relieved, the cream of tartar being given in the form of a drink, the other medicine continued. During the latter part of the month of October, the urine averaged 70 ounces daily. From 1st to 6th November (relapse of bronchitis), the quantity was, on an average, 60 ounces. From the 6th to 12th November, it was 73 ounces on an average; and, at the latter date, 100 ounces in twenty-four hours. There was every reason to think that the improvement in the patient's condition had been commensurate with the increased flow of urine.

REMARKS.—In speaking of this case, Dr. Gairdner said that it was one that in dispensary practice, or under an examination hastily conducted, might very easily have passed as a case of mere chronic bronchitis; and it was therefore a very suitable one, at the commencement of a clinical course, to demonstrate the necessity of careful and thorough examination. The facts indicating disease or degeneration of the heart, arteries, kidney, and cornea, only came out on physical examination, and were by no means brought into notice directly by the statement of symptoms in the first instance. In fact, this patient, who considered himself a fairly healthy man up to the time of his bronchitic attack, is clearly proved to have a constitution organically undermined at a multitude of points, so that the failure of it altogether at no distant date may be regarded as extremely probable. In the meantime, the evident improvement under diuretics, and more particularly the curious physical evidence afforded of improvement in the condition of the heart, are worthy of especial notice. In estimating this latter improvement, however, it should not be forgotten that the over-expansion of the edges of the lungs on admission had a tendency to displace the heart downwards; and it is possible, therefore, that the altered position of the apex may not have been due to any change in the size of the organ; only in such case, the dull percussion ought to have extended rather than diminished; so that, having regard to all the facts, Dr. Gairdner inclines to the belief that the hypertrophied or dilated left ventricle had become somewhat reduced in size, and acquired a greater control over its contents; the improvement in all the symptoms proceeding *pari passu*.

CAUTIONS IN THE USE OF SURGICAL INSTRUMENTS AND APPLIANCES.*

By THOMAS GREEN, F.R.C.S., M.D. Edin.,
Consulting-Surgeon and late Senior Surgeon to the Bristol
Royal Infirmary, etc.

DURING the whole of my professional life I have been intimately connected with large hospitals, either as a student or as Surgeon to the Bristol Royal Infirmary; and it has thus fallen to my lot to see a good deal of surgery—to witness not alone what its resources can accomplish in the successful treatment of disease or injury, but also serious accidents, often fatal, occurring in the use of surgical instruments or appliances. These cases have been most useful to myself as warnings, and, perhaps, have prevented similar accidents at my own hands. To bring them before you in detail may possibly do the same service to others that their observation has done to myself.

In clinical lectures, or in those given at the Medical School, I have always endeavoured to impress on the students the necessity of caution in dealing with the canals passing from within to the different outlets of the body. When instruments are required, there is a delicate membranous tube to pass through; and to make this passage we have either a metallic instrument, or one of a different material, but nearly as hard and unyielding. If the instrument do not pass freely and easily, or if there be an obstruction to its passage, anything beyond a moderate amount of pressure or force may make it go through, not the canal, but the membranous structures of which it is composed.

Case of Tracheotomy in which the Trachea was not opened.—A child, suffering from croup, was under the care of Dr. Lyon. In consultation with a surgeon in Bristol, tracheotomy was agreed upon. The operation was at once performed; the child was not relieved, and died soon afterwards. On examination, it was found that the trachea had not been entered; the cannula lay in front and close on the rings of the trachea.

* Read before the Bath and Bristol Branch.

The surgeon was a most experienced operator, but his method of performing this operation was to endeavour to enter the trachea by pushing a lancet through the skin and coverings of the part into the tube. In this case it entirely failed; and the failure may be taken as a caution not to operate in this way.

Having operated more than fifteen times for croup and diseases of the larynx, I have not found any difficulty in entering the trachea by making a slow and careful dissection (if the urgency of the case permit it) through the tissues, next exposing the rings and opening them from the crico-thyroid space downwards as far as may be necessary. The operation was successful as far as it went in all those cases; yet every one of them ended fatally, it having failed, as too often happens, to do more than arrest for a short time the urgency of the symptoms.

Having had such marked want of success when operating for disease, it is but right to say there is a bright side to this picture. I have operated six times for the removal of foreign bodies in the larynx or trachea, and in each case successfully. One case, where I had to operate for what appeared to be disease of the larynx, is worth mentioning, as it imparts a caution in treating similar cases.

Case of Tracheotomy for Supposed Laryngeal Disease, arising from Aneurismal Pressure: Fatal.—A patient in the Bristol Infirmary appeared to be suffering from urgent disease of the larynx. In consultation, tracheotomy was agreed upon, which I immediately performed: the crico-thyroid space was opened, and the rings divided sufficiently to allow a tube to be introduced. No relief followed the operation; and the man died soon afterwards. On examination, no disease of the larynx was found, but aneurism of the arch of the aorta pressing on the left recurrent nerve.

Similar cases have been placed on record where aneurismal pressure on the nerve has caused laryngeal symptoms. It may become a question whether the operation might not be performed simply to give temporary relief to these symptoms; in this case, it failed to give the slightest relief. This patient was under the care of my colleague, Dr. Brittan, in the medical wards, before coming under me for surgical treatment. Dr. Brittan stated at the meeting that in operating I had nearly cut into a pouch from the aneurismal sac, which extended upwards by the side of the trachea. I was not aware of this at the time; but, as he examined the parts very carefully after death, I have no doubt that he is correct. The preparation is in the museum of the Bristol Infirmary, and I shall be happy to show it to anyone wishing to see it.

Female Catheter escaping into the Bladder and perforating its Coats: Fatal.—A young woman was admitted into the Bristol Infirmary, under the late Mr. Lowe, said to be suffering from disease of the bladder. The prominent symptoms were acute pain and tenderness over the bladder, extending from the pubes upwards on the left side of the abdomen; purulent discharge from the bladder, at times tinged with blood; quick pulse, nausea, vomiting, etc. She stated that she had good health till recently, when retention of urine came on, requiring the occasional use of the catheter. After its last use severe pain came on, constant desire to pass urine, etc. She had been gradually becoming worse until admission. She was driven several miles to the Infirmary, and felt much distress from the shaking of the carriage. What was this disease? Mr. Lowe thought it either an abscess in the left kidney discharging through the ureter, or an ovarian abscess opening into the bladder. He knew nothing of the catheter. Treatment seemed of little use except to relieve pain. She died, worn down by profuse discharge and pain. On examination, the convolutions of the intestines on the side affected were found agglutinated. On separating the adhesions, a female catheter was discovered, lying in a large oblong cavity imbedded in broken-down tissue and pus, with an opening into the bladder.

The case was now clear: the catheter had escaped into the bladder, and, after a time, had perforated its fundus, passed between the convolutions of intestine without wounding the gut, and formed the cavity in which it lay.

The surgeon, if he tried, had not succeeded in extracting it. This was an accident that might happen to any of us; but I think it was blamable to allow the instrument to remain in the bladder. If the surgeon failed to remove it himself, he ought to have sought assistance, or have sent the girl to some hospital, stating what had happened. I may say with some confidence that, if she had come to the Bristol Infirmary we could have taken it out of the bladder; in fact, I have no doubt that any Hospital Surgeon could have done the same.

The caution from this case is obvious. Do not let a catheter slip into the bladder; but, should this happen, take care to remove it.

Female Catheter in the Uterus: Perforation, Extraction, etc.: "Unique Case".—A case somewhat similar has been reported by M. Foltz to the Medical Society at Lyons. A woman introduced a female catheter into the uterus to procure abortion; this was soon effected, but the instru-

ment remained in. A minute search was made by the surgeon, but in vain. After four months, a tumour was found at the umbilicus, in which the extremity of the catheter could be felt. An attempt was made to extract it through the vagina by incising the neck of the uterus, but without success. It was afterwards extracted with difficulty through an incision in the abdominal walls. The patient recovered. When the case was related to the Society, some thought the catheter had slipped into the bladder, perforated its coats, passed up between the convolutions of intestine, and formed a cavity between them and the walls of the abdomen, in which it lay. In many things it resembles the case which I have related, but it differed, according to the account given, in that the foreign body did not excite acute inflammation and suppuration along its track. It may, however, have excited enough adhesive inflammation to circumscribe the cavity in which it lay, and to close it. The case also differed in not terminating fatally. The author considers this case "unique, after having taken great pains to search through many medical periodicals"; so that the report of the one here given may be of interest to the surgical inquirer.

Fatal Wound in the Vagina, caused by a Glass Syringe.—This case occurred lately at Guy's Hospital. It resembles the last case as far as the nature of the injury is concerned, but differs as to the instrument by which the injury was inflicted, and also in the result, this case ending fatally. A young woman used a glass syringe to throw a solution of alum into the vagina. It broke when in the canal. "Great pain and some hæmorrhage" followed on its being removed piecemeal by her friends. She became a patient of Dr. Oldham, at the Hospital, and died twelve days after admission. On examination, there were found two purulent cavities in the abdomen, and a wound in the vagina behind the os uteri. This case gives a special caution against the use of glass syringes in the vagina. I have been informed of other cases where this accident has happened.

The Gut Punctured in Opening a Lumbar Abscess: Fatal.—A man had lumbar abscess and became a patient in a large public institution in Bristol. The surgeon decided to puncture, which he did with a long trocar. The instrument was pushed into the abscess to its full extent; to me it appeared at the time that it was pushed in farther than was necessary. On withdrawing the stilet, no matter came through the cannula, but, on drawing it half out, pus, with some air, came through the instrument. Great pain was felt after the puncture. On the following day, blood came from the anus; afterwards, blood and pus were discharged. Irritation of the gut, tenesmus, etc., followed. The disease was supposed to be dysentery. The man died in a fortnight. On examination, a round fistulous opening was found between the abscess in the back and the descending colon. What had happened now became clear. The trocar had pierced the opposite side of the abscess and gone into the colon. The caution taught here may be thought unnecessary; but the surgeon was considered clever and had much experience, though he appeared to me too rough in the use of penetrating instruments.

Perforation of the Œsophagus by a Bougie: Fatal.—A young woman became a patient of mine at the Infirmary. She was sent in for stricture of the Œsophagus; her symptoms, however, were those of inflammation of one lung. The treatment was directed to that disease, and nothing was done in reference to the stricture. She could swallow only liquids, but with pain at one part of the tube. An instrument had been passed shortly before admission. Great pain, oppressed breathing, cough, and spitting of blood, followed its introduction. Within a week she died, apparently from acute pneumonia. On examination, it was found that the bougie had been forced through the coats of the Œsophagus, and had penetrated some distance into the substance of the left lung. The wound had united, but the part where the bougie had gone through was indicated by a ragged surface within the tube, and intense congestion where it had traversed the lung. *No stricture existed.*

This case proves the necessity of caution in passing an Œsophagus bougie, and the same caution is required in passing the tube of a stomach-pump. Cases are on record where the latter instrument has been passed through the larynx, and fluid pumped into the trachea.

Perforation of the Rectum by a Bougie: Fatal.—A woman became a patient at the Infirmary for Stricture of the Rectum. She stated that an instrument had been passed into the bowel for stricture two days previously. Great pain, ending in faintness, followed its use. On admission, she was suffering from what appeared to be acute peritonitis, extending over the lower part of the abdomen, on the left side. The treatment was directed to the local inflammation, but the case ended fatally. An examination was made in the presence of my colleague, Dr. Fairbrother, and myself. The bougie had been forced through the coats of the gut, about three inches from the anus. It passed up between the convolutions of the intestine, causing acute inflammation

and agglutination of all parts in the region affected. *There was no stricture* in this, as in the last case, so that the diagnoses in both cases were incorrect.

Accidents of this kind have occurred too often. One of them, well known to several gentlemen present, happened in the neighbourhood of Bristol, in the hands of a skilful and experienced surgeon, a man so universally respected that all who knew him sincerely regretted the occurrence. A bougie was passed, and went through the coats of the gut; the lady died soon afterwards; and, what was more melancholy, the accident happened, and she died, in the surgeon's own house.

Injury has not unfrequently been done to the rectum from the tube of the enema-syringe, producing abrasions and laceration of the mucous membrane, contusions, etc. I once treated a case of tetanus by injections of beef-tea, brandy, and laudanum, which at one time appeared likely to be successful. These means certainly prolonged life and relieved the urgent symptoms; the case, however, ended fatally. On examination, the mucous membrane of the gut was found abraded in several places; it appeared to me, by the enema-tube. The elastic tube now much in use is an improvement on the ivory pipe hitherto used; it is less likely to injure the gut, and is longer.

Some years ago, a member of Parliament for a large city in the south of Ireland, caused his own death by an enema-tube forced through the coats of the rectum, in the hurried use of the instrument by himself.

We have a valuable instrument in O'Beirne's long tube; its value is, I think, not fully appreciated. It will remove obstructions, whether from inflammation, spasm, or obstruction in the bowels, where all other means fail, either medicine by the mouth or the usual injections; if the former consist of strong purgatives, it often makes matters worse. O'Beirne's tube, as now sold by the instrument-makers, is about twenty-eight inches long; it may be introduced to the extent of twelve or fourteen inches into the gut, with cautious manipulation, and not in a hurry. This can be done with perfect safety. If passed so far, it travels well into the left curve of the colon, and two or three pints of warm fluid may thus be thrown through the transverse into the descending colon, even as far as the cæcum. I have treated not a few cases of obstruction in consultation with my colleague, Dr. Lyon, and in every case but one successfully; the plan has succeeded when things appeared hastening to a fatal termination. One case I will mention.

A medical friend at Clifton was under the care of Dr. Lyon and Dr. Symonds. I saw him in consultation with these gentlemen. There were a large hard tumour in the right iliac region; incessant vomiting night and day; constant hiccup; a feeble and rapid pulse; pale and sweating skin, etc. But one termination could be looked for. Nearly four pints of warm fluid were slowly and cautiously injected by O'Beirne's tube. This succeeded in breaking up and bringing away a mass which appeared to a large extent made up of magnesian accretions. His symptoms soon improved. This gentleman perfectly recovered, and is, I am happy to say, now in perfect health. The tube requires caution, especially when passing the sigmoid flexure. Haste or undue force may here do mischief.

I think enough has now been said to prove the necessity of caution in the introduction of instruments into the rectum.

We now come to consider the most frequent, and most important because most frequent, wounds of membranous tubes caused by instruments; I mean those of the urethra. After many years of hospital experience, truth requires me to say that wounds of the urethra, false passages, etc., made by instruments, are not unfrequent; and I believe that other hospital surgeons will say the same. The consideration of this subject in reference to the causes and prevention of accidents would extend this paper beyond its intended limits; therefore I must defer any remarks I may wish to make until a future occasion.

I should have hesitated, perhaps not felt justified, in bringing those cases before you if I could not include myself in the category of those in whose hands accidents have happened. Infallibility belongs not to our profession, although the Council of learned Churchmen now assembled in Rome may decide that it is the attribute of one frail mortal, even though he occupy at best a tottering throne.

A Grooved Needle Broken in a Tumour, and Extracted.—I saw a lady at Clifton in consultation with Mr. Greig. She was suffering from a tumour in the breast, hard, deeply seated, apparently lying under the gland. We decided to use the grooved needle, which I then introduced. The depth of the induration required it to be passed to its entire length. In attempting to withdraw it, the needle broke off, leaving about an inch deeply imbedded in the part. What was to be done? Leave it in, and trust to the chapter of accidents to deal with it? This we decided not to do, but at once to cut it out. On making two or three deep incisions, I was able to draw it out without any difficulty. The wound healed by immediate union. We said nothing

about it, and the lady and her friends never knew that any accident had happened.

The grooved needle as a means of diagnosis is a most valuable little instrument, and is not used as often as it ought to be. The caution to be drawn from this case may not be altogether useless.

Supposed Abscess: Puncture: Proved to be Aneurism: Fatal.—The very common operation of opening an abscess requires some caution in its performance. The *tactus eruditus* of the experienced surgeon sometimes fails to give a correct diagnosis; and accidents have happened, sometimes serious, even fatal, when an error in diagnosis has been made.

Among the serious accidents may be mentioned opening an aneurism supposed to be a collection of pus. I have myself known this to occur; but there is one well known case of which it may be well to remind you. It occurred in the hands of one of the most accomplished surgeons of his day. Mr. Liston has published the case himself; it may therefore be referred to, and his name be mentioned. Briefly stated, the case was as follows. A boy became a patient in University College Hospital with swelling at the side of his neck. It was shown to Mr. Liston on his going round. He examined it, pronounced it to be an abscess, and passed a bistoury into it. Arterial blood came out in a full stream, and left no doubt as to what the swelling was—aneurism of the carotid artery. Subsequently, Mr. Liston tied the vessel. The boy died; and dissection proved the tumour to be an aneurism. It is but justice to the dresser of the case to add, that he had carefully examined the swelling, considered it to be aneurism, and told Mr. Liston his opinion. That gentlemen thought otherwise, the result being as just stated.

Eminent men make mistakes from over-confidence in their powers of diagnosis, which less eminent men avoid by a more careful examination.

Abscess in the Tonsil Punctured: Fatal Hemorrhage.—A fatal accident occurred some years ago at the hands of one of the most distinguished surgeons in Ireland. In opening an abscess in the tonsil, the instrument wounded one of the large vessels passing near the gland. A gush of blood followed, and the young lady died at once; and, more sad to tell, it was said that she died in the arms of a medical student to whom she was engaged.

Wound of an Artery in Opening an Abscess, supposed to be Malignant Disease.—The following case occurred to myself, and is not without interest. A lad was brought into the Bristol Infirmary. On admission, one side of his face was much swollen and covered with layers of lint, strapping, and bandage, apparently to stop bleeding. They were all saturated with blood, and a weeping of blood was going on under these coverings. The history was, that the swelling was thought to be an abscess, and was punctured by a surgeon; no pus, but blood followed the puncture. The case was then thought to be one of malignant disease, and was sent to the Infirmary as a case of fungoid disease of the face. The lad became my patient. Bleeding was still going on, and he looked pale; it therefore became necessary to know at once what the disease really was. The coverings were all taken off, and the part well sponged. The swelling felt "doughy"; it wanted the hardness of scirrhus and the soft elastic feeling of fungus. In the centre of the cheek was an ulcerated opening, through which dark blood was oozing at the time. On passing a finger through the opening, it appeared to enter a large cavity filled with coagula. On withdrawing the finger, it was covered with blood and small coagula. I determined at once to lay open this cavity freely, to clear away its contents, and know what it really was. This I did immediately; and, the exposed parts having been well cleaned, an artery was found bleeding, which I tied. It seemed to be either the facial or one of its primary branches.

The conclusion to be arrived at is, that the instrument used in opening the supposed abscess wounded the artery. Blood issuing from the puncture, the wound was immediately closed, and constant pressure kept up to stop the bleeding, the coagula being kept in by this pressure. The swelling, no doubt, was from that form of inflammation in which there is more fluid than solid exudation, giving a deceptive feeling of suppuration. We have often seen these swellings opened when there was no pus formed. I think this case gives us a caution not to be too hasty in making a diagnosis of malignant disease; and it also confirms a most useful rule of practice, which is, where pressure fails to arrest bleeding from a deep surface or cavity, at once to lay the parts open freely, and thus ascertain whence the bleeding comes, whether from one vessel which can be tied, or from a number of minute ones, where styptics can be applied. Cases occur where bleeding goes on a few days from a stump, say after amputation of the thigh. A large gush of blood comes on suddenly, and is supposed to come from the main artery, so as to lead the surgeon to think of tying the vessel above the wound. Let the wound be freely laid open, if necessary, adhesions separated,

and the entire surface exposed to view. There may be some oozing of blood going on, or, more often, the mere exposure to air at once arrests any further hæmorrhage; and in some cases the exposed surface of the stump looks like sodden skin, showing a want of vital power and consequent failure to throw out granulations—the only process by which the wound can be filled up, aided of course to some extent by vital contraction in the surrounding parts. Any stimulating dressing in such a case as this now brings on a healthy condition on the face of the wound. A case precisely similar to the one described occurred in the Infirmary, where more than a pint of blood was lost in a gush. The tourniquet was at once applied, and I was sent for. By the advice of a very experienced colleague (the late Mr. Lowe), the artery was not tied, but the stump was opened in the way described. Not a drop of blood could be seen, merely the sodden surface just described. The large bleeding must have been from the surface; it was kept in by the dressings, had accumulated until the wound was mechanically distended by the large amount of fluid and could contain no more, when it suddenly burst through the coverings; and this led to the supposition that the main artery had given way.

In both these cases the wound healed rapidly under the usual applications, and without the use of carbolic acid or an invasion from those "septic germs" supposed by some to be such potent agents for mischief.

The healing of wounds is a subject which has lately been so prominently brought before the profession, that I cannot conclude these remarks without taking the opportunity of giving one more caution, which is, not hastily to accept the doctrines now taught by Professor Lister. Most of those present will, I think, agree with me, that there is nothing new in much of this system. There is nothing new in the attempt to convert a compound fracture into a simple one, by closing the external wound and excluding the air; and the same may be said of other wounds. There is nothing new in the "antiseptic" treatment; every one knows that antiseptics have been freely used by hospital surgeons for many years. There is nothing new in the doctrine that wounds can heal without granulation and suppuration: this doctrine was taught by Macartney in his lectures at the University of Dublin, and published in his work on *Inflammation*. Having been a pupil, and afterwards assistant, to that distinguished teacher, I was a convert to his opinions; and when I became surgeon to a large hospital, I fully carried out his views, and only gave them up on becoming convinced that they were untenable in practice.

What is really new is the carbolic acid treatment of wounds. This application will, I am confident, be found no better than other remedies of the same class which we already possess; it is either an escharotic, stimulant, or astringent, according to the proportions used; and I cannot but think that to "putty" over or by any other contrivance to keep in pus, which is, as it were, struggling to get out, is more likely to retard than to hasten the healing of a wound, and is opposed to one of the most important rules of surgery—always to promote the discharge of pus. This fluid, if allowed to remain, decomposes, in hot weather quickly, and then becomes the most frequent cause of pyæmia.

If the new system be true, then the principles of John Hunter are false; and the doctrines contained in Hunter's immortal work on *Inflammation*, accepted and taught by the best teachers in these countries during the present century, are entirely fallacious. Not alone the present able teachers in London, but the great men who have just passed away, men whose names shed a lustre on our own time, and whose recorded opinions influence the practice of surgery throughout the civilised world—Abernethy, Cooper, Lawrence, Brodie, Travers, and Bell—have taught and written what is erroneous. But it is not so; Hunter's principles will stand as the rule of practice in surgery long, very long, after the new system will have been pronounced by the profession as unsound in theory and erroneous in practice.

"Organic germs", with their most extraordinary performances, make up no small part of the new system. It may be true that there is an amount of animal and vegetable life in a minute form to be found in certain conditions of the atmosphere. But we know so little about those germs, their generation, conditions under which they live, or their influence in the generation or propagation of disease, that we can in the present state of our knowledge admit nothing more about them than that they are ready at hand to perform a part in any hypothesis which a fertile imagination may allot to them. Pasteur's opinions about these germs are being disproved in France, and the same fate seems in store for the startling announcement made by Professor Tyndall. The practical suggestion, to open an abscess with a hot knife to burn out these terrible germs, approaches so closely to the ludicrous, that I suspect the profession will not adopt it.

In conclusion, I take leave to say that nothing is further from my intention than to impute blame to any one. Accidents have happened and will happen to the best men. During a lengthened education, I

have seen them happen to those who deservedly stood high in their profession: but if the relation of these cases can save one life from similar accidents, and perhaps one sensitive mind from the reflection of having occupied the foreground in one of these sad pictures, then this chapter of accidents has not been read in vain.

RECOLLECTIONS OF WORK IN AN AMBULANCE.

By WILLIAM MAC CORMAC, F.R.C.S., Surgeon to the General Hospital, Belfast.

VI.

September 12th.—All our tents were pitched: these were thirty-six in number. They were soldiers', not hospital tents, and calculated to hold eight persons each. We considered four about the proper number. They were spread over the hospital enclosure, now made clean, and trenches had been dug round them. We were distributing some of our cases amongst them, when the even tenour of our way was disturbed by the arrival of a message to prepare to receive a number of fresh cases, and forthwith the patients appeared, borne upon stretchers. The weather was as bad as bad could be, cold and stormy, and the rain came down in torrents, without a moment's cessation. The inequalities of the coverlets over the men served but to form receptacles for little pools of water. There were one hundred and thirty of these poor fellows, all French, sent up to us that fearful day. Some of them were in a truly wretched plight. These patients were transferred to us from the ambulance installed in the fine large building of the College or District Public School, previously occupied by the wounded French, who were removed by the German authorities to make room for their own wounded; and this was done, under the circumstances which I have detailed, in most villainous weather. These patients were not convalescents. There were amongst them two cases of tetanus. One of the patients died on the day of his arrival; two died the following day; several in three or four days afterwards. Some absolute necessity for it, or some adequate explanation, may be forthcoming of what certainly appeared to us at the time, and under the circumstances, a most unkind and cruel act. I, for one, should be delighted to receive some explanation. But, as it stands, the case seems to me to be a distinct violation of the Geneva Convention, since a wounded man becomes *ipso facto* a neutral, and should cease, so far as the doctors are concerned, to possess any nationality whatever. I would not dwell upon this topic, but that it had so direct and unfortunate an influence upon our own well-being. Upon the accession of so many fresh cases, the hospital became at once fearfully overcrowded. One hundred and five of the new-comers had sustained serious injuries, demanding in many instances severe operations; the remaining twenty-five were cases of fever and dysentery.

Very few days passed until the wounds of those previously under treatment began to alter in appearance for the worse. Secondary hæmorrhage became frequent; and, worst of all, some of our best and most promising cases of operation began to show symptoms of pyæmia. All the patients, in fact, sickened more or less. The difference was felt even amongst the staff; for one and all of us got attacks of some sort of illness. One had severe diarrhoea, another a feverish attack, a third violent headache, a fourth an attack of vomiting, and so on. Dr. Sims alone was exempt.

There can be little doubt that the overcrowding which we suffered from at this time was a most potent cause in inducing an increased death-rate. For instance, in thirty-three cases death arose from acute pyæmia, in its most typical form of rigors, drenching sweats, diarrhoea, jaundice, and finally death; the *post mortem* examinations revealing abscesses, often in the joints and limbs, but more frequently in the liver and lungs, never in the spleen or kidneys. Without doubt, the agglomeration of bad cases has, whatever else may have, a good deal to say to the production of pyæmia. That many other deaths were due to the same cause I am very certain, although it has not been so noted.

Amongst those admitted during the first two days of September, and those sent in on the 9th, 10th, and 12th, the deaths from this cause were about equal, namely, seventeen of the one class, and sixteen of the other. It is perhaps noteworthy that of the seventeen deaths from pyæmia, occurring amongst our original patients, twelve took place between the 21st and 27th days of the month, seven of the twelve being on the 21st and 22nd September. Again, eight of the sixteen deaths from pyæmia amongst the patients admitted from the 9th Sept. to the 12th September took place also from the 20th to the 27th of the month, five of the eight being on the 20th, 21st, and 22nd September. Assuming the duration of a case of acute pyæmia to be from ten to fourteen days, this would determine the commencement of the disease

as the very time at which we were encumbered with the influx of new cases.

I am aware it is rather dangerous to draw large deductions from limited premises; but it is a fact well worthy of remark, that so many as twenty of the thirty-three noted deaths from blood-poisoning took place within a very few days of each other, and that twelve of the twenty occurred within a few hours of each other. If the disease run an approximately fixed course as to time, the inference clearly is that it commenced in these different cases about the same date; and other considerations fix that date as being from the 9th to the 12th Sept., when the large numbers of fresh patients were crowded in upon us.

In the large majority pyæmia was found to arise only in those cases in which the bone had been injured, or in which amputation had been performed. It was far more frequent also after secondary than after primary amputations.

Before proceeding to consider wounds of the extremities, with or without fracture of the bone, necessitating in some cases amputation, in others resection, I should wish to narrate briefly the particulars of some other cases of pelvic gun-shot injury.

CASE XXXVI.—Lieutenant Sécheras, Chasseurs-à-pied, was struck by a ball on September 1st. The point of entrance was three inches below the tip of the great right trochanter, but a couple of inches anterior to the bone. The point of exit was almost symmetrically placed on the opposite side, being three inches below the tip of the left trochanter. In place of being in front of the femur, it was two inches behind the bone. The urethra was wounded, but not completely divided by the ball. There were frequent fits of retention of urine, and the greatest difficulty was experienced in introducing the catheter. The laceration, which was in the lower wall of the urethra, could be distinctly felt while the instrument was being passed. The particular charge of this case, as well as of the other wounded officers, was entrusted to Dr. Tilghman, than whom none could be more faithful or intelligent in the discharge of his duties. He conducted the case to a successful issue, and this officer left the hospital quite convalescent, and warned of the necessity for combatting the tendency to stricture which must inevitably ensue after a contused wound of the urethra.

In two other cases, where the upper part of the thigh was pierced, a large part of the scrotum was torn off; in one case the testicles were not injured, and in the other the corpora cavernosa were almost completely divided, the urethra being left intact. Recovery took place in both.

CASE XXXVII.—Colombain, a soldier of the line, was struck by a bullet just over the right anterior superior spine of the ilium. He must have been carrying his watch just at the place where the ball struck, for it was carried bodily into the wound. Dr. Duncan extracted portions of the watch and of cloth over the sacro-iliac synchondrosis on the same side. Unfortunately, the watch was not in such a state of preservation as to be of much further use as a time-keeper. The man made a good recovery, and was discharged convalescent from hospital.

We had altogether 124 cases of injury to the upper extremity, 18 of which terminated fatally. These may be analysed and tabulated in the following manner.

	Cases.	Deaths.
Wounds around the shoulder not penetrating the joint ...	7	0
Penetrating wounds of the shoulder-joint ...	7	3
Wounds around the elbow-joint not penetrating ...	1	0
Penetrating wounds of the elbow-joint ...	14	6
Gun-shot wound of arm without fracture ...	22	0
Gun-shot fracture of arm ...	25	9
Gun-shot wound of fore-arm without fracture ...	8	0
Gun-shot fracture of one or both bones of fore-arm ...	12	0
Gun-shot wound of hand with and without fracture ...	28	0
	124	18

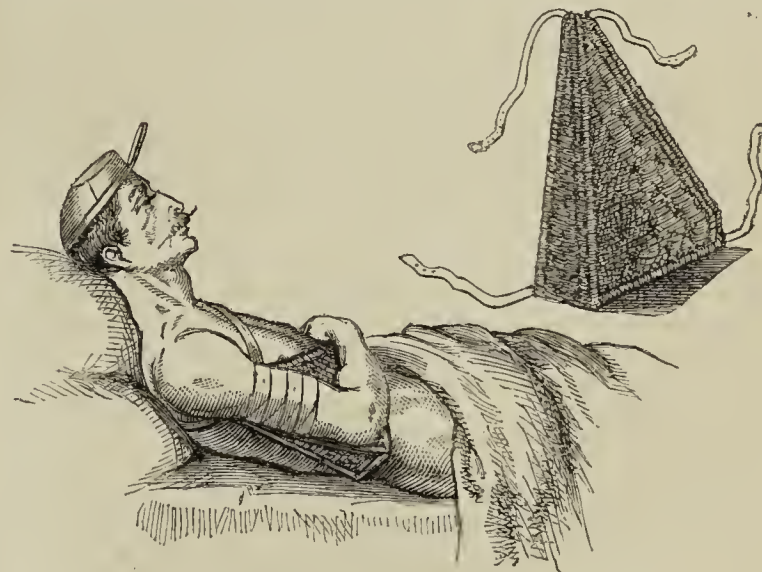
The operations which these injuries entailed were as follow:—

	Operations.			Deaths.		
	Prim.	Sec.	Tot.	Prim.	Sec.	Tot.
Disarticulation at shoulder-joint ...	2	0	2	2	0	2
„ elbow-joint ...	0	2	2	0	2	2
„ wrist-joint ...	2	0	2	0	0	0
Amputation of arm ...	19	1	20	8	0	8
„ fore-arm ...	3	0	3	0	0	0
Partial amputation of hand ...	11	0	11	0	0	0
Resection of shoulder-joint ...	1	1	2	1	0	1
„ elbow-joint ...	6	3	9	2	2	4
Double resection of shoulder- and elbow-joints in the same arm ...	0	1	1	0	0	0
Resection of three-fourths of ulna ...	1	0	1	0	0	0
Total.....	45	8	53	13	4	17

There were besides two instances of double amputation in the upper extremity: in one case, the arm and fore-arm were removed; in the other, amputation of the arm and disarticulation at the shoulder were performed: both patients died.

On the whole the recoveries, both after wounds and from operations, in injuries of the upper extremity, are, as might be anticipated, exceedingly satisfactory for military practice. The proportion of deaths, both after amputation and resection, was comparatively small, and the patients recovered well, with scarcely any exception, from simple flesh-wounds. The proportion of deaths in the fractures of the upper arm seems very high, but in many of the cases so noted amputation had subsequently to be performed. While on the subject of gun-shot fracture of the upper arm, I should like to notice the triangular cushion used by Stromeyer, that veteran authority in military surgery, for the treatment of these fractures. He has observed, he told me, the excessive danger which exists of producing gangrene, or other unfavourable result, when any constricting apparatus is applied to the fractured upper limb, and he says there is a fatal facility for gangrene to occur if any tight bandaging be applied, and the circulation materially interfered with. The cushion is a right-angled isosceles triangle, four inches thick at the apex, which rests against the chest and supports the elbow, the fore-arm being bent at a right angle with the arm; the cushion gradually thins down till the base is a mere edge; and of the other angles, one is passed up into the axilla, while the other rests on the chest under the wrist. The cushion is readily fastened in its place by a tape round the neck, and once round the body. When this cushion is applied, the arm rests upon it, beautifully supported, and in excellent position. Whilst lying in bed, nothing beyond the ordinary dressings are required for the wound; and if the patient need to be transported from one place to another, or is fit to walk about, this can be arranged with the utmost facility, as cushion, arm, and all can be bound by a broad bandage to the body, and thus form an immoveable whole. Stromeyer himself told me that, so highly did he estimate the value of this cushion, he considered it the most valuable thing he had invented during his life, which is very strong language from a man who, like him, has done so much for surgical science.

I have tried this mode of treatment myself and found it answer every purpose. The cushions are very readily made, and can be manufactured of different sizes; a very good size is one where the sides measure about fourteen or fifteen inches in length.



Stromeyer's Cushion for Gun-shot Fracture of the Humerus.

I may here put upon record one or two of the more interesting cases of injury of the upper extremity which fell under our notice.

CASE XXXVIII.—Roux was wounded on the 31st August by a fragment of a shell striking the front and outer part of the left shoulder. The greater portion of the pectoralis major was torn away, and part of the deltoid muscle, leaving between the two a species of bridge of skin and other tissue. Most of the deltoid was in fact divided across, and the wound in front was a deep hole five inches in diameter. The shoulder-joint was fully opened, and the head of the humerus somewhat comminuted. The first and second stages of the axillary artery were exposed, and the beating of the great humeral vessel was very distinctly seen. The clavicle and the scapula were not broken. This patient was treated in a very simple manner. All loose pieces of bone were removed, both at first and whenever they were disposed to exfoliate. The wounds, which were of enormous size, were carefully dressed and attended to by Mr. Haydon, who deserves great credit for the painstaking attention

which he bestowed upon this, and indeed upon all the other cases of which he had the care. Pieces of bone from time to time came away, and the wounds began to fill up. Three weeks afterwards, the report states that the patient had been getting on admirably, and was then all but convalescent, and that the expectant mode of treatment had proved most satisfactory. The Dutch surgeon under whose care he was left wrote to me a report up to November 21st of this and the other cases left behind, and I am sorry to chronicle an unfortunate issue to this case. "Roux" he writes, "died a few days ago. At first he was doing nicely. The caput humeri, and also a large piece of the humerus, became loose, and had been removed; the wounds had filled up with good granulations, but an attack of fever and diarrhoea soon made an end of him." His death, therefore, could not at an interval of ten or eleven weeks be attributed, except indirectly, to the injury from which he was then rapidly recovering.

CASE XXXIX.—I mention this case not for its surgical so much as for its psychical character. Payer, a private soldier in the 50th Regiment of the Line, received a gun-shot wound which traversed the left wrist-joint, shattering the bones so extensively as to render resection of the joint impracticable. The soft parts were also a good deal injured. I amputated in the middle of the fore-arm, and the patient was removed to the next ward to bed. I may here mention that all our operations were performed at the end of one of the wards opposite the large window, and in the presence of a number of the patients; for, since all the beds, for a considerable time at best, were full, we could not empty any portion of the hospital to make an operation-theatre. This operation was performed on September 1st, and during that entire day we were exposed to the heavy fire of the Prussian batteries just opposite, whose shells often struck, but fortunately never entered, the hospital-building. The constant whizzing of the shells in our ears was anything but reassuring. But, to return to our patient: in about ten minutes after he had been sent to bed, he left his own ward and returned to the operating-ward, where we were administering chloroform to a poor fellow whose leg required amputation. We were all amazed at Payer's *sang froid*. He asked for a cigar, which he commenced to smoke, and chatted to those around him unconcernedly. We could not persuade him to return to bed. As we had not any time to lose, he was allowed to remain. He inspected all the steps of the operation with much interest. He said he could not understand in his own case why he had felt no pain, and he wanted to see how such a feat of magic was accomplished. After he had seen the stump put up, he returned to bed perfectly satisfied. It is perhaps unnecessary to add that this young man rapidly recovered. His wound healed by the first intention almost, and he left the hospital on the 22nd September.

I do not think I have anything to note about amputations of the arm. They were generally performed with oval skin-flaps and circular division of the muscles. In respect of the mortality after this operation, we find, as before stated, that it is large. The cases of double amputation were both fatal. In one curious case, the same ball traversed both arms without injuring the trunk.

ACTION OF HYOSCYAMINE AND DATURINE.—MM. Oulmont and Laurent, having made a number of experiments on the action of hyoscyamine and daturine, sum up the results at which they have arrived as follows. 1. Hyoscyamine and daturine act specially on the great sympathetic nervous system. 2. In small doses, they reduce the capillary circulation; in large doses, they produce paralysis of the vessels. 3. The arterial tension is increased by the administration of weak, and is diminished by poisonous, doses. These results are not modified by section of the pneumogastric nerves. 4. The frequency of the pulse is increased, and their fulness diminished. 5. Hyoscyamine renders the movements of the heart regular; daturine often produces intermittence and arrest of action. When applied directly to the heart, these alkaloids diminish the frequency of the beats, and produce complete arrest of the heart's action. 6. Hyoscyamine and daturine always accelerate respiration. 7. Hyoscyamine and daturine have no direct action on the nervous system of animal life. Sensation and motor power are not modified by them. In toxic doses, they blunt cutaneous sensibility. 8. These alkaloids have no action on the excitability of the striated muscles; they do not modify their structure. 9. In small doses, they accelerate the movements of the intestines; in large doses, they paralyse them. 10. The general phenomena observed when these alkaloids are given are due to modifications of the circulation, and disappear rapidly. The alkaloids are soon eliminated, especially by the urine, in which they may be found. 11. The dilatation of the pupil which is produced is due to stimulation of the sympathetic; the third pair of nerves is not concerned in its production. 12. Small doses generally give rise to slight increase of temperature; large doses diminish the central temperature.—*Archives de Physiologie*, No. 3, 1870.

NOTES ON THE EPIDEMIC OR RELAPSING FEVER IN LIVERPOOL.

By ROBERT GEE, M.D., M.R.C.P.,
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VII.

I WILL now refer, in a cursory manner, to the etiology of the epidemic. That relapsing fever, as its synonym *famine-fever* would imply, is dependent on destitution, is not borne out by our recent invasion. There have been seasons of great distress without the appearance of the disease; and while it has prevailed there has been no excess of poverty among the labouring classes. In a large town with a fluctuating population, having uncertain or intermittent occupations, and of improvident habits, there must at all times be a great amount of poverty; and this, unfortunately, is the normal condition of the mass in the low district of our town. [That it has not been excessive, is evident from the following return, supplied by the relief department of this parish, of the average number of paupers chargeable for four weeks in each of the following months.

	1867.	1868.	1869.	1870.
April	13,592	14,109	12,387	11,366
May.....	12,528	12,966	11,294	10,691

This table shows that there was a decrease in 1870 as compared with the previous years. This statement is corroborated by the patients who have been admitted into the Hospital, and by their condition on admission. With very few exceptions, they presented no emaciated appearance; and, though their clothing was poor, their bodies were generally well nourished; and only twelve per cent. acknowledged that they had been what is called "badly off". There are thus three sources of information or grounds for an impartial judgment on this point; viz., the records of the parish relieving-offices, the condition of the patients, and the statement of the sick themselves. To these may be added the testimony of Mr. Canning, the superintendent relieving-officer, that the majority of applicants for hospital admission-orders were not persons in receipt of parochial relief; they belonged to that class who were able to gain their own livelihood, but who, through want of thrift, had no means to fall back upon in case of illness; and, consequently, when attacked, became for the time objects for parochial relief. That relapsing fever is a *hunger-pest* must, therefore, as far as the present epidemic in Liverpool is concerned, be disclaimed.

Overcrowding prevails here to a lamentable extent; the houses being too closely packed together, and too densely occupied. Interested owners and builders have, in time past, converted what should have been gardens or yards into sites for the erection of court-houses—hence the number on a given area is something alarming when viewed from a sanitary stand-point. These courts are destitute of adequate means of ventilation, being surrounded by high walls or the backs of neighbouring houses, which serve the double purpose of preventing the free circulation of air and of excluding the light of day. The health-authorities, under the advice of Dr. Trench, the medical officer of health, have demolished some of these courts and have opened up others, whereby more ventilation and light are secured to the occupants. If the construction of our courts be objectionable, the practice of overcrowding *within* the houses, carried on as it is to a great extent, is still more so; the inevitable result being the moral and physical degradation of their occupants.

Drunkenness must be added to the list of depressing agencies rife in Liverpool. The practice of dram-drinking is prompted, to a great extent, by the unhealthy state of the atmosphere which many are compelled to breathe, and, when once established, leads inevitably to drunkenness, followed by poverty and its long train of disastrous results. These act and re-act on each other until the individual is degraded to the lowest possible condition. Drunkenness gives rise to poverty and filthy habits, and necessitates a residence in unhealthy, overcrowded, dark nooks; while these, on the other hand, engender a craving for stimulants which, under the circumstances, cannot be withstood.

Want of cleanliness, both in the houses of the poor and in the streets and courts of the town, has had its full share of the responsibility of the epidemic. The state of both is truly deplorable, notwithstanding the large amount of money annually expended on sanitary measures; but the inhabitants are more culpable on this score than the Corporation. The efforts of the sanitary officers are greatly frustrated by the filthy habits of the people with regard to the exterior of their dwellings, whilst the internal arrangement of the households, with the exception of those of lodging-houses, cannot be interfered with by them.

That overcrowding, the faulty construction of courts and dwellings, drunkenness, and filthy habits (bad drainage or an insufficient supply of

water cannot be added to the list) as the recognised causes of fever have been, and are, in operation here to an almost unequalled extent is not to be denied; and it would be difficult to decide which enjoys the pre-eminence as an epidemic producing agency. Separately, each would play an important part in the deterioration of our labouring population, but on their united action their baneful consequences are incalculable. One result is the production of a race impaired in mind, morals, and physical constitution, possessing organisations so enfeebled and susceptible, that a noxious germ deposited therein, finds a soil prepared for its reception admirably suited for its development and propagation.

That relapsing fever is *contagious* it is not necessary to adduce other proof than that already on record. Our experience as regards the house-surgeons, nurses, and patients, ninety-two per cent. of whom contracted the disease directly from others, confirms what has already been written on the subject. This, unfortunately, is lost sight of—is almost ignored—in the measures which are deemed prophylactic of epidemics.

While sincerely sympathising with every effort put forth to promote the wellbeing, and to improve the *physique*, of our lower orders, such as extended sanitary measures, the education and improvement of the masses, and the suppression of the vice of drunkenness, I have, for many years, maintained that, concurrently with these means, energetic measures should be resorted to for the prevention of epidemics by prompt action when the first signs of such are manifested; thus to stamp them out when in their inchoate state. That this desirable consummation is practicable, I firmly believe, if a general system of registration of disease were established, if the sick were promptly removed for treatment, and if suitable arrangements were made for the reception of the healthy inmates of an infected dwelling while undergoing disinfection and purification. When these measures are wisely carried out, we may hope that, though sporadic cases of infectious disease might occur from time to time, they would not assume an epidemic form, carrying in their wake death and misery.

OBSERVATIONS ON THE TRUE NATURE OF THE SO-CALLED "SKIN-GRAFTING".

By DAVID PAGE, M.B.,

President of the Royal Medical Society of Edinburgh.

ALTHOUGH the experiments of M. Reverdin on the transplantation of skin to ulcerated surfaces, so as to hasten the healing process, have been repeated in many instances with accredited satisfactory results, nothing beyond the mere clinical details of these experiments have been advanced in explanation of the physiological changes involved. From careful observations conducted throughout a case of successful transplantation, I have come to the conclusion that these changes and their results are altogether different from those which previous information on this subject would lead one to infer. When a breach of surface fails to heal by primary union, the efforts which are next made to accomplish healing by granulating action depend for success upon the combined facilities for contraction and cicatrization that are afforded by the surrounding healthy textures. The callous ulcer is an example on the point, for in it the removal, by appropriate means, of the solid œdema and hardened cuticle is quickly followed by a reappearance of vigorous granulating action upon a surface till then unhealthy and inactive.

So far, then, does healing by granulation depend upon the co-operation of neighbouring parts; and, when once it is fairly established, the formation of a cicatrix over the breach that contraction fails ultimately to enclose, becomes a matter of time. To shorten the period required, and, if possible, to insure an integumentary cicatrix—that is to say, one more or less identical with the true skin—are considerations of interest, for which the novel method "of skin-grafting" has been supposed to afford the conditions. To ascertain the exact nature of this method, an opportunity occurred in the case of a man, 38 years of age, suffering from an extensive callous ulcer of the leg, who was admitted to the wards of Dr. Gillespie, senior surgeon of the Royal Infirmary, in the month of July last. Dr. Gillespie has kindly allowed me, as his house-surgeon, to carry on in the present instance these observations. The ulcer exhibited at that time a greyish coloured and irregular surface, little more than moistened with a fœtid transudation, and measured six inches in length; being only prevented from completely surrounding the leg by a narrow isthmus of sound skin, about two inches in breadth, behind. After the solid œdema of the leg and foot and the hard white edges of the ulcer had been removed by the usual means, the surface became covered with vigorous granulations; and, under simple dressings and rest, contraction and cicatrization proceeded actively, so that by the middle of October the ulcer was reduced to a narrow irregular patch,

lying in the midst of newly formed cicatrix. During the next three weeks, healing action seemed to be in abeyance, even under frequent changes in the mode of treatment; and it became evident that the opposition to further progress lay in the resistance of the surrounding cicatrix.

On the 4th November, I removed two portions of skin from the front of the upper arm, the patches—each a quarter of an inch in diameter—being simply raised up in dressing forceps and cut off with a pair of scissors. They were then placed upon the healthy granulating surface of the ulcer, and there retained by strips of isinglass-plaster. The dressings were not changed until the second day, and then the pieces of transplanted skin were found in position, seemingly adherent, and their margins exhibiting the transparent and purple tint of the delicate cicatrix at the edges of the ulcer. Two days later, on the 8th November, when the dressings were next removed, an increase of suppuration had occurred, and one of the pieces came away in the discharges; the other still adhered, but the cuticle had desquamated from its surface, and, on being removed, displayed a delicate and pink pellicle below. The edge of this pellicle was carefully raised at one part, and proved to be colourless and transparent, so that the vascular appearance was in reality due to the granulations upon which it lay. And then, upon examination, with the aid of the microscope, the film was seen to consist of young epithelial cells. The ulcer was examined again on the 10th November, by which time the remaining patch had increased to double the original size, while two days later still it had at one point reached the circumference, so that the ulcer now exhibited a cicatrix extending, by means of the transplanted portion, into the very centre of the surface.

The identity of this latter pellicle with the one spontaneously proceeding from the edges of the ulcer was established by the amount of resistance that both offered when detached, and by microscopic examination, showing them to consist of young epithelial cells. Further, when the healing of the ulcer was completed at the end of November, the cicatrix artificially induced, and that formed naturally elsewhere, were indistinguishable one from the other, and under the microscope proved to be of the same fibro-cellular structure.

In this way, then, the cicatrization of an obstinate but healthy ulcer was effected; but beyond this nothing more, for observation showed the identity of the central and peripheral cicatrices, which means also no nearer approach to the condition of true skin, but merely a more rapid growth of a tissue of very low vitality, devoid of the functions of the true skin, and easily destroyed by causes that would not affect the latter; for indeed, in the case under observation, the ulcer had existed for twelve years, during which time it had alternately healed and broken out from the weakness of the cicatrix; and, from what has now been accomplished, I anticipate no better security against a similar condition.

I am convinced that the so-called "skin-grafting" consists, in truth, not of a transplantation of true skin, but of epithelium, exactly analogous to what is occasionally observed in certain ulcers, especially in those associated with a syphilitic cachexia, where patches of delicate cuticle appear spontaneously on the surface and spread towards the circumference, but to be carefully discriminated from similar phenomena in ulcers resulting from extensive burns, for in these the apparent regeneration of skin is due to the fact that little insulated spots of true skin having escaped destruction, reappear after the first effects of the injury have been removed. These act as centres for healing action in a very different way. That the action of the transplanted portions is not merely that of affording a point of attachment (*point d'appui*) for spontaneous cicatrization, was satisfactorily proved by a series of experiments, in which pieces of sheep's-skin, caoutchouc, and other substances, were applied to the surfaces of healthy ulcers, and then retained in the same way as the portions of skin. But they only acted as foreign bodies, and on removal I found that a destruction of the granulations and depression of surface had resulted from their pressure.

Besides the cases in which skin-grafting has proved successful, have been those in which the granulating action was healthy; for if it were weak or absent, the patches refused to adhere. The temporary disappearance of some of the transplanted pieces, noticed by at least one surgeon, is, I think, due to the varying thickness of the young epithelial layer removed.

In conclusion, I am led to believe by these results of observation that, beyond a somewhat greater rapidity of cicatrization, especially where contraction of surrounding textures is resisted either by the situation or the extent of the breach of the surface, this method of skin-grafting is of limited application; and, as its results lead to no regeneration of the true skin, but merely the formation of a cicatrix in every respect identical with that formed spontaneously in the natural process of cure, it is an operation which cannot rank with plastic operations proper, and which is not likely to occupy a permanent position in minor surgery.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN
THE HOSPITALS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

DURING a recent visit to the out-patient department of St. Bartholomew's Hospital, we observed an interesting case of Choreic Paralysis in a girl twelve years of age. The mother brought the patient to the Hospital for partial loss of power in the left arm, which she could just raise above the head, and for a similar affection of the left leg, which the child, when made to walk across the room, slightly dragged. There was no cardiac disease or history pointing to organic disease which could account for the paralysis; neither were there any choreic movements observed until the child was made to elevate the hands above her head. A slight movement was then observed in the left hand, which increased and extended to the arm, as continued attention was drawn to it. The mother then stated, on questioning, that the child had recently been in the habit of twitching about her left arm. The true nature of the paralysis then became apparent. Dr. Duckworth, under whose care the patient was, prescribed vinum ferri; scammony powder was also given for the bowels. He finds excellent results from liquor arsenicalis in chorea.

We saw also a case of Diabetes, which had been treated by opium for some months. It had not contributed to the fulfilment of the sanguine expectations entertained by some of this new method of treatment.

Amongst the numerous cases of Chronic Bronchitis which presented themselves, not a few were being treated with iron, a plan which Dr. Duckworth has found to meet with very considerable success. Amongst other remedies, Dr. Duckworth frequently ordered, as an external application night and morning, to the back and front of the chest in obstinate cases of bronchitis, the linimentum terebinthinæ aceticum of the *British Pharmacopœia*, a course of treatment which had presented good results.

We also saw a man suffering from Chronic Renal Disease (probably large white kidney) who was being treated with belladonna, which seemed to answer well as a diuretic.

Amongst the patients were several cases of Hæmoptysis, which were being treated with twenty-minim doses of ipecacuanha wine, a remedy which Dr. Duckworth finds very useful, especially in the slight hæmoptysis of emphysema.

SEAMAN'S HOSPITAL, GREENWICH.

INJURY TO THE HEAD: SYMPTOMS OF FRACTURE OF THE BASE
OF THE CRANIUM: RECOVERY.

(Under the care of Mr. W. J. SMITH.)

We are indebted to Dr. W. Macfie Campbell, House-Surgeon, for the notes of the following interesting case.

Anton Petersen, aged 16, a Swede, was admitted into the Seaman's Hospital on November 16th, at 1.30 P.M. On the morning of the preceding day, he fell from the jibboom of his own ship on to the deck of another vessel, a fall of fifteen feet. He struck in falling the left side of his head, and was picked up insensible. When he was admitted, he was totally unconscious, paying no attention to what was going on about him, and took no notice when his name was called out. He was very restless, constantly moving from one side to the other. His legs and arms were flexed; his tongue was dry, and covered by a dark-brown fur. There was much bruising and swelling of the soft parts over the left mastoid process and the left side of the neck. He had a constant flow of blood from the left ear. A dry coagulum was found in the left nasal orifice. There was marked facial paralysis of the left side. The pupils were dilated, inaccessible to light, and he had convergent strabismus of the left eye. Pulse 140; temperature 99.4 deg. He was ordered three grains of subchloride of mercury with eight grains of compound jalap-powder.

November 19th. He had progressed favourably since admission. The skin was cool, and the sordes had disappeared from the tongue and lips. Consciousness seemed to be returning; but the patient still moved and rolled about in bed. His face was much flushed. There had been hæmorrhage from the left ear since the morning of the 18th; no serous discharge. Pulse 80; temperature 98 deg. On the following day, he had an attack of convulsions lasting for about twenty minutes.

November 21st. The patient was quiet, but still semi-conscious. He slept constantly, and took little or no notice of anything said or done

to him. The facial paralysis continued. The skin was hot and dry. Three grains of bromide of potassium with half an ounce of water were ordered to be given every three hours.

November 24th. He was in very much the same condition. Tongue cleaning. The facial paralysis was still very evident. Pulse 84; temperature 98.2 deg. He was still taking the bromide of potassium.

November 25th. Pulse 84; temperature 98 deg. This morning he was quite conscious: he answered when questioned, and looked better and more lively. From the last date the patient progressed favourably. The ecchymosis over the left mastoid region gradually disappeared, and no tenderness remained. The boy rapidly regained health and the use of his limbs, and on December 5th was able to get up and walk about the wards. The facial paralysis, however, was as well marked as at the date of admission.

On December 12th, the patient, in all other respects save the facial paralysis and slight deafness of the left ear, had recovered from the effects of the accident, and was in a very good state of health, both with regard to his bodily and his mental condition.

CHILDREN'S HOSPITAL, BIRMINGHAM.

CASE OF INTERNAL HYDROCEPHALUS TREATED BY PARACENTESIS.

(Under the care of Mr. C. J. BRACEY, M.B.)

THE child was four months old. The head was large at birth, and had continued to grow in spite of the use of pressure and of general treatment. It measured 21 inches in circumference; 15½ inches from the root of the nose to the occiput, and 14 between the tops of the auricles. The eyeballs were greatly depressed, more than half of the iris being hidden beneath the lower lid. Convulsions occurred three days after birth, but since then the child had only suffered from occasional twitchings, and now and then from constipation and vomiting; it was suckling, and though feeble and very thin, did not seem unhealthy. The mother has another child, which is quite healthy, and there is no reason to suspect the existence of any hereditary disease. The head was tapped twice a week, eight times in all, by means of a fine trocar introduced through a valvular incision in the skin at the coronal suture, an inch and a half from the middle line. Two ounces of clear straw-coloured albuminous fluid were taken each time; it flowed freely; pressure was at the same time applied—at first by strapping, afterwards by means of a capelline bandage.

No ill effects followed, and the head gradually lessened, losing nearly two inches of its circumference. Three days after the last tapping, the child refused the breast, and died the next day without convulsions, and, as it would seem from the mother's account, by exhaustion.

The head only was opened. The bones of the calvarium were found widely separated; the dura mater stretched between them was normal in appearance, and was not tense. There was scarcely any fluid in the subarachnoid space; but the lateral ventricles were expanded into a great cavity containing rather more than two pints of clear fluid. The corpus callosum was entire; but the septum lucidum was not present, and the fornix was separated into its two crura. The lining of the ventricles was unaltered; no disease could be discovered in the folds of the pia mater, but there was no communication between the third and fourth ventricles. The cerebral substance was expanded, and the convolutions flattened, but the section presented a natural appearance. The trocar had passed through the brain-substance one-third of an inch in thickness; but no scar or other sign of the punctures could be found.

The case shows that small quantities of fluid may be removed without ill effects, and that the brain may be pierced without giving rise to hæmorrhage or other evil consequences.

LEEDS PUBLIC DISPENSARY.

PULMONARY REGURGITATION.

(Under the care of Dr. EDDISON.)

FOR the notes of the following case we are indebted to Dr. J. Milner Fothergill, House-Surgeon.

M. J., aged 24, came under care in March for dyspnoea, with ascites and cedema of the lower limbs. At first, the case presented features of difficulty as to the causation. After some improvement, due to general treatment, a murmur was discovered at the second left intercostal space. In the absence of jugular pulsation and of any apparent distension of the right ventricle, together with the disappearance of the cedema, the murmur was deemed to belong to pulmonary aneurism. The age and sex of the patient, and the absence of circumstances (anterior) calculated to try the pulmonic circulation, militated against the diagnosis. The murmur

could only be heard over a very limited space. The patient was sent to the Leeds Infirmary under Dr. Clifford Allbutt. During her three weeks' stay there, the murmur became more prominent, and could be heard over the whole of the right ventricle. The pulmonary second sound, which had hitherto been prominent (a material evidence in the diagnosis), now became masked by the murmur; the aortic second sound at the second costal articulation being still clear. Dr. Allbutt decided in favour of the murmur being diagnostic of pulmonary regurgitation. In this opinion Dr. Eddison concurred. Though the treatment included rest in bed, and the administration of Virginian cherry-juice by Dr. Clifford Allbutt, in order to test its powers in comparison with digitalis, which it was determined to try afterwards, the case made no material improvement. At the end of three weeks, the patient returned home, under the care of Dr. Eddison. Home meant a cottage of two rooms—one upstairs and one below, occupied by a married sister of the patient with two children. Rest in an arm-chair was all that was practicable. The treatment then instituted consisted of fifteen minims of tincture of digitalis, five grains of trisnitrate of bismuth, half a drachm of acacia mixture, and half an ounce of infusion of calumba, three times a day. This was given with special reference to gastric disturbance. The patient now had ascites, and her feet were again both swollen; while intense dyspnoea was occasioned by the slightest exertion. In the course of a month, the ascites and swelling of the feet much diminished. In another month, the patient went into the country for a few days, continuing the treatment; and, on coming back, could walk the length of the street (one hundred and twenty yards) comfortably, by walking very leisurely. The treatment was then changed to fifteen minims of tincture of digitalis, ten minims of tincture of perchloride of iron, and half an ounce of infusion of calumba, three times a day. This was well borne, and the patient is now in Cookridge Convalescent Hospital with the following symptoms. Subjective: dyspnoea on any exertion, general debility, and incapacity for bodily labour. Objective: considerable increased dulness over the right ventricle and auricle, extending from the second right costal cartilage over the third and fourth, and from the base of the ensiform cartilage to the right apex; also, a diastolic murmur heard from the third left costal cartilage to the base and towards the xiphoid cartilage. The murmur is soft and blowing.

NEW BOOKS AND NEW EDITIONS.

THE *Descriptive Catalogue* (by Mr. ERASMUS WILSON) of the *Dermatological Specimens contained in the Museum of the Royal College of Surgeons** is a very careful and valuable account of the fine collection of models, casts, drawings, photographs, engravings, and preparations, which the author has presented to the Hunterian Museum, where they are open to the inspection of every member of the profession, and cannot fail to be of use to the student, as they are unquestionably of interest to the pathologist.

Dr. SCORESBY JACKSON's very handy, compact, and carefully written *Note-book of Materia Medica, Pharmacology, and Therapeutics*,† has lost none of its attractions in the hands of Dr. Angus Macdonald, who has re-edited it with great care and knowledge. Of course, such articles as Hydrate of Chloral, Carbolic Acid, etc., are altogether or nearly new. On the subject of Hydrate of Chloral, Dr. Macdonald observes that, inasmuch as the alkaline salts of the blood do not decompose chloral so as to give chloroform (Gamgee), and as the effect of a given amount of chloral is utterly disproportioned to what could be expected from the quantity of chloroform obtainable from it, "we are forced to confess, in spite of Dr. Richardson's opinion to the contrary, that Dr. Liebreich's theory is untenable; and that chloral must act in a special manner, and not as a simple producer of chloroform." The article on Carbolic Acid does full justice to M. Lemaire and Professor Lister, but hardly so to the labours of Dr. Crace Calvert (described here as Dr. Crum Calvert); nor to Dr. Sansom's sulphocarbolates. The considerable antiseptic properties of the fumes of sulphurous acid are passed over very lightly—hardly mentioned, indeed.

IN Mr. RICHARD BARWELL's *Lectures on the Causes and Treatment of Lateral Curvature of the Spine*,‡ he continues to entertain a very favourable opinion of the treatment by elastic traction and support. Further experience confirms the author in the conclusion that this mode of treatment is less irksome and more efficacious than the metallic appliances frequently used. In support of this view, he has much to say

that is worth reading. Independent testimony confirms the favourable opinions of the author.

Dr. ALTHAUS has made considerable additions to his very valuable *Treatise on Medical Electricity*,* theoretical and practical, and has especially developed the sections in which he treats of its use in the treatment of paralysis, neuralgia, and other diseases. It is no reproach to a very large number of practitioners, including many of the most able, well-educated, and industrious among us, that they have everything to learn from such a book as this, and are even repelled by an absence of the necessary knowledge of electro-physiology, on which electro-therapeutics are based. The defects of medical education have been such, that electricity as a part of physics was hardly till recently taught in any of our schools, and of electro-physiology and electro-therapeutics there was barely more than an occasional formal notice, if as much. One or two hospitals have electrical rooms now; and some teachers of "chemistry and natural philosophy", of medicine and materia medica, have included the different parts of the subject in their courses. We know not where else, however, than in this treatise of Dr. Althaus, to find an English handbook of medical electricity. Fortunately, it is at once clear, practical, and complete. We have reason to think it very trustworthy, and we could wish for it a very extended circulation. We some time since devoted a good deal of space to a review of electro-therapeutics, and cannot now enter into an elaborate criticism of Dr. Althaus's second edition; but we may honestly commend it as worthy of being in the hands of all thoughtful practitioners. The action of electricity is unquestionably one of the most hopeful fields of therapeutic research, and has been very inadequately worked, except by a few. Any one who masters the contents of this book will have the elements of critical judgment and responsible opinion on a subject which is generally either wholly neglected or taken on trust—two almost equally undesirable alternatives for any scientific method.

Dr. TILT has been a very earnest and a very faithful worker in the physiology and diseases of women, and has made contributions to the literature of the subject which are all of accepted value. His treatise on *The Change of Life*† has probably always been most popular. It is a full, careful, and yet gossiping treatise, founded on a very thorough search of the literature of the subject, and a careful digestion of clinical examples. It has, too, its own *cachet* of originality, and is altogether one of those books which do not fail to arrest attention and arouse interest, and which succeed in stamping the author as a good clinical observer and writer, even if they do not mark any definite progress in science. We do not attach the same importance as the author to his physiological inquiries; and we are not much enlightened by the general sketch of ganglionic pathology—a cloudy subject, which it does not to our mind render more distinct. But of this part of the work we shall hope to find an opportunity of giving a fuller analysis. On the subject of speculum-examinations, Dr. Tilt is emphatic, and his words are not without instruction to the "shrieking sisterhood" and their various abettors. "A digital examination is often perfectly useless and unreliable for the diagnosis of ulceration and of those various morbid states of the uterine mucous membrane that lead to ulceration. . . . If the ocular examination of diseases of the womb were to fall into disuse, all further progress of uterine pathology would be arrested. Nay more; it would soon retrograde to what it was before Recamier took it up, when uterine pathologists gave their chief attention to heteromorphous growths; when cancer was accepted as an ordinary result of chronic inflammation; when all forms of acute inflammation of the womb and the ovaries were considered the same disease, and called inflammation of the bowels; while chronic uterine affections, escaping detection, kept many women in a more or less constant state of ill-health."

Odd Showers. By CARRIBER.—A neatly got-up little work of forty-three pages, containing short and condensed explanations of the rain of insects, fishes, and lizards, soot, sand, and ashes, red rain, and snow, meteoric stones, and other bodies. These lectures are intended chiefly for the young. The subject has been handled in an effective and interesting manner by the author.

MESSRS. JOHN SMITH and Co. have brought out the 25th edition of the *Physician's and Surgeon's Visiting List* (for 1871.) It is also a diary, almanack, and book of engagements, and is arranged upon a plan furnished to the publishers by Mr. Seymour Haden. It is so really useful, portable, and convenient, that it deserves to be, what the publishers aspire to make it, "the daily and hourly companion of every practitioner in the kingdom".

* "Descriptive Catalogue, etc." London: Taylor and Francis. 1870.

† "Dr. Scoresby Jackson's Note-Book of Materia Medica, Pharmacology, and Therapeutics." Second Edition, revised, etc., by Dr. A. Macdonald, M.A. Edinburgh: MacLachlan and Stewart. London: Simpkin, Marshall, and Co. 1870.

‡ "The Causes and Treatment of Lateral Curvature of the Spine." By Richard Barwell, Surgeon to Charing Cross Hospital. Second Edition. London: Macmillan and Co. 1870.

* "A Treatise on Medical Electricity, and its Use in the Treatment of Paralysis, etc." By J. Althaus, M.D. Second Edition, revised and partly re-written. London: Longmans. 1870.

† "The Change of Life in Health and Disease." By E. J. Tilt, M.D. Third Edition. London: Churchill and Sons. 1870.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 17TH, 1870.

MEDICAL REFORM.

THE important correspondence between Dr. Rumsey and Dr. Waters, the Chairman of the Medical Reform Committee, will have attracted the attention of our readers. Dr. Rumsey refers, in the opening paragraph of his letter to-day, to our forwarding a proof of his letter to the Chairman of the Committee of the Association, and allowing the reply to appear contemporaneously with the letter. Under ordinary circumstances such a letter would be placed in the hands of a leader-writer for comment, which then would have been anonymous. As this is the Journal of the Association, and as the Association have appointed a committee specially to deal with this subject, the obviously best course was to place this communication in the chairman's hands for comment, he being most intimately acquainted with the precise series of facts to which Dr. Rumsey's letters refer, and with the grounds and shape of the policy which he discusses. The comment challenged by the letter thus appears with the signature of a representative member of the committee specially authorised to speak for the Association in the matter. Thus no doubt or mistake can occur, and the discussion is the more likely to be profitable, because we all know who are the parties to it, and whence the voice issues which undertakes to decide. This is not the precise moment for speech behind a mask on this subject; and anonymous contributions to it, whether as letters or bills, are little better than waste-paper.

Every member of the Association will, we think, be satisfied with the announced intention of the Committee to take an early opportunity of presenting its views in an affirmative form to the Government. The Government Bill of last year embodied most, but not all, of the opinions which have prevailed in the Association for some time. Dr. Waters recalls the fact that, while it was received with consternation in the first instance in the Medical Council, the only complaint of the Association has been, that it does not go far enough. This year we may hope for a more thorough measure. The great mistake which the Medical Council made was, in sober truth, to attempt to snub the British Medical Association, of which it had not then recognised all the political strength and earnestness. On the other hand, the very development of that power and the stern exercise of it which was made last year have devolved upon the Medical Reform Committee important political responsibilities, which they will certainly not fail to endeavour to fulfil with intelligent energy, tempered by a sense of the many-sided difficulties of their task. In the present disorganisation of Colleges and Corporations, all pulling different ways, and each for the most part looking out for itself, the British Medical Association is the only professional body possessing any political independence and coherence, or embodying a representative principle, which can approach the Government. Nearly every other body—except some of the Universities—is fighting for privileges and charters which benefit only small numbers of privileged persons. As to the Medical Council, Dr. Rumsey has pronounced its doom: “nothing could be more absurd than to expect it to reform itself.” Every one agrees that it needs reform; even itself concurs in that opinion. Therefore the reform must come from without. Except from the Government on the one hand, and the British Medical Association—the only existing large medical representative body—on the other, we see no source from which it can come. The Council will not propose its own remodelling. The Cor-

porations will not propose the extinction of their individual rights of representation each by its own delegate. The scheme can only be arranged by agreement between our Association and the Government; due regard being of course shown to the existing institutions, and their highest interests being consulted. We shall hope to be able to report progress before very long.

THE COLLEGE OF SURGEONS OF ENGLAND.

THE proceedings of the last meeting of the Council of the College of Surgeons included matters of interest. When the minutes of the Court of Examiners were read, it was resolved that Dr. Bennett be informed, in reply to the memorial from himself and other Fellows and Members of the College, that, after a further careful examination of the two published reports for the consecutive years 1868 and 1869, relating to the Sydney Infirmary—the one forwarded by the secretaries to the Institution and the other by the memorialists—the Council find that the opportunities for practical medical and surgical instruction afforded by the Infirmary are not in conformity with the regulations of the College both with respect to the number of patients and the nature of the medical and surgical cases under treatment; that the Council therefore rescind their resolution recognising certificates of attendance on the practice of the Infirmary; and that, with regard to the curriculum of professional education proposed to be established in connection with the University of Sydney, the question of its recognition will not arise until the contemplated arrangements shall have been fully and satisfactorily carried out. It was proposed that, as recommended by the Court of Examiners in the case of students natives of India, the matriculation examinations of the Universities of Calcutta, Madras, and Bombay, be recognised as equivalent to the preliminary examination for the Fellowship of the College, when the certificates of having passed the same shall, in addition to the several compulsory subjects thereof, contain evidence that the candidates have passed in Latin, French, or German, and in lieu of Greek, in one of the Eastern languages included in the lists of the respective Universities. But an amendment was carried, on the motion of Mr. Quain and Mr. Curling, that the foregoing resolution be adopted, with the omission of the words “French and German”. It was further resolved that candidates for the preliminary examination for the Fellowship be in future allowed to take up at their option either French or German as one of the subjects of the examination.

A letter was read from Mr. Simon, resigning his seat as a member of the Committee on the Conjoint Board, in consequence of his not being able to attend evening meetings at this time of year.

Sir William Fergusson, the President, submitted to the consideration of the Council a proposal to form, at a reasonable expense, a collection of surgical instruments and appliances, both ancient and modern, to be added to the museum of the College. The proposal being approved, it was referred to the Museum Committee to consider the best mode of carrying the same into effect.

A letter from Mr. W. K. Sullivan, Secretary to the Royal Irish Academy, was read, enclosing a copy of a memorial to the Government in reference to the loss which would be sustained should the works of science and art in Paris be destroyed, and soliciting the co-operation of the College in supporting its object. The President and Vice-Presidents were requested to reply thereto.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

VI.

On the Argument that Examinations must not be made too strict.

It is sometimes argued that the requirements of the ordinary Examining Boards for their ordinary degrees must not be strict, and that a very moderate standard of excellence is quite good enough to be demanded of the ordinary practitioner, who is supposed, by-the-bye, to be going to “practise” where no great amount of learning is required, say in

Africa. But the argument is surely very unsound, and for these reasons. In the first place, it is not true that a man can be fit, as regards *professional* knowledge, to practise on one tribe of his fellow-men and not on another; and, in the next place, the gentlemen supposed to be *African* in their capabilities (if we may be allowed the metaphor) may, and often do, decline the station in life for which they are thought to be eminently qualified, and take up instead a more prominent position—a position, moreover, in which their qualities, assumed to be representative of the profession to which they belong, are keenly appreciated by an admiring public.

It seems scarcely worth while to refer to the obvious facts connected with this subject, that the social status of a profession depends on the culture and work of its individual members, not on the nature of the profession; that every member, therefore, is deeply concerned, personally, with the qualifications of his fellows, inasmuch as they will reflect credit or discredit on himself; that it is his interest to prevent, by all means in his power, the entrance of those who will lower the average of excellence—the general estimation in which a profession is held being only an average struck for several individual and conflicting opinions; that, in proportion to the strictness with which the barriers of entrance to a society are guarded, will be the worth of the situation to those who pass them. All this would be too trite even for reference, were it not that exactly the opposite conclusion to that naturally resulting from these facts appears to be the one at which certain Examining Boards have arrived.

But that this should be the case, that the motto of certain Universities and Corporations should be, "Pass many and pass them easily", is very natural: wrong it may be, but natural. And so long as there exists the element of competition, combined with the fact that examination-fees are the life-blood of the bodies in question, matters will remain as they are, notwithstanding all the legislation in the world. The fault is the fault of the system, by means of which these bodies (competing one with another) earn their bread by the sale of diplomas; and the line will be drawn, or will tend to be drawn, as in other commercial transactions, just where the numbers applying on account of the cheapness of an article begin to be balanced by a falling off of customers on account of its worthlessness when obtained; other things naturally entering more or less into the consideration, as, for example, the loss of *prestige*, the pressure of public opinion, individual notions of right and wrong, and the like, on the one hand; and, on the other, the difficulties of altering long-continued habits and customs of examinations, the difficulty of resisting the natural tendency to get money (not for *personal* use) easily and quickly, and many other considerations too numerous to mention. All arguments about venality, corruption, and the like, are beside the mark, and probably prevent reform by their exaggerations. The individual governing members of Universities and Corporations are at least as honourable as other men; but the body which they collectively form believes—honestly enough, but without taking the trouble to analyse the mental action of belief—in a certain individual and varying standard of proceeding, and the evil will never be remedied until the removal of its cause.

It may be said that the argument fails because there are notable instances of prosperity with high standard of examination, and that the higher the standard the greater the prosperity, on account of the increased *prestige* of the diplomas. And this is true; but the fact that it is in the end more profitable for people individually or collectively to do this or that, is a very unsafe foundation for the belief that it will be done. In the instances referred to, moreover, the prosperity, pecuniarily, is probably not nearly so great as in the case of Corporations held in fair esteem, with only moderate examination requirements.

As it is said that the tests at ordinary diploma-examinations should not be too strict, because men must be provided for certain inferior kinds of practice, so, it is sometimes added, they must not be made very strict, because "if you do the majority of them would not pass at all". Exactly so; but, due notice having been given, would not this be a capital thing? The temporary lack of medical practitioners would lead

at once, as with other articles of commerce, to a higher value of such as were in the market; and the demand for more would lead certainly to a supply of what was wanted, for the simple reason that, the prizes being higher and proportionally more numerous, there would be a greater struggle to enter a profession which held them out; and if one man could not enter, another would.

There can be no doubt that the preliminary tests of general and scientific knowledge required of candidates about to enter the medical profession are not strict enough. The argument already referred to is used over and over again. "Examinations must not be too strict or nobody would pass them." It is unnecessary to repeat what is the evident answer to such statements: but it may be remarked, as an additional counter-argument, that it would save much trouble to students and their friends if the preliminary tests were at least strong enough to keep out of the medical profession altogether men who are positively deficient in mental capacity. The very fact (if it be one) that half-witted men are now occasionally prevented from entering the profession from incapacity to pass the preliminary examinations, is a proof of the value of the test even as it exists at present, although it is a proof also of the inefficiency of a standard which only to the half-witted is formidable. It is of course true that very stupid men are to be found even in the ranks of those who pass the strictest preliminary examinations. But the very stupid form a minority, and represent a much larger number who, instead of just scraping through, were rejected. It is also true that, by plodding, almost any man can pass in time any examination, however difficult; but no great harm is done by this. The fact that a man can surmount great difficulties goes far to make up for original mental defects, while the same difficulties remain insurmountable to him who possesses no such compensating qualities. In both instances, moreover, the difficulties, whether just surmountable or not, are efficient as a warning to others.

DR. DEBUS, F.R.S., has been appointed Examiner in Chemistry in the University of London, *vice* Dr. Matthiessen, F.R.S., deceased.

MR. HAVILAND will deliver his lecture on the Geographical Distribution of Health in England and Wales, at St. Thomas's Hospital, on Monday, December 22nd, at 4 P.M.

DR. RUSSELL, Lecturer on Chemistry at St. Mary's Hospital, has been appointed to the Chair of Chemistry at St. Bartholomew's Hospital, lately occupied by Dr. Matthiessen; who also, up to the time of his appointment at St. Bartholomew's, filled the Chair at St. Mary's.

BIRMINGHAM SCHOOLS' OLD STUDENTS' DINNER.

OUR Birmingham correspondent writes:—On December 8th, a dinner of the Council, professors, and old students of the Birmingham schools of medicine was held at the Great Western Hotel, Birmingham. The Earl of Lichfield, President of the Queen's College, took the Chair, and over ninety of the professors and old students were present. Many of the latter had travelled considerable distances, for the sake of old associations and old associates. The usual loyal and complimentary toasts were drunk, and *Floreat Collegium Regine* was proposed by the President, and answered to by the Warden, Dr. Espin. A very agreeable evening was spent; and it was thought that an annual dinner of the kind would assist in keeping up professional unity, in promoting friendly association between old students, and in extending the influence and importance of the schools of medical education in Birmingham.

DR. MAPOTHER'S ADDRESS.

THE highly complimentary notice of American medicine by Dr. Mapother, which lately appeared in our pages, has not failed to attract the attention of medical writers in America, who rub their eyes in astonishment, and ask if it can be true that the "clinical mode of examination is universal in America"; that a student is usually required to "act as dresser under the house-surgeon, who is responsible for his instruction"; that all the junior offices in American hospitals are "won by

competition"; that nearly every town and every city has "an excellent system of inspection, including speedy prosecution of those who spread catching diseases, directed by a medical officer"; that in Harvard University, owing to the absence of any other competing school, the fees are sufficiently large to repay the professors for all their time; and that it is a common thing in these "high pressure" States to have a summer session "for similar work to that of winter", the prevailing source of complaint having been that, with a few exceptions, the single, brief four months course of American Colleges was insufficient to prepare men without previous training for the practice of medicine. In all these respects Dr. Mapother has courteously taken for granted a much better state of things than really exists. But the extremely favourable view which he is desirous to take of all he saw has lent additional weight to the points which he mildly censures; and all that he has to say on violation of copyright and rampant quackery in the daily papers, and downward competition of schools, is fully admitted.

ELEGANT PHARMACY.

A WRITER in the *Pharmaceutical Journal*, describing the state of pharmacy in America, says:—The art of skilfully preparing medicines, whereby they become less nauseous in taste, more easily digestible, or more permanent and convenient in form, is largely practised under the name of "elegant pharmacy." Combinations attaining any of these results are in much request, and are welcomed eagerly by the physicians, who continually order them in their prescriptions. A large increase of business accrues to the ingenious pharmacist, not only from his own city and State, but from the whole Union. Orders for these preparations are entered one after another in an order book, from places as remote from the pharmacist's city as St. Petersburg and Madrid, Vienna and Paris, Rome and Christiana are remote from London.

DUST AND DISEASE.

IT is announced that, to enable Professor Tyndall to join the eclipse-expedition to Oran, the *conversazione* of the London Institution, announced for December 21st, has been postponed until Wednesday, January 25th, 1871, when he will deliver his promised lecture on Dust and Disease. It may not be inopportune meantime to quote the following passage from Dr. Gull's late Harveian Oration at the College of Physicians, which has just been published in a complete and separate form.

"We have lately been rather blamed for not gratefully and more fully accepting the germ-theory of disease; but to this College the theory is not new, and, I think I may add, has not been proved to be true to the extent its more zealous supporters believe. It will be in the remembrance of many present, that in the year 1849 a theory was put forth that epidemic cholera was due to fungi and their germs. Peculiar bodies, it was said, had been found in the rice-water evacuations, and also in the air and drinking-waters of the infected localities. It was confidently asserted that we had substantial facts in support of the theory, and that it fulfilled the conditions required of being both true and sufficient. This College thought the subject of such moment, that a subcommittee was formed from the Cholera Committee of that day for its investigation. The drinking-water of infected places was examined; the air of rooms in which cholera patients were dying was condensed, that it might afford whatever floated in it for examination; dust was collected from cobwebs, window-frames, books, surfaces of exposed food, and every imaginable place, to try it for cholera-germs. The rice-water stools and the intestinal evacuations passed in different diseases were scrutinised without stint of labour; but the value of the facts put forth by the promoters of the theory gradually faded under the inquiry. The supposed germs, when really germs (for many shapes had been included in the supposed direful growth), were found to be spores of known harmless fungi and confervæ, of which, if even the startling number of thirty-seven and a half millions should be contained in about two drachms of water, as quoted by Tyndall, from Mr. Dancer's examination, it is probable that the whole or repeated units of such millions might be harmlessly swallowed. But for the most part the supposed germs were not germs of any kind, but broken scraps of vegetable and animal tissues, spiral vessels from dried horse-dung, hairs, wings, and legs of insects, detrita of dress, and the like. The re-

sults were, in fact, entirely negative of any peculiar bodies to which the epidemic disease could be referred. One general result arrived at at that time, however, agrees with the observation of Tyndall in his recent investigation of dust by a beam of light—viz., that the floating particles in the air are chiefly of an organic nature. This we might have been prepared for, from the specific weight of dried organic material, enabling such dust to float, when the heavier inorganic substances would be deposited. That infectious diseases, as the name imports, spread by emanations from the sick, must have been long known; and that such emanations are of a solid nature, we may infer from the fact that they may be dried and conveyed from place to place; but in what state, whether as amorphous material or as germs, we know no more to-day than was known a thousand years past. No new fact bearing upon the propagation of contagious diseases has been reached by the recent investigations on dust. We cannot infer that summer catarrh is due to infusoria, because the nasal mucus formed in the disease, and at no other time (?), was found peopled by vibriones, since decomposing mucus is generally populous with these infusorial creatures. The phenomena of fermentation and putrefaction in dead and decomposing substances afford no explanation of the changes observed in a living body in a fever-process. The purulent matter produced in small-pox is not in any way comparable to the yeast-plant, growing in fermenting fluids. The microscope shows no forms in variolous pus which are not contained in other purulent innocuous exudations. It is to be regretted that a confusion in terms has been made. Instead of dust and disease, it should rather have been dust and putrefaction, or dust and fermentation, since the relation of dust to disease has not been revealed any where in the inquiry. That the air conveys the material causes of infectious diseases from the sick to the healthy, is a notorious fact, which had equal force before these inquiries were instituted, though, owing to the exigencies of social intercourse, it is a fact now more neglected than in times of comparative ignorance."

The researches of Mr. Lewis on the so-called cholera-fungus, which we lately analysed, confirm the conclusions of the Cholera Committee of the College to which Dr. Gull refers.

ERBSWURST.

THIS new and famous food for conquerors, on which the German armies rely for sustenance when requisitions fail, and which meets us at every turn in the letters of correspondents, is the subject of an article in the *Polytechnischer Journal von Dingler* (second number, for October 1870). The *Erbswurst* is a peas-pudding sausage, made of a mixture of bacon, peculiarly prepared pea-flour, onions, and other ingredients, inclusive of salt. The Prussian War Office has created an establishment at Berlin capable of producing daily seventy-five thousand sausages made of this preparation. The sausages are sent away to the armies packed in boxes containing from one hundred to six hundred, weighing one pound each: they only require to be boiled in water for a very short time to be ready for the use of the soldiers. The daily ration of each soldier is a sausage of one pound—a quantity quite sufficient for each man. This establishment, working only for the armies, costs daily about £6,000. The process by which the preparation is prevented from turning sour when kept is the discovery of a Berlin cook named Grünberg, who is said to have received the sum of £5,555 for his secret.

HAIR-DYES AND COSMETICS.

DR. CHANDLER, Health-Officer of New York, has examined chemically, for the Board of Health of that city, a large number of hair-restoratives, enamels, skin-powders, etc. The inquiry arose out of some cases of lead-palsy occurring in the practice of Dr. Lewis Sayre of New York, which were traced to the use of a cosmetic called Land's Bloom of Youth. Dr. Chandler found that the preparations he examined contained acetate and carbonate of lead, corrosive sublimate, and bismuth, in variable quantities. In all the hair-restoratives, lead was present. The skin-powders were comparatively harmless. The enamels, however, were of a very deleterious character. The following is the result of analysis, showing the quantity of salts of lead in each fluid-ounce:—1, Clark's Restorative, 0.11; 2, Chevalier's Life for the Hair, 1.02; 3, Circassian Rejuvenator, 2.71; 4, Hair Vigour, 2.89; 5, Wood's Hair Restorative, 3.08; 6, Hair Restorer of America, 3.28;

7, Gray's Hair Restorative, 3.39; 8, Phalon's Vitalia, 4.69; 9, Vegetable Ambrosia, 5.00; 10, Mrs. Allen's Hair Restorer, 5.57; 11, Indian Hair Tonique, 6.29; 12, Sicilian Hair Renewer, 7.13; 13, Physiological Hair Regenerator, 7.44; 14, Martha Washington's Restorer, 9.80; 15, Singer's Hair Restorative, 16.39.

NITROUS ETHER.

PRESCRIBERS must not be greatly surprised if they do not always find their prescriptions containing spiritus ætheris nitrosi produce the desired therapeutical effect. According to Mr. Alfred B. Tanner, most of the wholesale houses send what they term solutio ætheris nitrosi, 1 to 7, for the purpose of making up spiritus ætheris nitrosi. This tempting article he has known to be used in the proportion of a drachm to every ounce of spiritus ætheris nitrosi ordered; the other tincture ordered in the mixture being trusted to make up the requisite amount of spirit. On examining a specimen labelled very exactly as follows: "Solut. ætheris nitros.—1 part added to 7 parts of spiritus vini rect. (56 per cent.)" forms the spiritus ætheris nitrosi of the *British Pharmacopœia*—he found that this compound was really only one per cent. above the strength of the ordinary Pharmacopœial preparation. The Pharmacopœial process is neither expensive nor difficult.

PRESCRIBERS AND PHARMACISTS IN AMERICA.

MR. HOWDEN, writing in the *Pharmaceutical Journal* on this subject, says truly: "No physician—the generic term for the whole body of medical practitioners—sends out his own medicines. He invariably writes prescriptions. On the other hand, no pharmacist prescribes. He carefully and scrupulously abstains from doing so; and this is the universal and national custom in all the States, with few and rare exceptions on the part of depraved members in either profession. The physician is very jealous of his prerogative, and will occasionally endeavour to prevent a pharmacist from repeating a prescription unless a second fee has been received by him. *That a copy should be given for the use of the patient's friends, he regards as an outrage.* No prescriptions are returned to the patient, but are preserved pasted in a book, by the chemist who first dispenses them. The physician's fee is generally twenty shillings for a first consultation, and eight shillings for every subsequent one; lower fees are taken from the less affluent classes. The pharmacist generally charges about sixpence an ounce for medicines—that is, three shillings for a six-ounce mixture." This custom of retaining prescriptions is universal. We have already referred to legal opinions given in America, that the prescription is given by the physician for the particular condition existing at the time, and is a direction for the moment. It is to be taken to the chemist for use at that time, and ought not to be used at any other time, except by the permission and advice of the prescriber, who has a right to expect to be consulted on each occasion and paid for his advice. There is at present a prevalent abuse in this and other "old countries" of retaining a physician's prescription for perpetual use, and hawking it about amongst friends, often much to the damage and material loss and frequently to the injury of reputation of the prescriber. His "medicine" is found to be good for nothing by people for whom it was never intended, and is not suited; and his skill is depreciated by persons who have given it no fair trial, and who have cheated themselves in trying to get the best of him.

THE SHARPEY MEMORIAL.

THE Committee who have undertaken the task of raising a fund for the purpose of establishing a memorial of Dr. Sharpey, the highly esteemed Professor of Physiology in University College, have just issued a report to the subscribers. We reproduce here a large portion of the report; feeling assured that the many old pupils and friends of Dr. Sharpey who exist among our readers, will have pleasure in adding their contributions to the fund which is being raised for the purpose of honouring a highly esteemed teacher, and at the same time providing a means of promoting the advancement of science in this country. The original idea was, to collect a "Memorial Fund", the interest of which should

be enjoyed by Dr. Sharpey during his life, and afterwards be applied to the establishment of a travelling studentship or scholarship in University College, bearing Dr. Sharpey's name. He, however, declined to accept any pecuniary advantage; and, with his assistance and advice, the Committee have determined to endow a "Physiological Scholarship" in University College, the holder of which, "The Sharpey Physiological Scholar," must be, or have been, a Student of the College, and will have duties assigned to him in the Laboratory of Practical Physiology, under the supervision of the teacher or professor in that department. These duties, so far as they can be now defined, will consist essentially in aiding the Professor of Practical Physiology, in helping to instruct the pupils of his class, and, as opportunities arise, in undertaking original physiological and anatomical researches. The mode of election of the Sharpey scholar, the period for which the office is to be held, the emoluments, the necessary conditions and restrictions attached to the appointment, with other details, will be arranged in concert with the Council of the College; and a special provision will be made for the occasional modification of the regulations, if any change should become necessary. Dr. Sharpey, moved by this proposition to carry out an intention which he had previously contemplated, has liberally offered to present to the College his Anatomical and Physiological Library, consisting of the best works of the older anatomists, a useful series of foreign scientific periodicals, and a large number of monographs by the most active and learned observers of modern times. This very valuable collection Dr. Sharpey will give during his lifetime, and in perpetuity, to the College, on condition that proper accommodation and care be provided for it—a condition to which the Council has readily acceded. These books will be placed in the New Classroom, which is to be fitted up for the course of Practical Physiology, and which it is proposed henceforth to designate the "Sharpey Physiological Laboratory and Library," in analogy with the "Birkbeck Chemical Laboratory." In this room, the "Sharpey Library" will be accessible to students, the "Sharpey Physiological Scholars" will work for "the promotion of Biological Science," and the practical instruction in Physiology will be conducted. Thus strengthened, the physiological department in the College may be expected to assume a position even higher than that which it has hitherto enjoyed, and so become a School of Physiology equal to the most celebrated of those which exist in other countries; whilst the newly organised Physiological Laboratory and Library will constitute a very appropriate permanent memorial of Dr. Sharpey, to whom, especially considering his disinterested position and his generous gift, it will form, all will hope for many years, a source of unalloyed satisfaction. It is further proposed that a portrait of Dr. Sharpey should be placed in the "Sharpey Physiological Laboratory and Library." On the amount of the Memorial Fund collected, it will depend whether a *bust* of Dr. Sharpey should be obtained for presentation to the College; and, also, whether a *medal* should be struck, a silver copy of which might be presented to each "Sharpey Physiological Scholar", whilst bronze copies would be obtainable by those who desired them. Considering the strong feeling of personal regard for Dr. Sharpey, which prevails universally amongst those who have had the advantage and pleasure of his teaching and friendship; considering, also, the debt which so many owe to him for the breadth and solidity of his teaching; and, lastly, the services which he has rendered to medical science and education generally, it is anticipated with confidence that, not only all those who are attached to Dr. Sharpey by the closer ties of pupilage or friendship, but also many who have been associated with him in other labours, will contribute to this fitting and lasting recognition of the services of so eminent and esteemed a teacher, friend, and colleague. Subscriptions amounting to £1,825 have already been collected or promised. Further contributions, specified as for the "Sharpey Memorial Fund", may be paid, either to the London and Westminster Bank, 4, Stratford Place, W., or to the Treasurer, the Honorary Secretaries, or any member of the Subcommittee. The Committee consists of about two hundred members. The members of the Subcommittee are:—W. Henry

Allchin, M.B., University College, W.C.; Dr. Charlton Bastian, M.D., F.R.S., 20, Queen Anne Street, W.; Dr. W. Carr, M.D., Lee Grove, Lec, Kent; Edward Enfield, Esq., 19, Chester Terrace, Regent's Park, N.W.; Sir William Jenner, Bart., M.D., F.R.S., 63, Brook Street, W. (*Treasurer*); Professor Malden, 54, Russell Square, W.C.; John Marshall, Esq., F.R.S., 10, Savile Row, W. (*Secretary*); Dr. Quain, 67, Harley Street, W.; Dr. J. Russell Reynolds, F.R.S., 38, Grosvenor Street, W. (*Secretary*); Dr. Sidney Ringer, 15, Cavendish Place, W.; Erasmus Wilson, Esq., F.R.S., 17, Henrietta Street, Cavendish Square, W.

RESULTS OF THE CONTAGIOUS DISEASES ACT.

WE are informed that in the 1st Battalion of Coldstream Guards stationed at Windsor, in the months of September, October, and November, 14 cases of venereal disease occurred, viz., 8 of syphilitic sores, and 6 of gonorrhœa; while in the 2nd Battalion of the same regiment, stationed in London, during the same three months, 68 cases occurred, viz., 36 of syphilitic sores, and 32 of gonorrhœa. The contrast is instructive.

THE ROYAL COMMISSION ON THE CONTAGIOUS DISEASES ACT.

THE Royal Commission on the Contagious Diseases Act has commenced its sittings, and is taking evidence. We understand that they intend not to go out of London, and to work vigorously with the view of reporting in time for legislation next session if necessary. The Commission have commenced by examining the Devonport Dockyard Police. The medical evidence will not be taken till after Christmas, but a large number of witnesses will be called. The opponents and the promoters of the Act are allowed each to have a representative present during the examinations of witnesses, not to speak, but to advise privately with avowed partisans of their views.

FEVER AT MERTHYR.

THE Merthyr Board of Guardians have had under their consideration the costly and fatal prevalence of fever in their district. In that town and in Aberdare, since the spring of last year, they have had no fewer than 300 cases of fever, 202 of which, according to Mr. Simon, were entirely traceable to importation by one man, from whom the infection spread in a way that, it was stated, can be shown, man from man, house from house, day by day. During the last six weeks, £75 have been spent on relief to fever-cases. Putting aside the much greater indirect loss, the suffering, and loss of life, it would evidently have been much cheaper to provide means of isolation in the first instance. Unless prompt measures be taken, still greater harm must follow. The Medical Officer of Health of Merthyr, Mr. Dyke, is well known in our Association as one of the ablest sanitarians in the kingdom; and if the Guardians and Board of Health would give him *carte blanche*, and act always promptly and permanently on his advice, they might count on a great saving of life and an ultimate economy of rates.

PROPOSED FEVER HOSPITAL AT LEICESTER.

THE best plan for supplying additional means of treating cases of contagious fever and small-pox is being discussed with considerable warmth at Leicester. We have already referred to the exertions of Dr. Barclay towards this very desirable end. Dr. Barclay wished that cottages should be erected for the purpose on the grounds of the Infirmary. Dr. Marriott and others wish to have a separate hospital erected out of the town limits: and a public meeting has been held on the subject. Both parties seem agreed that the cottage principle should be adopted. Dr. Marriott quotes Sir William Jenner on the impropriety of accumulating patients in a small area, and the dangers of infection. It does not appear, however, that it had been laid before Sir William Jenner that there is in connexion with the Infirmary an open area of five-and-a-half acres of ground. Dr. Acland, to whom the facts together with this information have been communicated, is of opinion that no one can doubt the perfect safety with which distinct buildings could be erected in so large an area. It is little to the purpose to urge,

as was done at the meeting, that no such buildings have been supplied for London hospitals. None of them have any such space at command, and the permanent demands for fever-accommodation in so large a population make a much more urgent demand for permanent staff and buildings for fever on a separate organisation than is, we hope, likely to be the case at Leicester. The vote of the meeting was not, in our opinion, according to the weight of evidence. The more costly plan is not always the better. We think, in the face of the facts, that Dr. Barclay's plan is the more likely to be kept in effective working order. But the question is one which requires local knowledge, and opinions from a distance are of no great value. The best plan will be for those interested to get the opinion of one of the inspectors of the Privy Council, to be nominated by Mr. Simon, or of such a practical authority as Sir William Jenner, Dr. Acland, or Dr. Murchison, after he has viewed the places and seen the plans.

BOARDING OUT OF PAUPER CHILDREN.

IN reference to the new system of boarding out pauper children, and the suggestions made as to the establishment of a central committee in London, and district committees in the provinces, to provide the necessary voluntary assistance towards obtaining suitable persons to take charge of the children, and to exercise supervision, Mr. Curgenvin wishes us to state that the newly formed Infant Life Protection Society proposes to accomplish this work. This Society has prepared a Bill "For the Better Protection of Children," embodying its first object. This Bill was placed in the hands of the Home Secretary by a deputation from the society, with a desire that the Government will see fit to bring in a Bill on the principles therein suggested. Should the Government decline to bring in a satisfactory Bill, this society will be prepared to appeal for public and Parliamentary support towards carrying a Bill through Parliament by the hands of a private member of the house during the coming session. The society is about to issue an appeal to ladies and gentlemen interested in its objects to join the society and assist in the formation of district committees, to aid in the supervision of "boarding out".

THE WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.

WE mentioned last week the regrettable demise of this useful little Society, which has gathered many distinguished men at its rooms, as will be surmised from its list of Presidents, and which furnished an excellent library and reading-room for the neighbourhood. A correspondent furnishes us with the following additional notes, which will at least be useful to the medical historian. In October 1845, Mr. Barnes, of the King's Road, Chelsea, invited a few medical friends to his house to consider the possibility of establishing a Library for Chelsea and the neighbouring districts. In March 1846, a Provisional Council was named to form a Society and a Library. In April, a Society was formed "for the cultivation and promotion of medical knowledge"; also for the formation of a Medical Library. Sir James Clark was chosen President, and Mr. Barnes Provisional Secretary. In the first year, sixty members joined the Society. The Presidents were elected for two years; they have been the following: Sir James Clark; Sir Benjamin Brodie; Dr. Robert Lee; Dr. G. A. Mantell; Dr. J. A. Wilson; Mr. Samuel Lane; Mr. Barnes; Dr. Seaton; Dr. Barclay; Mr. Pollock; Dr. Fuller; and Mr. J. R. Lane. The Society was chiefly indebted to Dr. E. C. Seaton for the efficiency of its organisation and its good working. He acted as Treasurer for many years. The Society was given up in consequence of the landlord of the premises having given the Society notice to quit their rooms, and the Society finding other rooms in the neighbourhood beyond their means, combined with a falling off in their income. The number of members never at any time exceeded seventy; but, at the time of dissolution, only forty could be depended upon. The library, which was a very good one, and well supplied with series of periodicals, was, as we have stated, offered to the Medical School at St. George's Hospital, and accepted by it, on the condition that the members of the Society should be admitted members of the hospital library.

CHOLERA IN ST. PETERSBURG.

THE official reports of the cholera epidemic in St. Petersburg state that between the 17th of August (the day on which the cholera made its appearance) and the 28th October, there had been 1269 cases, distributed as follows:—

		Males.	Females.	Totals.
Cases	...	877	392	1269
Recoveries	...	424	197	621
Deaths	...	369	167	536

There were still under treatment on the 1st of November 66 males and 22 females, making a total of 88 cases.

MEDICAL STUDENTS.

THE return from the provincial schools of gentlemen attending the anatomical classes has only just been completed by the addition of that from the Cambridge University School, where there appear to be 21, making, with those at the other seven recognised provincial hospitals, already published in the BRITISH MEDICAL JOURNAL, a total of 378, or, with the 1324 gentlemen pursuing their studies in this metropolis, a grand total of 1702, being an increase over the corresponding period of last year of 141. The following return will, no doubt, be read with some interest by provincial and metropolitan teachers, as showing the changes during the past ten years.

Years.	Metropolitan Schools.	Provincial Schools.	Total.
1860.....	1128	333	1561
1861.....	1116	258	1374
1862.....	1045	248	1293
1863.....	1020	214	1234
1864.....	995	247	1242
1865.....	1013	249	1262
1866.....	1027	258	1285
1867.....	1125	257	1382
1868.....	1194	284	1478
1869.....	1231	330	1561
1870.....	1324	378	1702

QUARANTINE IN THE EAST.

THE quarantine is still kept up (according to the latest advices) in the East against ships arriving from some of the ports in the Black Sea and Sea of Azof. This has been done in consequence of the arrival at Constantinople of two ships from Taganrog, each having a case of cholera on board.

THE BRIGHTON MUSEUM.

THE Committee of the Brighton Museum have instituted a short series of popular and conversational lectures on the contents of the museum. On Monday of last week some lucid and popular explanations were given in the geological, entomological, antiquarian, economical, and sanitary departments. The lecture on food was very instructive, and, with the others, created much interest.

SCOTLAND.

THE EDINBURGH ROYAL INFIRMARY BUILDINGS AND THE UNIVERSITY.

WE understand that arrangements have been made whereby the University will be enabled to secure the old Infirmary buildings. The purchase price is about £21,000.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

The following gentlemen have been elected Office-Bearers for the coming year:—*President*—Professor Bennett. *Vice-Presidents*—Dr. James Keith, Dr. Matthews Duncan, Professor Lister. *Councillors*—Thomas R. Fraser, Dr. J. D. Brakenridge, Dr. A. G. Miller, Angus Macdonald, Dr. James Fraser, Dr. John Chiene, Dr. C. I. ves, Dr. Wyllie. *Treasurer*—Dr. George W. Balfour. *Secretaries*—Dr. Argyll Robertson, 40, Queen Street; Dr. Claud Muirhead, 7, ... at Row.

EDINBURGH: MEDICAL EDUCATION OF WOMEN.

OUR special correspondent writes:—After a brief lull in the question of female education in medicine, attention has been again directed to the subject by a petition addressed by the medical students to the Royal College of Surgeons, requesting them to put a stop to mixed classes. This the College have declined to consider, simply because they, as a body, have no power of this kind over the individual lecturers of which the School is composed. We understand, however, that a brief but expressive motion by Dr. Andrew Wood is to be discussed at a special meeting of the College called for next Monday, December 19th. If it be passed, as it is expected to be by a large majority, it will show that the sense of the College is like that of the bulk of the profession here—very strongly against *mixed* education of young men and women in anatomy, surgery, and midwifery.

GLASGOW MATERNITY HOSPITAL.

ON Monday last, George Buchanan, M.D., Professor of Anatomy in Anderson's University, was appointed Consulting Surgeon to the Glasgow Maternity Hospital; and J. G. Wilson, M.D., F.R.S.E., Professor of Midwifery in Anderson's University; and R. D. Tannahill, M.D., F.F.P.&S., Physician-Accoucheurs to the Hospital. The statistics of this hospital for the last year have been made public at a meeting held lately, at which Dr. Fleming, President of the Faculty of Physicians and Surgeons was in the chair. They show that during the year 337 women were confined in the hospital, while 833 were treated at their own homes, making a total of 1,170 cases. It is hardly necessary to observe that we have here an institution of great value in the education of medical students, and that we wish all success to Dr. Tannahill and his colleagues in the medical staff of the hospital. We also reciprocate the hopes of the chairman that the buildings may be at no distant date renewed. We are glad, meanwhile, that the funds for current expenses are in a prosperous condition.

IRELAND.

SURGICAL SOCIETY OF IRELAND.

THE opening meeting of the fortieth session of this Society took place on Friday evening, the 9th instant, in the Albert Hall of the Royal College of Surgeons, Ireland. There was a numerous attendance of the members and of visitors. The chair was taken by Dr. Albert Walsh, President of the Society, who likewise delivered the inaugural address of the session. In it he expressed the pride he felt in being elevated to the high position which he then occupied. He dwelt on the importance of such an association as the Surgical Society, tending as it did to produce an unity of thought derivable from a frequent intercommunion of experience; and, in concluding his address, he paid a merited tribute to the memory of the late Professor Geoghegan, who had ever taken a great interest in the welfare of the Society.

THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION, IRELAND.

DR. SPEEDY, 28, North Frederick Street, Dublin, has been appointed General Treasurer to this newly formed Association, and the annual subscriptions of 2s. 6d. are asked for at as early a date as possible. The regulations, which we have before published, have received a very wide approval from Poor-law medical officers in Ireland, who begin fully to appreciate the advantages of independent and united action. The circular letter, of which we have received a copy, says—

These regulations have been forwarded to every Poor-law medical officer in Ireland. The answers received are very numerous, fully approving of the scheme, and will be laid before the association at the first general meeting. It would be very undesirable, indeed, that this association should be considered to be antagonistic to any of the existing medical societies, many of which have been of great benefit to the profession; but the Poor-law medical officers of Ireland believe that their number and importance are such that they require an organisation for the advancement of their special interests, and what these are, they conceive that they themselves are the best judges.

NOTES OF THE WAR.

ADVENTURES OF AN AMBULANCE-SURGEON IN THE SORTIES FROM PARIS.

WE have been favoured with a perusal of a very interesting private letter from Dr. Rose Cormack, who is in surgical charge of an ambulance in Paris, and have been permitted to make the following extracts.

Last week was in many respects the most eventful, exciting, and laborious week of my whole life. This you will be able to understand at once when I tell you that I was in two great battles—on Wednesday, 30th November, and Friday, 2nd December. On both days, unavoidable circumstances—not likely to recur—placed me in great danger, as I shall now explain to you. I may premise, that I was not the only member of the surgical service subjected to peril. Several of the ambulance service were wounded on the two days I have named.

On Tuesday (29th November), I was out all day with my ambulance, and heard the roar of the battle, but was not in it. On Wednesday, from six in the morning till next day at ten o'clock, I was without intermission hard at work. At the latter hour, I returned with my patients to my own ward at Les Ternes. I slept some hours after this, and again joined the army. I returned to Paris about midnight of Friday, and have since been occupied with my patients. Probably I go out to another battle, expected in two or three days.

On Wednesday, I was with the right wing of Ducrot's army at Creteil. For some hours I was stationed very favourably for seeing a great part of the battle. The day was clear; I was for some time on the roof of a house in the midst of reserves of infantry and artillery, and quite out of danger. I had a good field-glass. Colonel Hicks, acting as *infirmier*, was with me. About eleven o'clock, we were ordered to the front—about a mile from where we had been mere spectators—leaving our wagons, and advancing with our stretchers and “*croix rouge*” flags to a place where there were heaps of dead and wounded. I was one of a party of four doctors and about forty carriers and other subordinates. I worked diligently, staunching blood, and placing those with broken bones so that they could be carried to the rear to our carriages. This was going on, when Hicks, with glass in hand, said “Doctor, you must look at this pretty skirmishing of the Prussians and then we must retire—the French are giving way in front of us”. I rose from the ground to take a peep, when a regiment began to pass our post into action. They had not been ten minutes clear off, and had only fired one or two rounds, when they were driven back: at first they retired in some order, but in a few minutes they were on us in a crushing crowd, and the Prussian fire was getting nearer and nearer. We had to leave our wounded; Hicks and I tried to carry one poor fellow who was on a *brancard*, but after a few yards there was nothing for it but to leave him. A ball struck the ground with a thud within a few inches of Hicks's foot; another struck a stone near me, and, after dancing hither and thither for an instant, lay quietly before me. I put it in my pocket. All this happened within a briefer space of time than it has taken me to write it. We retreated as fast as we could with the receding infantry. Soon, however, the retreat moderated. Up came three field-guns and a mitrailleuse. The 117th Regiment began to reform; still the Prussians were getting nearer and nearer, when the mitrailleuse, taking up a position exactly in front of that where we had abandoned the wounded, and within a very short distance of the enemy, sent three showers of bullets at them. The field-guns did not fire, though ready to do so; at once the Prussians ceased their musketry, the 117th French renewed their attack, and within an hour of the time when we left the wounded we were back to them, and with the assistance of other doctors, etc., sent to us, we completed our work. My staff—I had charge of two wagons—were, however, dispersed, and it was not till next day that they all turned up. The night of Wednesday I passed partly in a church and partly in a *château*, ministering to the wounded. I had also some hours of sound sleep in a deserted house of which we took possession.

On Friday evening, I was waiting orders to advance, when a priest came to our carriages. He said that he had been confessing dying French soldiers on the brow of a hill (to which he pointed) where, he said, there were at least fifty lying wounded, and dying from cold. The sun had now set; the moon was rising; a keen cutting wind was blowing from the north. For me and half-a-dozen *brancardiers* to go alone so far when we had work nearer seemed absurd; but the priest was urgent. Our wagons were a mile and a half nearer, he said, than any others. I agreed to go on, but told the priest to go back to a certain point where I knew that more than a hundred wagons were waiting orders to advance. This he agreed to do; and we set off to climb the

hill. On reaching a shattered house in the lane, we heard moans, and entered. The house was full of dead and dying. An army surgeon was in charge: he said that he had got cut off from his carriages and assistants. At his request, I sent back one of my stretchers with a very badly wounded man. I was told by a captain commanding a guard that it would be dangerous to advance to the spot indicated by the priest; that it was close to the Prussian lines, and that the battle was not quite over. We might, he said, go to a certain point which he indicated; but we had on the whole better wait till general orders were given to the ambulances. . . . At this time, we heard plaintive cries; the words “*Français*”, “*blessé*”, and “*froid*”, being distinctly recognised. I said to the captain that, if he would allow me two or three men as porters, I would seek out the poor fellow and do what his case required. The captain agreed, stating, however, that we must screen our lantern and go silently, otherwise we would be shot at by the Prussian outposts, within whom we would be not more than fifty yards. He said to his men, “Any three of you may accompany the doctor to bring in a comrade who has been moaning and crying for the last two hours over there”. After some hesitation, three came forward, laid down their arms, and joined us in the search. Silently we advanced, stumbling on stones in the uncertain light of a good-for-nothing moon, aided by a lantern: the latter was screened in front, but the screening cloak was blown aside by the wind, and in a minute afterwards we heard three Prussian bullets whizzing about our heads. We lay down, and after ten minutes got into a quarry, where we found our plaintive *blessé* cold as death, and his clothes, which had been soaked in his warm blood, were frozen stiff. We gave him a drink of gravy and brandy, bound his wound, placed him on the stretcher, and, after various adventures, started for Paris. The poor fellow whom we took out of the quarry seemed as if he would die on the road. I therefore resolved that, if we got him alive to Paris, he should occupy one of two beds which I had ordered to be ready in my dining-room. Before midnight, he and another of our cargo (a man shot through the thigh) were deposited in the room, and left there for two hours, whilst I took the rest to Les Ternes and did the needful. On coming back, I found the two poor fellows—even the quarry fellow—somewhat rallied by heat externally and internally applied in accordance with my orders. Their clothes were cut off them, they were washed and dressed and bedded, and are now—at the end of a week—doing well. They are, as soon as they can be removed, to occupy two of six beds which I have had installed as an auxiliary military ambulance in the flat (now unlet) above ours. When I lay down on Saturday morning in my own bed, after placing my quarry friend and his shattered thigh as well as the case allowed, his moans rather soothed me; for I felt that, had I not taken him when I did, he must have died. The ambulances did not till after midnight go on the field: an armistice of an hour then took place, when Prussians and French gathered respectively their dead and wounded. The carriages which we left near the heights of Champigny did not reach Paris till seven next morning.

In coming into Paris on that night, I had an adventure which seems nothing to tell, but which frightened me more than any incident of either battle. When crossing the Marne on the pontoons by the moonlight, our waggon jolted, and tottered as if about to fall into the water, which was a swollen heavy stream. This happened though men at each side steadied the carriage. Though frightened at the time, I had forgotten my fright till I read in a newspaper that, some six hours after I passed, an ambulance with six wounded soldiers had toppled into the stream. The horse was drowned; the men were saved. On Friday, the wounded horses were killed, skinned, and cut up for Paris food. The Americans brought back a whole horse for their patients. For food, we have a meat ticket which we are entitled to use every third day: one day we get fresh beef or mutton; the next time fresh horse; the third time salt beef, salt mutton, or salt fish. The daily allowance for each person is now fifty *grammes*—that is, half a pound a day in all for the five persons constituting our present family; in other words, all that we get each time for three days' use is a pound and a half. All the animals in the Zoological Gardens have been eaten; cats and dogs have also been devoured to such an extent that they are now rare animals in Paris. Our *concierge* has killed and eaten his cat; a friend called on us the other evening after having dined on a rat ragoût. Notwithstanding this queer style of living, the general health seems as yet good. Our own family is very well indeed, though we long for milk, butter, eggs, and other luxuries long untasted by us, and not procurable. The anxieties and privations of the siege are now such as to call for faith, hope, and courage. We have them: and are quite willing cheerfully to suffer longer still, if it be thought that prolonged suffering and resistance will save France from humiliation. My ambulance duties have been successful and appreciated.

MEDICAL PREPARATIONS FOR SIEGE AT LYONS.

IN the prospect of siege, Lyons has been divided into four parts, to each of which is assigned a section of the ambulance organisation of the city. Each section comprises a surgeon-in-chief, a surgeon *adjoint*, and a certain number of medical officers, and of assistants taken from among the hospital *internes* and students, one or more apothecaries, and a certain number of squads of infirmiry nurses, selected from men who are not liable to be called on for military duty; viz., Frenchmen from 40 to 60 years of age, with a large number of Swiss and Italians, who have shown much zeal in offering their services. The four chief surgeons are MM. Pétrequin, Bouchacourt, Rollet, and Delore. There is a large supply of necessaries; and it is believed that, should it be required, more will be provided.

THE MEDICAL SERVICE OF THE MOBILES.

THE *Lyon Médicale* of the 4th instant contains the text of a circular issued by M. Gambetta to the generals and intendants of divisions and the prefects of departments. It is as follows. At the commencement of the present war, measures were taken to regulate as far as possible the medical service of the Garde Mobile, and to keep in reserve sufficient resources for certain eventualities. These measures were described in a circular dated September 1st, by which the generals of division were authorised to appoint one medical officer to each battalion of the Garde Mobile, and to keep at their homes all men called on to serve who could prove the possession of a degree of doctor in medicine or in pharmacy, or of at least twelve inscriptions. In consequence of the recent decree calling out all the able men aged from 21 to 40, provision must be made for the medical service of the new forces. The following measures are therefore decreed. 1. The generals of division preserve the right of directly nominating one medical officer to each battalion of the National Guard, in conformity with the terms of the circular of September 1st. 2. Every corps mobilised in pursuance of the decree above alluded to, must, before marching, be provided with one medical officer to each battalion or force equivalent to a battalion. 3. The generals of division, in concert with the prefects of departments, will issue direct commissions to the medical officers of the mobilised corps, and will give an account to the minister of war of the nominations made by them. As far as possible, the medical officers should be chosen from the *arrondissement* furnishing the corps. Preference is to be given to doctors in medicine; these failing, the generals of division may nominate *officiers de santé* or medical students having sixteen inscriptions. 4. Applications for medical employment in the mobilised corps must be sent to the generals of division; those addressed to the minister of war will not be answered. 5. The medical officers nominated by the generals will have the rank and grade of *aide-major* of the first class if they possess the diploma of doctor in medicine; and that of *aide-major* of the second class if they are only *officiers de santé* and can only produce sixteen inscriptions. They will receive the pay and allowances corresponding to these ranks. 6. The same classification will be made in the case of future nominations of medical officers to the Garde Mobile; but no modification of grade is to have a retrospective effect. 7. The generals of division and the prefects will take the necessary measures for exempting from mobilisation (a) all doctors of medicine and *officiers de santé*; (b) all students of medicine or pharmacy having at least sixteen inscriptions; (c) all druggists established in business. 8. Students having less than sixteen inscriptions will not be exempted from service. 9. In other respects, the directions given in the circular of September 1st, as to the requisition of medical officers for the service of bodies of troops or of military hospitals, are not interfered with.

ALLEGED INFRACTIONS OF THE GENEVA CONVENTION BY THE PRUSSIANS.

THE *Lyon Médical* complains bitterly of the manner in which the regulations of the Geneva Convention have been set aside by the Germans. It is said that, to a remonstrance made by the staff of the first Lyons ambulance, General Werder replied: "We know the Geneva Convention: but the war which we are making is a special war." General von Treskow is also reported to have refused admission to Belfort to two medical men, alleging that "to succour the sick or wounded in a besieged place was equivalent to a revictualling." The *Lyon Médical* also publishes a letter from a member of the staff of the Vesinet ambulance. He says that the ambulance came within the Prussian lines on September 21st; and, on October 1st, the wounded were removed, and the staff sent as prisoners to Versailles. There they addressed a protest to the Crown Prince, who caused them to be set at liberty and sent back to the ambulance; which, however, had been in the meantime occupied, and the provisions seized. The officers of the ambulance were, after their return, daily visited by a Prussian medical officer with a

patrol; there were still twelve patients whom it had not been possible to remove. One morning they were visited by the Crown Prince, who pointed out that they were very near Mont-Valérien and in a very exposed situation, and offered them safe conducts to go whither they pleased. This they declined, stating that they had been appointed by the minister of war, and could only quit their posts by his order or under violence. On November 4th, they received, through a captain, a message to hold themselves ready for starting. They were informed that they were to go to Metz. In reply to their statement that they were without resources, they were told that they would receive money at Corbeil. On arriving at that place, however, they only got billets for a night's lodging, without food; and they had to give their word of honour that they would not quit the road to Metz. Through the kindness of the inhabitants of the places through which they passed, they were supplied with food. The journey occupied five days, during two of which it was made in carts guarded by a dozen Prussians. On arriving at Metz, they were told by the French surgeon-major that they were not required, and might go where they would; he also gave them a letter to the Prussian medical officer, who, however, would not allow them to depart. They received billets for lodging for two days from the *mairie*, and were most hospitably treated by the inhabitants. After in vain endeavouring to obtain employment or persuade the Germans to allow them to depart, they escaped in the disguise of townsmen. The writer of the letter reached Luxembourg, where he obtained money from the French Consul, and was going to join the Army of the North.

THE Municipal Council of Lyons has allotted a credit of 25,000 francs (£1,000) to the Society for aiding the wounded.

THE order of Chevalier of the Legion of Honour has been conferred, on account of zeal and devotion in the care of the wounded, on M. Bresson, *médecin aide-major* of the first class; and MM. Maury, Robuchon, and Heune, pupils of the military medical school at Strasbourg.

SMALL-POX IN LONDON.

AT a meeting of the Epidemiological Society on Wednesday evening, the President, Dr. SEATON, Inspector of Vaccination to the Privy Council, called attention to the present rapidly extending epidemic of small-pox, in a highly important statement, of which we are enabled to present a full report. There were various parts of the kingdom, especially unions in Yorkshire and Lancashire, in which small-pox had been epidemic during the present year; and the inhabitants had again entered on one of those epidemic visitations of that disease from which the metropolis was never free for more than two years together. Tracing the course of small-pox in London for the last twenty years, he showed that the last epidemic period terminated about the middle of 1868, and that from that time to the middle of the present year the mortality from that disease had been comparatively small. The minimum was reached in the quarter ending Midsummer 1869, for which quarter only 55 deaths were recorded, or fewer than are now occurring in a single week. In the Michaelmas quarter of 1869, the deaths were but 62; in the Christmas quarter, they were 87; in the first quarter of 1870, they were 99; in the second, 118; in the third, 157, or an average of 12 a week. In the first five weeks of the present quarter, the weekly average was 20; in the next three weeks, 42; and in the last two weeks, 60. There had, in fact, in ten weeks of the quarter, been 348 deaths registered. Though the epidemic was already diffused over a great part of London, and daily becoming more and more diffused, it was in the eastern districts that, as on former occasions, it had chiefly prevailed; and the circumstances under which it had been so fatal in them were in every respect the same as those in which it had on former occasions been fatal—gross and unlawful neglect of vaccination, and, in many of the adults who had suffered, the imperfect performance of vaccination, which had not been remedied by a subsequent revaccination.

The President remarked that if, at the time when the present Vaccination Act should, according to its requirements, have come into full operation—i. e., in July 1868—all had been done which should have been done, if two precious years of comparative immunity from small-pox had not been to a great extent thrown away, and if the metropolitan Boards generally had only taken from the first the course which a few of them really did take to administer properly the provisions of the law, London would not have been in the state of unpreparedness for the present epidemic in which a large proportion of it is now. He said that the successful working of the Act depended on each local authority having a proper inspector to see, as his regular and constant duty, that the children whose births are registered have the certificate of successful vaccination in due time recorded; and to see instantly, on the occurrence of any case of small-pox, that the children and others in the

locality infected were properly protected against the disease. He stated that this was duly pointed out to the Boards of Guardians, as well within as without the metropolis, by the central authority, on the Act coming into operation; and that it was within his own knowledge that, by a very large number of local authorities throughout the kingdom, the Act was being thoroughly and most beneficially administered. In London, only a very few of the Boards, as Poplar, St. Luke's, Fulham, etc., had at once set about the administration of the Act; and, though it would of course be premature to speak of results till the epidemic was over, he believed that those results would be found fully to vindicate the wisdom of the course which these particular Boards had taken. Some other Boards had followed the example thus set; but, on the whole, preparations had gone on so tardily that in the spring of the present year there was not, in much the greater part of London, any serious attempt at an efficient administration of the law; and it was then declared necessary by the Privy Council that further communication should be addressed to the local authorities, in view of the epidemic which they were warned would certainly come on the metropolis within a few months. The upshot of the whole was that, now that we were getting into the thick of the epidemic, there were still three or four metropolitan Boards without any inspector at all, and very many which were only now beginning in earnest the work which, to have been effectual, ought to have been begun two years and a half ago. In fairness, however, it ought to be stated that there had been a special difficulty affecting a large part of the metropolis in the reconstruction of unions which had been going on, and that some delay and difficulty also had occurred respecting the conditions under which the common fund of the metropolis was to be made available for the payment of the vaccination-inspectors.

Dr. Seaton then adverted to the lawless and unscrupulous efforts which had been made last year, and were still, in fact, being made, by a certain body calling itself the Antivaccination League, not merely to obtain an alteration of the law (which, of course, would be a proper proceeding enough, if they thought that the law was a bad one), but to stimulate the people to disobey the law by appeals to their prejudices, only too calculated to take effect with the ignorant and credulous. The utmost efforts, however, of the League, had been ludicrously unsuccessful where proper attention was given to the matter by the local authorities; and the President cited instances, some of them in London, some in the large towns, as Manchester, Leeds, Exeter, etc., where, notwithstanding the local agitation it had been attempted to get up, a virtually complete observance of the law had been obtained, and with so little of real and serious objection on the part of the people, that in very few cases indeed had recourse been necessary to the compulsory powers of the law. On the other hand, where the provisions of the law had not been carried out by the local authority, and the registration was imperfect, there were no means of measuring what the effect of the exhortations of the League had been; it was noteworthy, however, that the two unions of London which had suffered the most from small-pox were the two—for, happily, there were only two—the guardians of which had openly shaken hands, as it were, with the League; viz., the union of Bethnal Green and that of Mile-end Old Town. Of the 281 deaths from small-pox which had been registered this year up to Dec. 3rd in the Eastern districts of London, 135, or nearly one-half, were in these two unions. In 1866 and 1867, Bethnal Green alone had had 222 deaths from this disease, which, in fact, might be said to be almost endemic in that parish. Both these unions were now employing inspectors, but in Bethnal Green the appointment had only been made last July, and there was an overwhelming amount of arrears to be dealt with; in Mile-end it had only been made within the last two or three weeks. In striking contrast to what had occurred in these unions, and in some other of the Eastern unions in which action had been tardy, was the state of Poplar—an union which, before the present Vaccination Act, had suffered enormously from small-pox, having had, in 1863, 97 deaths from that cause; in 1866, 96; and in 1867, 112; but which, under a careful administration of the new law, had only contributed this year 11 to the 281 deaths in the Eastern division of London, and these were for the most part imported cases. Importation of the disease into Poplar had, in fact, been throughout the year of frequent occurrence, but the efforts of the inspector had hitherto been successful in preventing any extensive spread. The President further adverted to the careful administration of Act in the Holborn Union (including all its divisions of Holborn, Clerkenwell, and St. Luke's), showing that, though the epidemic influence had been considerably felt there, the mortality had been but slight.

In conclusion, referring to the only means known to us of arresting small-pox—isolation and vaccination—and to the very imperfect way in which isolation could be effected in such a population as that of London, he urged the paramount importance of stringently carrying out the

great protective measure of vaccination. If any unfounded mistrust of that great and all but certain prophylactic, such as had been fostered of late years in France, were to find its way into the minds of our population, we should be punished by a devastation from small-pox similar to that which had been going on throughout the year in Paris. He stated that, being himself in Paris before Christmas last, at the time when the disease was already assuming epidemic force, he was annoyed at the little heed which seemed to be given to vaccination, at the imperfect provision which was made for the vaccination of the population, and at the absence of any systematic requirement of the performance of vaccination. The victims of small-pox in the Paris epidemic have to be counted every quarter, not by hundreds as in our London epidemics, but by thousands; and such would be our fate, if we were foolish enough and wicked enough to neglect the great prophylactic which the discovery of Jenner has placed at our disposal for the saving of human life and suffering.

SMALL-POX IN THE METROPOLIS.

THE already severe and still increasing epidemic of small-pox has now nearly filled the temporary hospital provided by the Asylum District Managers at Hampstead. During the past week (ending Dec. 13), eighty-three patients have been admitted: in the previous week there were thirty-one. At this present rate of admission the hospital, of which the accommodation has been increased to 130 beds, will be full before the week is out. The largest number came from St. Leonard's, Shoreditch, and next to this St. George's, Hanover Square. In order to meet the pressure, the Managers of the Metropolitan District are going to remove an iron building, at present attached to the Fever Hospital at Liverpool Road, and add it to the Hampstead Hospital. This will give sixty more beds. They will be ready for occupation in three weeks. They are also rapidly preparing the permanent hospitals at Homerton and Stockwell for the reception of patients, and doing their best to overtake an epidemic which, already very severe, is still spreading.

There have been nine deaths at the Hampstead Hospital; in five of the cases the patients were not forty-eight hours in the hospital; seven of the nine were confessedly unvaccinated, and the other two asserted they were vaccinated, but owing to the advanced stage of the disease when they were admitted, this could not be verified, and from appearances it did not seem to be the case.

For the following tabular statement we are indebted to Dr. Grieve, Medical Superintendent:—

Name of Union or Parish.	For the week ending Dec. 13, 1870.	Since the opening of the hospital, Dec. 1, 1870.
St. Leonard, Shoreditch	13	22
St. George's Union (Hanover Square)	13	16
Holborn	3	8
St. George-in-the-East	2	7
Mile End Old Town	4	6
St. Matthew, Bethnal Green.....	6	8
City of London	7	7
St. Saviour	4	4
Fulham	1	4
Strand	3	4
Hackney	4	4
Stepney	5	5
Poplar	4	4
Westminster	3	3
Camberwell.....	3	3
Kensington	3	3
Whitechapel	2	3
St. Olave's	1	1
Greenwich	1	1
Lewisham	1	1
Total...	83	114
According to Age.		
Males over 15 years of age	35	41
Females	12	23
Males between 5 and 15 years of age	12	19
Females	15	18
Children under 5 years	9	13
Total...	83	114

SPECIAL CORRESPONDENCE.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

The Explosions.

WITHIN the last six or seven weeks, four explosions have occurred here in cartridge manufactories. The dangerous part of the process is carried on at a little distance from the town in light wooden sheds, separate from one another, and placed far from any road. Serious in their results as were the other explosions, the one that occurred on Friday, December 9th, was much more destructive. At a little before one o'clock a loud explosion was heard, followed by others less severe; these latter being occasioned by the burning *débris* scattered far and wide by the first explosion. The sheds, being made of wood, caught fire, and it was some time before the injured persons could be assisted. It was then found that eighteen were killed and over fifty injured, most of them being very severely burnt, and also suffering much from shock. The bodies of those dead were disfigured so as in many instances to defy recognition; and they were identified by articles of dress or jewellery that were found upon them. The injured were taken at once in cabs and any vehicles that could be found to the General Hospital, where, notice having been sent of the explosion, every preparation was made to receive them. Extra accommodation was provided by placing beds in the laundry and the chapel, and all convalescent patients were dismissed; but so great was the stress upon the capabilities of the institution, that one end of one of the male accident wards was screened off, and was occupied by the sufferers from the explosion. These were all women and young girls, as it is found that men are too rough for the delicate operation of filling and priming the cartridges. The accident is said to have been occasioned by a woman's apron catching fire at a stove which had recently been placed in the shed. The introduction of the fire was opposed by the proprietors, but was pertinaciously asked for by the workers, who suffered much during the late cold weather.

The injuries of those in the hospital consist of severe burns to the face, head, and neck, and upper part of the back, and also to the arms and hands. In many cases the eyes are destroyed. In one case, either the force of the explosion or a falling rafter occasioned a compound fracture of the tibia and fibula. The leg has since been removed by Mr. Goodall, under whose care, as surgeon of the week, the cases fall. The whole staff of the hospital, honorary and resident, has exerted itself to the utmost, and the care and kindness of the students is beyond praise. Relays of them are on duty day and night to endeavour to alleviate the sufferings of the patients by sedative draughts, or, in cases where vomiting prevents this, by the administration of chloroform, or the subcutaneous injection of morphia. Thirteen have died since their admission into the hospital, and two women far advanced in pregnancy have been delivered of still-born children. It is probable that the list of deaths will be largely increased during the next few days.

ASSOCIATION INTELLIGENCE.

CAMBRIDGE AND HUNTINGDON BRANCH.

A MEETING of the above Branch will be held at Huntingdon in the month of April next, at which Michael Foster, Esq., has been requested to preside. This is to meet the wishes of those members who cannot conveniently attend the combined meeting with the East Anglian Branch, to be held at Norwich in the summer.

Dr. P. W. Latham has retired from the office of Honorary Secretary, the duties of which are now undertaken by Dr. Bradbury, Cambridge.

GLOUCESTERSHIRE BRANCH: ANNUAL MEETING.

THE third annual meeting of this Branch was held at the Gloucester Infirmary on November 17th. Present, W. H. O. SANKEY, M.D., President, in the Chair, and twelve members.

The Report of the Council for the year 1870 was read and received. It appears that the Branch now numbers forty-nine members, and is in all respects in a flourishing condition. The rules of the Branch, as they were originally framed, included the provision that "any gentleman", if duly proposed and seconded, should be admitted a member. Consequently, the rules are already sufficiently elastic to admit neighbouring practitioners, although they may not reside within the geographical limits of the county; and as, at a recent meeting of Council, this rule was specially brought into prominence, it has already led to an extension of the Branch by the admission of members resident in the bordering counties of Hereford and Monmouth. Others have since applied for admission.

Officers and Council.—The following gentlemen were elected as officers for the year 1871:—*President*: E. Cripps, Esq. *Secretary*: A. Fleischmann, Esq. *Scrutineers*: F. Cook, M.D.; J. Bubb, Esq. *Auditors*: T. M. Rooke, M.D.; L. Winterbotham, Esq. *New Members of Council*: T. M. Rooke, M.D.; C. Wethered, Esq.; T. Evans, M.D.; F. Cook, M.D. *Representatives of the Branch in the General Council*: W. H. O. Sankey, M.D.; E. Cripps, Esq.

President's Address.—Dr. SANKEY gave an address, which consisted in a review of the principal changes in doctrine and modes of practice that he had seen during his own professional career. He arrived at the conclusion that, in nearly every instance in which much change had occurred, this was due to a better observation of facts. This improved observation was in great measure due to the introduction of instrumental aid, as by stethoscope, microscope, etc. He did not think that the great changes that had arisen in the estimation of various remedial agents were due to caprice, but to better physiological views and a more careful deduction from facts observed. He instanced, as an error in medical deduction by confounding the *post hoc* and the *propter hoc*, the belief that once prevailed as to the efficacy of venesection in the treatment of acute rheumatism and fever. Boulland advocated bleeding *coup sur coup* in rheumatism, and gave examples in which he took, he thought advantageously, eight, nine, or ten pounds of blood. His cases, read by the light shed upon them by the papers of Drs. Gull, Sutton, and Owen Rees, however, simply ran their natural course. The simple fact, it seems, had been overlooked, that, in order to know that a given process was shorter than natural, it was necessary first to know what was the natural length of such process. Again, Dr. Southwood Smith bled his friend Dr. Dill, during an attack of fever, to the extent of 120 pounds of blood; in other words, to 15 gallons, or to 6½ stone by weight. The case, read by subsequent light thrown upon it by the investigations of Sir William Jenner, was clearly one of relapsing fever, which needed little energy of treatment, and involved very little danger. And perhaps the most singular part of the case was that, notwithstanding this treatment, the disease pursued its natural course in every respect. These physicians attributed, however, recovery to the means they had employed; they confounded *post hoc* with *propter hoc*. Modern investigation was now more directed to the study of the natural history of disease, to the sequence in the symptoms of different diseases; and there is no doubt that the true value and efficacy of remedies is only to be studied by such means. The belief in the efficacy of other remedies had also undergone considerable modification. Doubtless the druggists could report great difference in the sale of different drugs, as of antimony, mercury, iodine, bromine, etc. The better knowledge of disease had led to modification in both opinions and practice; and the general public had also become much more competent to enter into the *rationale* of the treatment of disease, and this was greatly modifying even the mode of practice.

Communications.—I. Mr. JOHN BUBB read a short paper on a few interesting surgical cases. Two were very complicated cases of Harelip, of which he showed photographs before and after operation. The first had been twice before operated on unsuccessfully in another town. The photographs showed very good results in both cases.—The next case was one of Fracture of both Thighs and severe injury to the Head and Face, occurring in private practice. A young lady aged 7 fell over the banisters of a high house while sliding downstairs. The right thigh was very obliquely fractured about the middle third; the left transversely, about the junction of the lower with the middle third. The face was so contused and swollen that it was hardly like anything human. The treatment consisted of Liston's long splints, with three short splints covered with soft chamois leather; and extension by perineal bands for a few days, then by weights to the feet. In six weeks she was up, and in eight could walk with crutches; and now, nearly twelve months after the accident, she can run as fast as ever. There is no shortening at all, and no mark of the injury to the face or head.—The last case was one of Sloughing of the Knees from sleeping in front of a large fire when drunk. E. M. was admitted into the hospital under Mr. Bubb's care, under the following circumstances. He was

drinking at Minchinhampton for some time, and went to sleep in a public-house, sitting close to a huge piled-up fire of wood and coal. He slept about six hours; and, when he awoke, he found great pain in his knees. He then went to bed with his trousers on; and in the morning, on taking them off, he found his knees blistered and "soddened", as he called it. Mr. Bubb saw the trousers; there was no mark of the fire on them. The slough on the left knee extended four inches below the patella, and three above; it was very deep, reaching the joint. That on the right knee was about the size of the palm of the hand, and was more superficial than the left. The man was of very dissipated habits; and, although Mr. Bubb wished to remove the left leg, he was overruled by his seniors. The patient was admitted on February 14th, three weeks after the wasting, and died on March 6th, of exhaustion from foetid discharge from sloughs which never entirely came away.

2. Dr. WILSON exhibited and explained Dr. Beale's new Ophthalmoscope.

3. Mr. ELLIS exhibited a Femoral Artery which, after amputation of the limb, had been effectually controlled by Torsion. The occlusion had been complete, though death had supervened.

Dinner.—The members afterwards dined together.

The next Meeting will be held at Cheltenham, on some day in the month of May.

N.B.—Any gentleman wishing to join the Branch is requested to communicate with the Honorary Secretary, 48, Montpellier Terrace, Cheltenham.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, DECEMBER 9TH.

JAMES PAGET, Esq., F.R.S., President, in the Chair.

SIR HENRY THOMPSON exhibited a patient who had been the subject of large Extravasation of Urine, distending the scrotum and rising above the pubes, whence it was evacuated by free incisions. The sloughing destroyed the skin of the penis and a full inch of the urethra just anterior to the scrotum. When the neighbouring parts were sound, Sir Henry, having introduced a grooved staff, opened the urethra in the perinæum, passed a gum elastic catheter through the wound into the bladder, and retained it there permanently. He broadly pared the margin of the wound, dissected a large flap from the side of the scrotum, and placed it in apposition upon the raw surfaces, attaching it with silk sutures, and covering in completely the urethral wound. The urine now flowed by catheter into a vessel, and in a few days firm union had taken place except at one small spot. The catheter was changed in a fortnight, and the second one was retained for five weeks. On removing this the perineal wound speedily closed, and a No. 8 catheter could be passed through the entire urethra into the bladder. The patient had since learned to do this for himself. There now remained only a very small orifice, which could be readily closed by galvanic wire, or by some small plastic operation. Sir Henry dwelt upon the importance of a constant free evacuation of the urine in these cases, so as to bring about a state of quietude to the diseased passages. The procedure adopted in the present case had been adopted on two occasions in France, by Ségalas and Ricord.

Mr. T. SMITH read a paper on the so-called Congenital Tumour or Induration of the Sterno-Mastoid. This had been surmised to be adventitious by some, and syphilitic by others. Its real nature had never been determined, so far as he was aware, by *post mortem* examination. Mr. Smith thought that the induration was probably due to rupture, either partial or complete, of the fibres of the sterno-mastoid, giving rise to effusion of blood within the sheath of the muscle, and to retraction of the torn fibres. Such rupture he referred to injury during parturition, especially when this was complicated by version and extraction.

A paper by Dr. HANDFIELD JONES, entitled a Query as to the safety of Subcutaneous Injections, was read by the Secretary. Three cases were described in which the injection of small doses of morphia or opium (one-fifth of a grain of morphia in the first case, five minims of liquor opii in the second, and five-twenty-fourths of a grain of morphia in the third) had been followed by more or less serious fainting. Reference was made to published cases of serious symptoms following subcutaneous injections of morphia. He suggested the subject as one upon which the Clinical Society might usefully bring their experience to bear, especially with the view of discovering whether there were any objective signs of the state in which opium was not tolerated, and whether such a state might exist at one time and not at another. He thought it very desirable to ascertain whether morbid changes in the valves or muscular

tissue of the heart increased the liability to the occurrence of syncope, or whether this was chiefly dependent, as chloroform-syncope seems to be, on some latent infirmity of the cardiac nervous centres.

A Report was read upon Mr. T. Smith's case of Ulcer following Vaccination, by Messrs. Gascoven and Berkeley Hill; and some discussion took place upon it, which was adjourned.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 6TH, 1870.

RICHARD QUAIN, M.D., President, in the Chair.

DR. LIEBREICH, by means of his fixed ophthalmoscope, exhibited some interesting Ophthalmic Cases, normal and abnormal. In one, there was a persistent hyaloid artery and vein, running from the optic disc straight into the vitreous humour for a little way, the vein ending in the papillary excavation. Another was a case of posterior staphyloma, the patient suffering from short sight, owing to lengthening of the antero-posterior axis of the eye, and marked by choroidal atrophy round the disc. Choroiditis disseminata presented, in certain parts, the appearance of light spots, owing to atrophy and removal of pigment from the epithelium; in others, black spots, the cells having undergone other changes. This condition was not to be confounded with retinitis pigmentosa. In this, the black spots were in the retina, as indicated by their relation to the vessels. These and other conditions were of importance to the physician in connection with disease of the brain, spinal cord, and kidneys. In optic neuritis the contour of the disc became altered, or disappeared entirely; the substance of the papilla was opaque and thickened so as to project against the swollen and tortuous veins, presenting a notable difference from optic atrophy or glaucomatous excavation, of which, also, examples were shown.

Dr. MAC CORMAC exhibited a number of interesting specimens of Gunshot Injury to Bones received during the battle at Sedan, at which he was present. An inspection of these fractures, the speaker remarked, pointed to the conclusion that they were more severe, more extensive, and presented a larger amount of comminution and splitting than the fractures usually met with. Besides, they were invariably compound fractures, and the wound of the part was a contused wound, and incapable of uniting under any circumstances by the first intention—a condition which must modify the treatment and render, *ceteris paribus*, the prognosis less favourable. He thought that the marked difference in kind between the bone wound caused by the Prussian ball and the Chassepot was very apparent in some of the specimens shown. The former, the heavier of the two, and ovoid in shape, crushed, and, as it were, roughly pulverised when it struck the bone, and the splitting was not extensive. The Chassepot bullet, much lighter and of a conical shape, but having a greater velocity, comminuted extensively and split the bone, often to a very long distance. The Bavarian bullet was different in shape, but it, too, was conoidal, and acted somewhat similarly to the Chassepot. Much, however, depended upon the length of range at which fire had been delivered. Nothing was more deceptive than the external appearances of gunshot injuries, and the amount of deep-seated damage, especially if the bone had been struck. Nothing short of a thorough examination by the finger shortly after the receipt of the injury could, Dr. Mac Cormac considered, be wholly satisfactory in gunshot wounds of the limbs; and it would be well to lay this down as an invariable rule of practice whenever at all practicable. In penetrating wounds of the chest or abdomen, the less meddling the better for the patient. Dr. Mac Cormac summed up his experience by saying that the conservative surgery of civil hospital practice must be modified to practise military surgery with advantage.—Mr. J. W. TROTTER said that in the Crimea he never saw a case of conservative surgery do well.—Mr. HULKE pointed out that, owing to the great prevalence of scurvy in the Crimea, conservative surgery had scarcely had a fair chance.

Mr. JOHN FOSTER exhibited for Mr. Thompson of Nottingham a specimen of Mammary Tumour from a female in whose family there was no cancerous history—Referred to Committee.

Mr. HENRY ARNOTT brought forward several specimens of Secondary Epithelioma of the Heart and Lungs, which had been under the care of the late Mr. Moore at the Middlesex Hospital. The first was a case of epithelioma of the clitoris, which had been removed, and had returned with secondary deposit in the inguinal glands, in both lungs and pleura, and the muscular substance of the heart. The second was one of epithelioma of the face, with secondary deposits in both lungs. The third was one of epithelioma of the face and cervical glands, and growth also in the sternum. They all presented the microscopical character of epithelioma.—Dr. MOXON asked, how far one was entitled to believe in a descent of germs to the lungs in cases of cancer of the face.—Mr. ARNOTT replied, that nearly all epithelial growths of the

lung were secondary to the mouth or tongue, and that, therefore, probably some of the detached portions may have got into the lungs; but there were other cases in which this hypothesis was not tenable.

Mr. J. W. TROTTER exhibited specimens of infiltrating Encephaloid Cancer of the Lung and Kidneys, taken from the body of a soldier aged thirty, who had suffered from hæmoptysis in July, with slight clavicular dulness, and died in November.

Mr. CHRISTOPHER HEATH exhibited a specimen of Fibro-Cystic Tumour of the Axilla, of twelve years' standing, which had been removed from a female aged forty-nine. The patient recovered.

Mr. HEATH also brought forward a case of Procidencia Uteri, complicated with ovarian cyst. The uterus was passed back on October 29th, and the patient died on November 17th. The difficulty found during life in keeping the uterus up, was explained by the presence of the ovarian cyst. There was chronic pyelitis, the apparent cause of death.

Mr. HEATH also brought forward a case of Lipoma of the Nose, of twelve years' standing, which was successfully removed.

Mr. WILLIAM SQUIRE exhibited an enormous Spleen weighing twelve and three quarter pounds, taken from the body of a gentleman who suffered from pain in the hypochondrium, and recurrent febrile attacks, lasting a few days at a time. During these attacks the feet swelled, again to recover their natural size after the fever disappeared. There was leukæmia. There was reduplication of the first cardiac sound; and, a few months before his death, peritoneal friction-sound over the tumour was heard. Ascites came and went. He died ultimately of exhaustion. The spleen was found to fill up the whole left lumbar and hypochondriac regions, passing down to the groin. Its surface was covered with patches of lymph. The omentum was gone. There was no enlargement of the glands.—In answer to Mr. Spencer Wells, who asked whether there would have been any danger of bleeding had removal of the spleen been attempted during life, Mr. Squire said that he thought the patient would have recovered had an operation been performed. The splenic artery was not enlarged. In answer to Dr. Douglas Powell, he stated that there were no reasons whatever for attributing the enlargement of the spleen to ague.

Dr. TILBURY FOX exhibited several specimens of Keloid Tumours from the ears of negroes, consequent on their being pierced.

CORRESPONDENCE.

MEDICAL REFORM.

SIR,—You not only did me the honour to forward immediately to the Chairman of the Medical Reform Committee of the British Medical Association a proof of my letter,—thus giving him an opportunity of promptly neutralising the anticipated effect of my observations by a contemporaneous reply,—but you have also rendered me a service by publishing his precipitate rejoinder. Setting aside certain personal remarks and unsupported assertions in his letter, my principal statements and arguments are really untouched by it. He may be of opinion that several suggestions (of which I do not pretend to be the author) for amendments in the constitution of the Medical Council “mean nothing”: but, if he had examined them fairly, he could hardly have asserted that they imply the unfitness and incompetence of the present Council to administer the Medical Act. Surely improvements may be proposed in the constitution of a body corporate without condemning it as unfit and incompetent for its original duties. The proposal for “direct representation” is, however, ostensibly and generally made on that very ground. Again, Dr. Waters might have seen that the various suggestions mentioned by me apply more or less to such *enlarged* powers and responsibilities as might be intrusted to the Council in future, and not to the limited purposes committed to it by the Medical Act.

Whatever changes may now have become desirable in the powers, duties, and constitution of the Council, those who know something of its past working are fully aware that at first it would have been very difficult to bring the various systems of education and examination adopted by a multitude of licensing bodies into anything like conformity, unless each had been independently represented. If there were disadvantages, as I have admitted, in so large a representation, there were also obvious advantages; and it may reasonably be doubted whether so willing and cordial an acceptance of many important principles of reform in medical education could have been attained within twelve years by any other method.

Medical reformers, impressed by one idea, may assert that the Council has *not* improved the education of those admitted into the profession since 1858; but no one who is not blinded by prejudice could fail to perceive and acknowledge the plain fact, that the standards of qualifica-

tion have been very considerably raised under the administration of the Act by the Council.

Is it just—is it not very like a *suppressio veri*—to speak of the “defective education and attainments” of those who “still enter the profession”, without admitting that the number of such persons has greatly decreased, and is progressively decreasing?—to refer to the results of the army and navy examinations as proofs of the imperfect qualification of licensed practitioners, without stating that those very results, as published in our reports, prove that the number rejected by these boards has, on the whole, greatly diminished, and that the rejections are now comparatively rare?—to assert that the representatives of the various Corporations are “powerless to control each other”, ignoring the fact that they have already succeeded in controlling the old downward competition to an extent which might surprise an impartial inquirer? It may please gentlemen who favour a particular crotchet to call those “crotchety” who do not accept it; but is it not absurd to identify a certain assembly—say two hundred persons, many of whom probably attended purposely to support direct representation—with the whole profession?

I may have said that a large number of the profession were opposed to that project. I believe so still. Dr. Waters fancies that he has convicted me of a “decidedly wrong statement”, because only two or three hands beside those of the Medical Council were held up against it in a meeting consisting of barely one-hundredth part of the profession in this kingdom!

When Dr. Waters reminds me that, at previous general meetings, the demand for direct representation was insisted on, he might not have recollected that, so lately as at the Leeds meeting, Professor Haughton's motion in favour of the rival plan, *indirect* representation (*i.e.*, through the universities and medical corporations) was also carried by a large majority. No one but a pledged partisan can doubt that it would be easy to find, among the four thousand members of this Association, a party quite as numerous as the majority at Newcastle—a body of gentlemen who, if they thought it worth while to attend a meeting for the purpose, would either support “indirect” against “direct” representation, or would throw both overboard.

Dr. Waters may hold the opinion that a fee paid *before entering into practice* is a tax upon the practitioner, and not a simple purchase of the privilege of registration. All that we claim is, toleration for the many thoughtful and well-informed men who cannot adopt such a fallacy.

Probably, however, the most serious mistake made by Dr. Waters is his misrepresentation—of course undesigned—of my reference to what might be called the “trades-union” proclivities of a hypothetical assembly, elected on Dr. Waters's principle—an assembly not now in existence. He has thought fit to represent me as applying the term “trades-union” to the British Medical Association—a monstrous notion, which I neither hold nor have ever intimated.

I have too good an opinion of Dr. Waters to suppose that he will not regret having made such a charge, and of our numerous associates to suppose that they will be influenced by it, to any appreciable extent.

Having now replied, as far as seems necessary, to Dr. Waters, I beg to say that I do not intend to continue the correspondence.

December 12th, 1870.

I am, etc.,

H. W. RUMSEY.

SIR,—I beg to thank you for forwarding me a proof of Dr. Rumsey's letter for this week's JOURNAL. It is a matter of regret to me, at least as much as to himself, that I am obliged to reply very hurriedly or not at all; though, if he regards my reply as rendering him an essential service, it would seem he has ground for thankfulness rather than for complaint.

In answering the letter of any one, it is extremely difficult, and might be regarded uncourteous, to avoid all mention of the name of the writer. I am, however, most desirous to avoid personalities on all occasions—more particularly so in the case of Dr. Rumsey, whose acquaintance I have always esteemed it a privilege to possess. The points of difference between Dr. Rumsey and myself are of a public nature; each is fully entitled to advocate his own views; but if in doing so I have been guilty of mere assertion, Dr. Rumsey's position would be far more strengthened by specifying when and where, rather than by making a vague general accusation to that effect. I am not myself conscious of any assertion unsupported by the stern logic of fact.

I have not stated that the radical and extensive alterations in the General Medical Council suggested in Dr. Rumsey's letter mean “nothing”; on the contrary, I still maintain that those who hold such to be necessary, must regard the present Medical Council as altogether unsatisfactory, and unfit to be retained under any new Medical Act.

The Reform Committee of the Association will shortly hold a meeting at which shape will probably be given to the views long and consistently advocated by the Association. No doubt direct representation

of the profession in any future Medical Council will constitute one of the objects to be attained; but there can be equally little doubt that medical reform in its various aspects will also meet with careful and enlightened consideration. The action of the Association is not attributable to "the eminent men who lead it". Rather it is the will of the Association which directs the action of its officers, who, as our late President, Dr. Chadwick, forcibly expressed it at Newcastle, are bound in their official capacity to merge their individuality in that of the body which they represent.

Dr. Rumsey still maintains that the result of the meetings in Dublin, Oxford, Leeds, London, and Newcastle, are not conclusive evidence of the will of the Association. In addition, I would only cite the hundreds of petitions, signed by thousands of the profession, which flooded the House of Commons last session in favour of direct representation. I admit again that the Branch of which Dr. Rumsey is a member came to no conclusion on the subject; but, in answer to Dr. Rumsey at Newcastle, Dr. Chadwick mentioned that every man in Leeds was in its favour. A meeting of the profession was held in Liverpool with a similar result. I will not multiply such instances: if these facts will not convince Dr. Rumsey, he and I must be content to differ.

I perfectly well remember that the Rev. Professor Haughton carried at Leeds a resolution in favour of indirect representation; but then, as now, direct representation had no more strenuous and uncompromising advocate than in him. I and others equally desire indirect representation; but the opposition of the Colleges and Corporations rendering its attainment most difficult, if not impracticable, and the General Medical Council offering us no more assistance in regard to it than to direct representation, the Association, after public discussion at the special general meeting held in London, decided to abandon the attempt to procure it. It was felt by many that it was the duty of the members of the various Corporations to fight for what might be regarded as their own privileges, and that it did not fairly devolve on the Association to weaken its own influence by striving for them in vain. The position which the Association occupies is that of champion of the profession, irrespectively of the various Universities or Corporations to which its members belong.

But, supposing indirect representation granted by the Universities and other medical authorities, the Association, Dr. Haughton included, would still demand direct representation of the profession as a body, because, as Professor Hughes Bennett stated in the discussion at Leeds, "those gentlemen (the representatives of the Corporations) were delegates from particular bodies; and, although he had not the slightest doubt that they all endeavoured to act for the public good, there could be no doubt, on the other hand, that they were all anxious to benefit their separate Corporations". Professor Bennett, to whom the interests of the University of Edinburgh were confided during an arduous and prolonged struggle in Parliament, further stated that he regarded "the demand for direct representation, as urged by the Association, to be perfectly reasonable, and consequently that the efforts that had been made in that direction by the Association ought to be supported".

Sir, it is inevitable that the body specially represented by any individual member of the Council should hold the first place in his estimation. Statesmen of the highest distinction both in the Lords and in the Commons do battle for the interests of whatever University they may be connected with. Representatives of similar bodies in the General Medical Council, unconsciously at any rate, if not consciously, must yield in a greater or less degree to a similar bias. In the recent struggle for medical reform, the interests of the Universities clashed with those of the Colleges, while the interests of the Colleges were opposed to those of the Societies of Apothecaries.

Dr. Rumsey cannot adopt what he still terms "such a fallacy" as that the fee exacted for registration is a tax. He declares that the fee is "paid *before entering into practice*". Some fifteen thousand men long embarked in practice, Dr. Rumsey amongst the number, poured into the treasury of the General Medical Council fees to an enormous amount. Members of the legislature, statesmen too, regard this payment in the light of a tax, entitling those who pay it to some voice in its disbursement.

Dr. Rumsey imputes to me, as a "most serious mistake", my "misrepresentation" of his application of the term "trade-union" proclivities to the conduct and objects of our great Association. I am glad to find in his present letter a disclaimer of any such intention. I should sincerely regret having misunderstood, much more having misrepresented, him on such a point. Dr. Rumsey, in the last paragraph but three of his former letter, referring to direct representation, wrote: "But any demand more irrational than simply for 'direct representation' could hardly have been raised. And if it should be granted to satisfy popular clamour, Parliament will doubtless *take care to neutralise its intended operation* either by depriving a body so formed of all executive power, or

by adding so large a force of laymen and official authorities as to *counteract whatever may be called the 'trade-union' proclivities of such an assembly.*"

The great object of the Association referred to is direct representation; this point conceded, Parliament will take care to neutralise its intended operation. This intended operation appeared to me to be marked by trade-union proclivities. My misrepresentation of Dr. Rumsey's meaning was entirely undesigned. I accept his disclaimer unconditionally, though I must confess that his rejection of my interpretation renders the paragraph to me unintelligible. I cannot conclude this letter without noticing the lamentations of Dr. Rumsey and some of his colleagues over the withdrawn Bill of last session. One might suppose it to be their own offspring. What are the facts?

The Government applied to the General Medical Council for their views on medical reform. No sooner had they submitted them than the Government, through the medical adviser to the Privy Council, intimated that if such trivial matters as they suggested were alone to be dealt with, the Government would decline action. The Government then proposed their own Bill, which, except in leaving the composition of the General Medical Council untouched, embodied as its chief elements the principles submitted to it by the British Medical Association. A special session of the General Medical Council was at once summoned for the consideration of the Bill. The consternation of the Council on its examination was overwhelming; a majority unhesitatingly decided it could not be accepted, but when on the following day it was discovered that the Government would not forego, out of regard for the Corporations, the enactments it contained in the interests of the public, then only was the Bill allowed to pass muster.

I am, etc.,

EDWARD WATERS.

Chester, Dec. 14th, 1870.

THE PROPAGATION OF SCARLATINA.

SIR,—The general assumption, that "the body of every scarlatina-stricken patient is the source whence its *materies morbi* is derived," is so inconsistent with the erratic spread which I have repeatedly observed during twenty-five years in a large rural district, that I should be glad of permission to make a few remarks on the subject.

In the district referred to, the first case has usually occurred in some cottage; and the first patient has been a child. The second patient has often, but not always, of course, been four or five or more miles from the first, and in circumstances forbidding a reasonable suspicion of infection by personal propagation. Then, in the lapse of a few days, numerous cases have occurred between these first two, which, as I have said, are sometimes the most widely separated. The general or epidemic cause thus necessarily becomes less obvious, and more capable of being assigned to personal propagation; and the strong evidence for an aerial, or at least *against* a personal, importation of the scarlatina poison, is swamped in the favourite theory of germs or plasmata said to be thrown off during exfoliation of the cuticle. But let it not be overlooked that the law of spread appears precisely the same in a fever now epidemic in this neighbourhood—a sort of hybrid measles, in which, if there be exfoliation of cuticle, it is usually so minute as not to be observable by touch nor by the unassisted eye. There is in this theory a contradiction, too, in the supposed infection of scarlatina *latens*. Then, again, if the disease, at least in its origin, and its origin proves *sufficient cause*, were by personal propagation, it ought to occur first in one of the more frequently travelling classes, the upper or middle; for the travelled agent must be assumed the first inoculated, and therefore, by law of the disease, should be first to develop its manifestation. Nor does it spread especially along the great lines of commerce; but, on the direct contrary, the disease nearly always is first seen in some poor cottage, and the first patient a child. But, wherever occurring, what experienced medical man would be surprised to find the next case miles distant, with the time of the attack and other circumstances negating the possibility of connexion? Judging by a fair mode of evidence, in every distinct epidemic onset which I have observed, the agency has appeared to me clearly general, and not personal. If scarlatina were usually propagated by personal emanations, the disease should increase in a multiple ratio, and be endemic in every thickly peopled district, because therein are always sufficient arrivals to perpetuate the action. But do we not see a typical epidemic said to have, and in favouring circumstances undoubtedly having, infectious characters, dying out of a district in less time than that in which it fully invaded it? Then, again, how is it that scarlatina, like measles and whooping-cough, etc., has an aptitude for particular seasons? How is it that these often follow each other, or coexist, as though allied in epidemic cause? How is it that a district may be free from scarlatina for years, and then suddenly invaded by it—at first erratic-

ally, as I observe, and then more extensively? Besides the numerous facts which support the aerial against the usual theory of the spread of scarlatina by personal propagation, is it not in the abstract as reasonable to believe that the origin, and, with only occasional exceptions, the spread of scarlatina, are due to a subtly altered molecular chemistry in the atmospheric air? The little as yet known of the behaviour of ozone strongly suggests the competence of such a cause; and, if competent to one case, why may not this pervading medium be competent to all? Most medical men who have observed the spread of scarlatina in rural districts must concur, I think, that the spread is due to an agency entirely apart from personal propagation; and this the Reports of the Medical Officer to the Privy Council fully confirm. But, until argument is rigidly bridled by that definite period of incubation which a disease so specific must undoubtedly obey, fancy may suit the argument of any writer; and the subtle pertinacity of the virus will be to one so excessive as to resist saturation in carbolic acid; to another, milk-tins will be suspected vehicles; so also the milk itself, though rapidly breaking up into a great variety of active reagents, and afterwards submitted to gastric digestion. Surely, if scarlatina-virus found its way as such into milk, the play of agencies would bring it out as something else; and, if the educt lighted up disease, scarlatina would be of all the least likely.

There is ample evidence to prove the occasional spread of fever by personal propagation. Witness yellow fever on board the *Eclair*. But then the structure of a ship, and the crowded condition of the working seamen's portion of it, are precisely what would be likely to intensify fever-ferment. In the surgical wards of hospitals we not unfrequently see erysipelas spreading in deadly propagation; but who accounts erysipelas usually infectious? And, whereas hospitalism has made it infectious within, it will always be found epidemic without. Was cerebro-spinal fever infectious? No one said it was. Yet it spread through England and Ireland just at the time, and possibly by some modification of the same malarious influence which was engendering epidemic mania in Germany and Switzerland. If a disease such as scarlatina spread through a family or neighbourhood, is it that all the assailable living under nearly the same epidemic and endemic circumstances often become affected? or is it by personal propagation? Only the former proposition is to my mind consistent with constantly recurring facts. But, assuming, on the other hand, the virus of scarlatina to be as persistent, and its personal propagation as subtle, as now generally assumed, how is the advocated isolation possible? Nurses must be fed, and communicate with externs; and what, besides, of the more direct trial of the doctors? Still, the public mind is so prone on the subject as to make it possible that the continued advocacy of isolation by medical men may bring about such stringent enactments as would, if at all consistent, paralyse society in a dire quarantine; for, if all postal and mercantile, as well as all personal, transits do not cease, there can be no isolation, and only hermit life permits its human existence.

I am, etc., GEORGE CORDWENT, M.D.

Taunton, November 1870.

THE PREVENTION AND TREATMENT OF SCARLATINA.

SIR,—I always read with great pleasure anything that comes from the pen of Dr. George Johnson; and I am glad to find that I shall have an opportunity of listening to his address on Medicine at Plymouth, where our Association is to assemble next year. Nothing can be more definitely correct than his picture of scarlatina in his clinical lecture, as reported in last week's JOURNAL, and nothing more judicious than his directions for the prevention of the spread of the contagion. But, unfortunately, in a very large proportion of cases the measures which he points out are impracticable. In the houses of our wealthier patients, of course we can do everything he suggests, and I have frequently succeeded in confining the disease to one member of a family. In addition to Dr. Johnson's directions, I always have a double sheet hung outside the door of the sick-room, kept constantly damp with a disinfecting fluid applied by a besom, so that every one who comes out of the chamber must pass as it were through a disinfectant atmosphere. But the bulk of our cases occur in houses where separation is impossible. Take a family of the middle class, with five or six children, residing in a house of six or seven rooms, with only moderate means, how can you secure seclusion? Who can give the warm baths, or anoint with the camphorated oil? If you go a step lower in the social scale, the difficulties increase in proportion. Then, again, in the case of schools: I know of no position more perplexing than that of a medical man called on to advise the head of an establishment in which a case of scarlatina has appeared; and I shall be glad to hear Dr. Johnson's opinion, as well as that of any other member, as to the course of conduct to be pursued in such a contingency. If you keep the school together, of course the disease will spread; if you disperse it, you may send centres

of infection into every family which receives the scholar. My own opinion is *against dispersion*, at the same time giving the parents the option of withdrawing their children at once by the immediate use of the telegraphic wire.

As to the treatment of the disease, an experience of forty years has convinced me of the very small power exercised by any *physic* in modifying its intensity. If one of my own family were attacked, I should at once resort to the wet-sheet packing. Some years ago, cold affusion was much vaunted: children were placed on a board and buckets of cold water poured over them with remarkably successful results, as it was then stated. One would not dare in private practice to adopt such an heroic measure as this, and the packing plan seems to be a good compromise. But even here you have difficulty. If the case turn out unfavourably, the wet sheet may get the blame and yourself the cold shoulder; while in many cases, such I have before alluded to, even the simple appliances for the process are beyond your reach.

Of the subtle nature of the poison, the following is one among many I could select. The eldest girl of a family of seven went a little way out of town on a visit, and while there was attacked with virulent scarlatina, and died in a few days. Her father and mother, in regard to their other children, had the moral courage not to go near their dying child. Six weeks afterwards, scarlatina in its worst form broke out in the family at home, killed two children in a few days, as if they had died of a cobra-bite, and most seriously damaged all the rest. When all was over, in conversing with the mother, I found that, just before the outbreak, the little books, desk, and work-box, of the elder child had been brought into the house and distributed among the other children. I can have no doubt but that the box was a veritable box of Pandora.

Dr. Johnson's suggestions as to the interference of the public authorities are excellent; but how are they to be brought to bear? Is there a single mortuary house in England? Forty years ago, Mr. Chadwick suggested them, not as preventive of the spread of infection, but to obviate what he himself had witnessed in the dwellings of the poor; viz., children eating their food from the coffin-lid of their dead father. In how many large towns is there an officer of health? We have none, though we are a population of above a hundred thousand. Until such an office is made compulsory in every district, no effective steps can be taken to prevent the spread of contagious or infectious disease.

Scarlatina has been most extensively prevalent in this neighbourhood for the last twelve months, though, fortunately, of an exceptionally mild type. We are about to adopt the plan of having a large chart of the town hung up in a public place, on which every infected house is to be marked by a red wafer.

I am, etc.,

Stoke, Devonport.

PAUL W. SWAIN.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council, on Dec. 8th, the following gentlemen, having been elected Fellows at previous meetings, were admitted as such.

Marshall, Peter, Bedford Square: diploma of membership dated March 28, 1828
Mayer, John Emilius, Her Majesty's Indian Army: January 18, 1833

The following members of the College were elected Fellows.

Brookes, William Penny, Much Wenlock: diploma of membership dated May 20, 1831
Keate, Henry, Shrewsbury: June 20, 1836
Travers, Robert Boyle, Rostellan, co. Cork: May 21, 1841

UNIVERSITY OF CAMBRIDGE.—Michaelmas Term, 1870. First Examination for M.B. Degree.

Alford, M.A., St. John's	Moore, B.A., St. Catharine's
Bennett, B.A., Trinity Hall	Rockliffe, Jesus
Hood, Gonville and Caius	Stirling, B.A., Trinity

Third (Final) M.B. Examination.

Brailey, B.A., Downing	Underhill, B.A., Gonville and Caius
Image, M.A., Trinity	Winslow, M.A., Downing
Johnson, B.A., Jesus	

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, December 8th, 1870.

Broom, Henry John, Pembrey, Carmarthenshire
Fryer, John, Batley Carr, near Dewsbury

The following gentlemen also on the same day passed their first professional examination.

Deane, Robert Edmund, Leeds Infirmary
Fearn, Richard, Middlesex Hospital

As an Assistant in compounding and dispensing medicines.
Overton, Charles Arthur, Horncastle, Lincolnshire

UNIVERSITY OF DUBLIN: TRINITY COLLEGE, Michaelmas Term, 1870.—The following gentlemen have passed the M.B. Examination, held on the 5th and 6th instant. The names are arranged in the order of merit.

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|---|----------------------------|
| 1. Allen, Charles D. | 3. Lambert, William Hugh |
| 2. Harvey, Reuben J., Ex-Schol., T.C.D. | 4. O'Flaherty, Richard G. |
| | 5. Briscoe, William Thomas |

At the examination for the Degree of M.Ch., held on the 10th and 12th instant, the candidates passed in the following order.

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|---|------------------|
| 1. Briscoe, William Thomas | 3. Smyth, Hatton |
| 2. Harvey, Reuben J., Ex-Schol., T.C.D. | |

MEDICAL VACANCIES.

THE following vacancies are announced:—

- ALDERBURY UNION, Wiltshire—Medical Officer and Public Vaccinator for District No. 3: applications, Jan. 5th; election, 6th.
- ANDOVER UNION—Medical Officer for the Fyfield District: applications, 20th; election, 23rd.
- BINGLEY, Yorkshire—Certifying Factory Surgeon; Medical Officer of Health; Medical Attendant to the Police.
- BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Acting Physician: applications, 23rd; election, 27th.
- BIRMINGHAM GENERAL DISPENSARY—Resident-Surgeon: applications, 28th.
- CAPE COPPER MINES—Surgeon.
- CASTLEBAR UNION, co. Mayo—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the North Division (No. 2) of the Castlebar Dispensary District: 17th.
- CHARING CROSS HOSPITAL—Assistant-Physician; Assistant-Surgeon.
- COUNTY DOWN INFIRMARY, Downpatrick—Resident Surgeon's Assistant and Registrar: election, Jan. 10th.
- DELTING & NORTHMAVINE, Shetland—Medical Officer: applications, 17th.
- FEVER HOSPITAL AND HOUSE OF RECOVERY, Cork Street, Dublin—Temporary Physician: applications, Jan. 4th.
- KEIGHLEY UNION, Yorkshire—Medical Officer and Public Vaccinator for the Bingley District.
- KERRY DISTRICT LUNATIC ASYLUM, Killarney—Resident Medical Superintendent.
- KILLALA UNION, co. Mayo—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Ballycastle Dispensary District: 22nd.
- KIRKMABRECH, Kirkcudbrightshire—Parochial Medical Officer.
- LARNE UNION, co. Antrim—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Glenarm Dispensary District: 27th.
- LIVERPOOL DISPENSARIES—Assistant Resident House-Surgeon: applications, 27th; Medical Board, 28th.
- LEAMINGTON PROVIDENT DISPENSARY—Dispenser: applications, 17th.
- MANCHESTER—Assistant Resident Medical Officer at the Workhouse, New Bridge Street.
- MIDDLESEX HOSPITAL—Medical Registrar: applications, December 31st.
- NEWCASTLE-UPON-TYNE BOROUGH LUNATIC ASYLUM—Resident Medical Superintendent: applications, 24th.
- PERSHORE UNION, Worcestershire—Medical Officer for the Eckington District: election, 17th; duties, Christmas.
- PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY—House-Surgeon: applications, Jan. 2nd; duties, Feb. 7th.
- PWLLHELI UNION, Carnarvonshire—Medical Officer and Public Vaccinator for the Aberdaron District: applications, 20th; election, 21st.
- ST. MATTHEW, Bethnal Green—Assistant Resident Medical Officer at the Workhouse.
- ST. PANCRAS DISPENSARIES—Three Dispensers: applications, 19th; appointments, 22nd.
- STAMFORD AND RUTLAND GENERAL INFIRMARY—Apothecary and Secretary: applications, 31st; election, Jan. 31st.
- STEYNING UNION, Sussex—Medical Officer for District No. 4.
- WATERFORD UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Tramore Dispensary District: 19th.
- WEST KENT GENERAL HOSPITAL, Maidstone—Resident House-Surgeon: election, Jan. 3rd; duties, 28th.
- WIGAN DISPENSARY—Surgeon.

MEDICAL APPOINTMENT.

Names marked with an asterisk are those of Members of the Association.

- *GORNALL, John H., Esq., appointed Surgeon-in-Ordinary to the Warrington Dispensary.

BIRTHS.

- BATTEN.—On November 30th, at Bromsgrove, the wife of William S. Batten, Esq., Surgeon, of a son.
- BRADEN.—On November 29th, at Lewes, the wife of J. G. Braden, Esq., Surgeon, of a daughter.
- HILL.—On November 30th, at Newport, Monmouthshire, the wife of Philip E. Hill, Esq., Surgeon, of a daughter.
- JOYCE.—On December 1st, at Rolvenden, the wife of *Thomas Joyce, M.D., of a daughter.
- OWEN.—On December 2nd, at Southsea, the wife of A. Lloyd Owen, B.A., M.B., of a daughter.

MARRIAGES.

- *GRABHAM, Charles, M.B., of Pontefract, to Eliza Jane, youngest daughter of the late Flintoff LEATHAM, Esq., of Pontefract, on December 7th.
- LOUIS, Alfred, Esq., of Manchester, to Cora, eldest daughter of John F. GRACE, M.D., of Brixton, on December 7th.
- *STAWMAN, Wm., Esq., Surgeon, Barnsley, to Sarah, second daughter of the late Rev. A. MANSIE, Missionary in Jamaica, at Silkstone, Yorkshire, on Dec. 13th.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
- TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.
- WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.
- THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
- FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
- SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.—Medical Society of London, 8 P.M. Mr. Brudenell Carter, "Demonstrations of Diseases of the Eye"; Mr. John Hainworth, "Incision *vice* Excision of the Tonsils"; Mr. Gay (the President), "A Case of Glanders in the Human Subject"; Dr. Thudichum, "Clinical Experiences of the War."
- TUESDAY.—Pathological Society of London, 8 P.M. Specimens to be exhibited:—Dr. Tilbury Fox, "Case of Devergie's Pityriasis Pilaris"; Mr. Spencer Watson, "Sarcoma of Leg" (removed by Dr. Swift Walker of Hanley); Mr. Spencer Watson, "Eyeball, with extensive Ossific Deposit and peculiar Opacity of Cornea"; Mr. Spencer Watson, "Eyeball, with a small Ossific Deposit"; Dr. Greenhow, "Spinal Cord from a Case of Motor Ataxy"; Mr. J. E. Adams, "Exostosis of Cranial Bones"; Mr. J. E. Adams, "Tubercular Disease of Testicle"; Dr. Whipple, "Disease of the Lungs in a Porpoise"; Dr. Dickinson, "Cystic Growth connected with Lumbar Glands."—Anthropological Society.
- THURSDAY.—Royal Society.
- FRIDAY.—Clinical Society of London, 8.30 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE GREAT SULPHUR CURE.—An old member asks—reminded by our recent note on the convenience of using alcohol as a medium for dissolving sulphurous acid—What has become of the "great sulphur cure"?

ERRATA.—In Mr. De Berdt Hovell's paper on Paralysis in Relation to Treatment, in the JOURNAL of last week, at page 628, column 2, line 41, for "irritative", read "imitative" paralysis; and in line 43, for "irritation", read "imitation". The remarks refer to a case of imitative paralysis read by Dr. Russell Reynolds at the annual meeting in 1869.

EXTENSION OF THE ASSOCIATION.

WE shall be happy to give Dr. Davies, of Heytesbury, all the aid in our power. Dr. H. Barnes, of Carlisle, and Mr. A. Fleischmann, of Cheltenham, have had recent experience in successful efforts at similar extensions of the Association; and the General Secretary, Mr. T. W. Williams, Newhall Street, Birmingham, will be happy to give Dr. Davies information and assistance in the mode of proceeding. If he will forward to us lists, we will assist him effectually to canvass the district, and furnish members of the local Medical Society, who do not at present receive the JOURNAL, with the current number, so that they can form an independent judgment. We take this opportunity of reminding officers of branches that we are always happy to further the local extension of branches by similar assistance; and that this is the most convenient time of the year for such purpose, as new subscriptions commence from the beginning of the year. Members desiring to propose new members can be supplied with forms from the office.

H. H. S. refers to a former notice (Oct. 31st, 1868), in which we stated that "by law all proxy forms used at hospital elections require to be stamped; and moreover that, in cancelling the stamp, the person signing the proxy should be careful to write his name and the date of signature across the stamp. If these formalities be not observed, the proxies may be disputed, and the election rendered invalid." He writes to know whether this still holds good. The law is as we then stated it, but the practice is changing; and by mutual agreement, at several recent elections in London, proxies have been used unstamped. An informer might probably recover penalties; but amongst hospital governors such an incident is little likely to occur.

REMARKS

ON

THE SUBCUTANEOUS DIVISION OF THE NECK
OF THE THIGH-BONE,AS COMPARED WITH OTHER OPERATIONS FOR RECTIFYING EXTREME
DISTORTION AT THE HIP-JOINT, WITH BONY ANCHYLOSIS.**Illustrated by a Successful Case of the Subcutaneous Division.*

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and Great Northern Hospitals.

CASES of extreme deformity at the hip-joint, with the thigh flexed upon the pelvis, and generally adducted or drawn towards the opposite limb, sometimes even crossing over the opposite limb, are not uncommonly met with in surgical practice as the result of various forms of hip-joint inflammation.

Anchylolysis of the hip-joint may be either true or false as in other articulations. By true anchylolysis, I mean bony union of the articular surfaces after complete destruction of the joint; and by false anchylolysis, either one of two conditions; viz., 1. Union of the articular surfaces by fibrous tissue after ulceration of the articular cartilage and partial or complete destruction of the joint; or, 2. Inflammatory thickening and retraction of the ligamentous and other fibrous structures external to the joint; the joint itself remaining in a healthy, or nearly healthy condition, without any destruction of the articular cartilages, but sometimes with intracapsular adhesions.

In the present paper it is not my intention to speak of *false anchylolysis*; but, in reference to the first condition of false anchylolysis above described, I would only observe that it is generally the result of strumous disease, with ulceration of the articular cartilage, and that any amount of contraction and deformity may be overcome by gradual mechanical extension, with or without tenotomy, according to circumstances, so as to bring the limb into an improved position; but there never can be any reasonable expectation of restoring motion in the joint, and forcible extension is extremely hazardous, as liable to set up inflammation and re-excite destructive disease in the articular extremities of the bones.

With regard to the second condition of false anchylolysis, in which there is no destruction of the articular cartilages, I would only observe that this condition is generally the result of acute rheumatism, frequently with gonorrhœal complication, or, as it is called, gonorrhœal rheumatism. In this form, forcible extension under chloroform is especially applicable, any contracted tendons having been divided three or four days previously, where this may appear necessary; by it the deformity may be completely overcome and free motion of the joint restored in a large proportion of cases, if the treatment be commenced within six months or a year of the rheumatic inflammation. Occasionally I have myself succeeded in restoring motion at a much later period, even as late as three years; but, on the other hand, I have entirely failed after the lapse of a year, such cases passing into complete bony anchylolysis. Gradual mechanical extension, combined with passive motion, will occasionally succeed in this class of cases when commenced early, but is very liable to failure. Either of these two forms of false anchylolysis may result from traumatic inflammation occurring in a healthy individual; but unless suppuration in the joint occurs, the latter form generally takes place, the articular cartilages remaining in a healthy condition; and in such cases forcible extension under chloroform, with or without tenotomy, according to circumstances, generally gives the most satisfactory results.

True bony anchylolysis can only occur after complete destruction of the joint and removal of the articular cartilages. This condition may be the result either of the strumous, the traumatic, the more severe forms of rheumatic, or the pyæmic form of inflammation. When resulting from strumous disease after ulceration of the articular cartilages and caries of bone, it occurs only at a late period—generally from seven to ten years after disease has ceased. I have known fibrous anchylolysis to remain in the hip-joint seven years after active disease had ceased; and it is an admitted fact that bony anchylolysis is very slow to result in this class of cases. When resulting from traumatic inflammation, bony anchylolysis may take place within a year if suppurative inflammation of

the joint has occurred; but, if not, the articular cartilages remaining sound long after the injury, bony anchylolysis is not to be looked for, except perhaps as a late result after many years. When resulting from the more severe forms of rheumatism—especially the gonorrhœal form—bony anchylolysis generally occurs in a period of from one to three years; the articular cartilage being first covered by the lymph effused during the inflammatory process, and then slowly disappearing after membranous bands of adhesion have been formed between the adjacent articular surfaces; i.e., from one articular cartilage-surface to the other. For an illustration of this form, see case recorded by myself in the Pathological Society's *Transactions*, vol. xx, p. 296; London, 1869. When resulting from acute pyæmic inflammation, causing rapid and complete destruction of the joint, bony anchylolysis occurs more quickly than after any other form of inflammation, except when acute suppuration follows as the result of an injury in a healthy individual. In the pyæmic as well as in the traumatic form, bony anchylolysis may occur within the period of a year.

When bony anchylolysis of the hip-joint has taken place as the result of any of the inflammatory affections above described, no operative procedures should be attempted, if the anchylolysis have occurred with the limb in a straight position, as any attempt to obtain free motion by the production of an artificial joint could only be made at the risk of life, and under the most favourable circumstances with a very doubtful result as to useful motion. In the great majority of cases of bony anchylolysis of the hip-joint, however, contraction of the joint with the limb in a deformed position is found to exist; in some cases, simple flexion of the thigh having occurred with very little adduction or abduction; in other cases, severe adduction, with a comparatively small amount of flexion; and again, in others, the distortion will be found to depend upon flexion with abduction, or adduction, of the thigh, in about equal proportions.

The inconveniences consequent upon anchylolysis of the hip-joint with distortion will vary according to the extent, and also according to the direction, in which the distortion has occurred; e.g., in a case of simple flexion of the thigh, even when contracted to a right angle with the pelvis, and accompanied with abduction, as in the case in which I subcutaneously divided the neck of the thigh-bone, and the photographs of which I now exhibit to the meeting, the inconvenience was limited to the uselessness of the limb, the use of a crutch and stick being necessary for progression.

In cases of anchylolysis with distortion, in which adduction of the thigh predominates, so that the knee is drawn across the opposite thigh; or in cases in which the adduction and flexion are combined, the inconveniences are very great when occurring in females, in consequence of pressure upon the labia and the orifice of the vagina rendering urination difficult, and the thigh liable to constant excoriation. This occurred to a serious extent in one of the cases operated upon by Louis Sayre of New York; and in this case even the introduction of a catheter was found impossible. Inconvenience of a similar kind occurred in the case of a young lady who was the subject of fibrous anchylolysis of the hip-joint, with the thigh in an extremely adducted position, with very little flexion, and upon whom I have operated with partial success by means of forcible extension, under chloroform, after tenotomy.

These and other inconveniences will be found to depend upon the extent and direction in which the distortion has occurred, and it is therefore obvious that in some cases an urgent necessity exists for surgical interference; and various operations have been proposed, not only with the object of rectifying the deformity and bringing the leg into a straight and useful position, but it has also been attempted to obtain free motion by the production of an artificial joint.

The first operation, having for its object not only that of rectifying the deformity, but of obtaining motion by the establishment of a false joint, was performed by Dr. Rhea Barton* of Philadelphia, United States, in 1826. This operation was accomplished by a crucial incision made over the great trochanter, seven inches in length and five inches in a horizontal direction. The bone was then divided transversely by a fine saw—it is said "between the two trochanters"—probably just above the small trochanter. The natural direction of the limb was at once restored, and the case proceeded favourably. It is said that useful motion was obtained, but that seven years afterwards anchylolysis took place, and that the man died of phthisis nine years after the operation.

The next operation worthy of attention is recorded by Dr. Louis Sayre† of New York, who operated successfully on two cases in which he performed a new operation, which he had proposed for obtaining a

* "On the Treatment of Anchylolysis by the Formation of Artificial Joints", in the *North American and Surgical Journal*, April 1827; with further remarks in the *American Journal of the Medical Sciences*, vol. xxi.

† "A New Operation for Artificial Hip-Joint in Bony Anchylolysis: illustrated by Two Cases." By Lewis A. Sayre, M.D. New York: D. Appleton and Co. 1869.

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

false joint and preserving motion in cases of bony ankylosis of the hip-joint, with the thigh in a flexed position. The theory of this operation was to obtain free motion by the formation of a false joint, of a ball-and-socket character, supposed to resemble the hip-joint in possessing an acetabulum or cavity corresponding to this, and a rounded extremity of bone corresponding to the head of the femur; and also a round ligament.

The operation consisted in the removal of a transverse section of the femur, of elliptical form, just above the trochanter minor (as shown in fig. 1), by means of the chain-saw, an incision of about six inches in

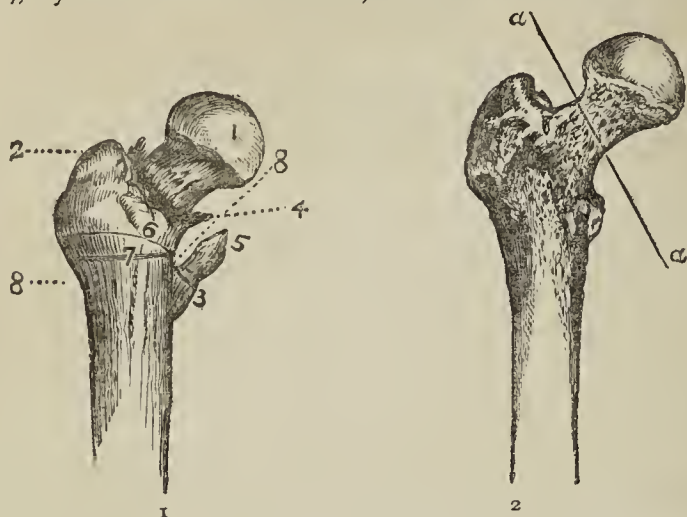


Fig. 1.—Diagram copied from Louis Sayre's pamphlet. 1. Head of Femur. 2. Trochanter Major. 3. Trochanter Minor. 4. Line of insertion of Capsular Ligament (variable). 5. Tendon of Psoas Magnus and Iliacus Internus Muscle. 6. Line of Curved Section. 7. Line of Transverse Section. 8. Dotted Lines indicating rounding off of Lower Fragment after removal of Segment.

Fig. 2.—Upper portion of Thigh-bone. Situation and direction of Subcutaneous Division of Neck of Thigh-bone represented by line a, a.

length being made over the trochanter major in the axis of the limb. The first patient, Robert Anderson, aged 26, was operated upon on the 11th June, 1862, and in December of the same year he is reported as follows, "Could stand on either leg without either crutch or cane"; and as late as April 29th, 1868, Dr. J. S. Green says, in a letter to Dr. Sayre, that "Robert Anderson still lives, moves, and walks with practical agility" (p. 35, pamphlet).

The second operation was performed 6th November, 1862, on Miss Susan M. Losee, aged 24. This case proceeded less favourably than the first; but all discharge from the wound ceased four months after the operation. Subsequently, however, an abscess formed, and a little necrosed bone escaped. Pneumonia and pleurisy occurred, and she died on the 17th May, 1863. At the *post mortem* examination, tubercular deposits were found in the lungs, and a large abscess in the left lung. The artificial joint was found to be provided with a complete capsular ligament, and the articulating surfaces were tipped with cartilage and furnished with synovial membrane. In consequence of Dr. Bauer, in his work on *Orthopædic Surgery* (p. 325), stating that this case of Dr. Sayre's died of pyæmia, a number of letters from medical men are given in the appendix to the paper, confirming the tubercular theory, and also Dr. Sayre's statement as to the existence of cartilaginous covering to the bone, synovial membrane, etc.

I am not aware of any operation having been performed in this or any other country on the hip-joint in cases of bony ankylosis, with the object of obtaining free motion by the establishment of a so-called "artificial joint"; and it will at once be seen that further experience is required before we can confidently speak of the success of such an operation, although the cases recorded by Dr. Sayre are undoubtedly worthy of the most attentive consideration.

It occurred to me, however, that in these cases of bony ankylosis of the hip-joint, with extreme distortion, a much more simple operation might be performed by the subcutaneous division of the neck of the thigh-bone, about its centre, within the capsular ligament (as represented in fig. 2), using for this purpose only a long tenotomy-knife, and a very small saw constructed for the purpose, with an inch and a half cutting edge, and a long thin shank like a tenotomy knife; and on the 1st December, 1869, I performed this operation successfully on the following case.

Luke Bristowe, aged 24, a gardener from Loudon, near Chippenham, Wiltshire, was admitted into the Orthopædic Hospital on the 12th October, 1869, in consequence of extreme deformity at the hip-joint. The thigh was flexed upon the pelvis at a right angle, and firmly ankylosed in this position; the heel of the right leg rested on the upper part of the left knee-joint, and the limb was therefore perfectly useless. The

only mode of progression was either with two crutches, or with one crutch and a stick, which he generally used (as shown in fig. 3). He had also ankylosis of the vertebral articulations through a considerable portion of the spinal column; all the lumbar and lower dorsal vertebræ were perfectly immovable, and the spine was curved posteriorly, with



Fig. 3.—Position of Limb previous to Operation, and the usual mode of progression.

an inclination to the right side in the lower dorsal and upper lumbar region. In consequence of this ankylosis through the lumbar region, the pelvis and spine could only be moved together, and the trunk and leg therefore appeared to be remarkably fixed in the deformed position. There was also a fixed and permanent obliquity of the pelvis, with regard to the spinal column, to the extent of two inches, as ascertained by careful measurement. Partial ankylosis also existed in some of the upper cervical vertebræ; the motion between the occipital bone and the atlas was free, but between the atlas and the axis motion was extremely limited, and the head was habitually carried forwards. This affection was the result of an extremely severe attack of rheumatic fever, with which he was seized seven years ago June last, and which, he stated, was not preceded by gonorrhœa. Various articulations were affected during the fever, and the rheumatic pains were severe for six months, and continued more or less for twelve months. During the latter part of this time he was an inmate of the Bath Hospital for fifteen weeks, and had the hot mineral baths, but without any marked relief; and he then went into the Brighton Hospital for nine weeks, where he was galvanised, and had to swing a seven-pound weight, but without material benefit. No treatment had been adopted during the last six years, nor had he suffered from any further attack of rheumatism. His general health was good, and also his family history.

That the case was one of true bony ankylosis, was proved by the failure of forcible extension under chloroform, tried on three separate occasions at the Orthopædic Hospital; and after this I suggested to the patient the operation of dividing through the bone as the only means of restoring the position of the limb, and he readily gave his assent. For the purpose of the operation, and that he might have the advantage of superior nursing, if required, he was removed to the Great Northern Hospital on the 26th November, 1869.

On the 1st December, 1869, I divided the neck of the thigh-bone subcutaneously within the capsular ligament, in the presence of my colleagues, Mr. Gay, Mr. Carr Jackson, and Mr. Shillitoe; Mr. Mason, Dr. H. Dick, and Mr. John Mackenzie of the Bombay Hospital, were also present. The instruments used were a long tenotomy-knife, and a very small saw, three-eighths of an inch in width, and with a cutting edge an inch and a half in length, at the end of a slender shank three inches in length, made by Mr. Blaise of St. James's Street, and shown on a diminished scale in fig. 4. The details of the operation were as follows.

I entered the tenotomy-knife a little above the top of the great trochanter, and, carrying it straight down to the neck of the thigh-bone, divided the muscles and opened the capsular ligament freely. Withdrawing the knife, I carried the small saw along the track made—pre-

serving this by pressure of the fingers—straight down to the bone, and sawed through it from before backwards, in the direction represented in fig. 2: this was accomplished in five minutes. No hæmorrhage followed; and I immediately applied a compress of dry lint, a plaster, and bandage.

improve the general balance of his body, which was somewhat disturbed by the spinal curvature.

In comparing the relative merits of the three operations which I have now described for rectifying extreme distortion at the hip-joint with bony ankylosis, the different objects sought to be accomplished and

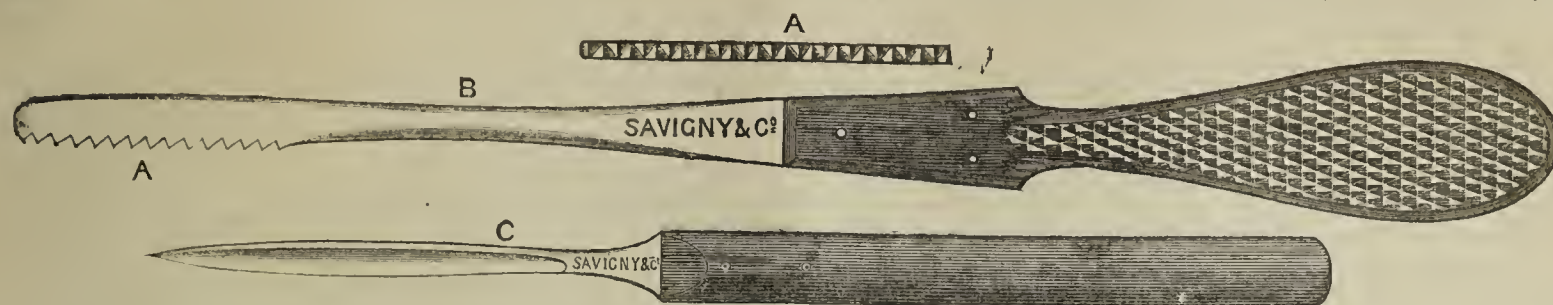


Fig. 4.—B, Subcutaneous Saw and c, Tenotomy-knife, drawn one-third less than those used in the operation; A representing double cutting edge of Saw, full size.

As soon as the bone was cut through, the leg moved freely in all directions; but, before it could be brought into a straight position, it was necessary to divide the tendons of the long head of the rectus and of the adductor longus muscles, and to cut through the tensor vaginæ femoris muscle. The limb was fixed in a straight position and bandaged to a long interrupted Liston's splint. No inflammation whatever followed the operation; no swelling or redness of the skin, or any deep suppuration; but the wound healed slowly. The House-Surgeon, Mr. Willis, reports as follows.

December 4th. The long splint was changed to-day for a short one. He could move the leg from the hip gently whilst the splint was off. The tenotomy wounds were quite healed.

December 5th. A four-pound weight was attached to the leg, which he bore well for a time.

December 7th. The dressing was removed for the first time to-day. A few drops of pus only escaped from the superficial wound. There was no deep suppuration going on. The superficial wound was dressed with carbolic lotion, one part in forty.

December 13th. The splint was removed altogether to-day. He could draw the leg up almost as well as the sound one, and had very fair motion at the hip.

December 22nd. He was going on well. No febrile symptoms or deep suppuration were going on. The superficial wound was nearly healed. There never had been more than two or three drops of pus on the lint in the morning. Collodion and castor-oil were applied to-day instead of carbolic acid lotion. He got up to-day for the first time, just three weeks since the operation.

I encouraged motion from the 13th December, and moved the limb frequently myself; and, when he walked about the ward on crutches, induced the patient to swing the leg as much as possible. After walking about daily for a fortnight, however, the limb began to stiffen at the hip, and all attempts at movement were painful. I then determined to abandon all idea of obtaining motion, and endeavour to procure bony ankylosis with the limb in a straight position.

On the 6th January, 1870, the man was ordered to keep his bed, and the limb to be maintained in a straight position by an extending weight of from three to five pounds suspended over the end of the bed. At the end of three weeks, the divided neck of the femur seemed to be firmly ankylosed; and on the 24th January, he was discharged and transferred to the Royal Orthopædic Hospital.

March 18th. He had gained sufficient strength to be able to walk about the ward with the aid of one stick, and he could walk a little without any assistance. [Fig. 5, taken from a photograph, represents him in the standing position, and a small depressed cicatrix is shown at the seat of operation.]

April 25th. He was taken to the Medical Society of London, and exhibited his power of walking about the room without any assistance. He continued steadily to improve, and gained sufficient strength to bear the entire weight of his body on the leg which had been operated upon, as shown in fig. 6, in which he is represented as standing on this leg. He still, however, generally uses one stick in walking, and walks with the body somewhat inclined to the right side (as represented in fig. 5) in consequence of the obliquity of the pelvis and ankylosis of the lumbar and lower dorsal vertebræ. Although there appears to be a little shortening of the right leg, he is not at all improved, as to the erect position of his body, by any addition to the boot, so that he wears boots of the same thickness.

November 10th, 1870. This patient having been at his home in the country for several months, came to London, and I again examined him. He could now walk three or four miles with ease, and did not require a stick for walking purposes, although he always used one to

the risk to life incurred in each operation must be borne in mind. The operations performed by Barton and Sayre were undoubtedly of a formidable character, requiring large external incisions, and necessitating considerable disturbance of structures at a great depth from the surface to allow of the use either of an ordinary saw or of a chain-saw, as em-



Fig. 5.—Patient in standing position, between three and four months after operation.

Fig. 6.—Patient standing, and bearing the weight of his body on the leg which had been the subject of operation.—Taken by Mayall at the same time as Fig. 5: and woodcuts 3, 5, and 6, were taken from photographs by Mr. Mayall, who, by his artistic assistance, generously aids the Orthopædic Hospital.

ployed by Sayre; and the evidence is not yet sufficient to prove that even by such means a permanently useful artificial joint can be established in the neighbourhood of the hip-joint. In Rhea Barton's case, bony ankylosis was proved to have taken place by the *post mortem* examination of the patient, who died from phthisis eight years after the operation, although motion is said to have been preserved for six years.

In Sayre's first case, in which a segment of bone was removed above the small trochanter, an useful limb was permanently obtained, and good motion existed five months after the operation, but some necrosis subsequently occurred; and the late accounts, six years afterwards, are less satisfactory than we could desire as to the evidence of free motion at the joint. In Sayre's second case, which undoubtedly offers a good illustration of the establishment of a false joint, necrosis, although in a limited degree, was still proceeding at the time of death—six months after the operation—and bone had exfoliated previously, so that Dr. Bauer was induced to believe that the death arose from pyæmia rather than phthisis.

In the case which I have now brought before the meeting, I was encouraged, by the absence of inflammation, to hope for the establishment of motion; but, this failing, the result was limited to remedying

the deformity and obtaining a useful limb for the patient, with bony ankylosis in a normal position; and to such a result I would advise, in all future operations, that our expectations should be limited.

With regard to the subcutaneous operation, which, so far as I know, was first suggested and performed by myself, and which I have now brought before the British Medical Association, I would only observe that the subcutaneous division of bone—subcutaneous osteotomy, as it may be called—has proved itself to be as simple and harmless an operation in its immediate effects as subcutaneous tenotomy, with which, in its essential characters, the operation may be compared.

Since this paper was read at the Association meeting, this operation has been successfully performed by Mr. T. R. Jessop of Leeds, who on the 17th September, 1870, writes as follows. "Three weeks ago last Thursday, I performed the operation upon a young woman whose right thigh was fixed by bony ankylosis at a right angle with the pelvis. By practising upon the dead subject, I had previously found that the best spot at which to make the puncture was about an inch behind the posterior margin of the great trochanter, near its upper border. The division we made without any difficulty. The operation and the subsequent dressings were performed after Professor Lister's method. The wound healed at once without a single drop of pus. For a fortnight I kept the patient in bed, with the limb stretched by means of a weight slung over a pulley attached to the ankle. Since the expiration of a fortnight, I have had the woman up, walking about on crutches, and swinging the leg in all directions, with the view of procuring a false joint. The limb measures barely an inch shorter than the sound one; and the patient makes complaint only of a little pain in both hip and knee. Crepitus can both be felt and heard very distinctly. I will have the result duly reported." The operation has also been successfully performed by Mr. F. W. Jowers, of Brighton, and Mr. Furneaux Jordan, of Birmingham. No inflammation or suppuration followed the operation in either case. The details of these three successful cases will shortly be published; and the fact that this operation has been successfully performed in four cases, goes far to establish it as a surgical procedure.

SUBCUTANEOUS SECTION OF THE NECK OF THE FEMUR.

By FURNEAUX JORDAN, F.R.C.S.,

Surgeon to the Queen's Hospital; Professor of Surgery in Queen's College, Birmingham; etc.

EMMA H., aged 16, from Wales, had had hip-disease for six years. She had had several sinuses opening and closing during that time. On admission into hospital, there was a little oozing from one near the perinæum. The thigh was flexed at right angles to the trunk; and there was unmistakable osseous ankylosis of the hip-joint, as revealed by examination under chloroform. I divided the neck of the femur by the method and with the instruments devised by Mr. W. Adams. The sudden mobility of the joint when the section of the femur was completed was very striking. The adductor longus and long head of the rectus femoris required tenotomy. The limb was then put into a position which promises a very useful result. It is now three weeks since the operation, and the progress has been most favourable.

In this case, the naturally short femoral neck of early life, made shorter by caries and ankylosis, combined with a very fat gluteal region (since ankylosis, the patient has become very stout), required more than ordinary care in every step of the operation.

ON SCARLET-FEVER, WITH SPECIAL REFERENCE TO PATHOLOGY AND TREATMENT.*

By ROBERT RENFREW, M.D., Glasgow.

SCARLET FEVER is one of the zymotic diseases. These diseases are now generally believed to be produced by a specific organised substance entering the body, either by the stomach or lungs, or by both; when it has entered the system, it has the power of developing and multiplying itself, as seen in inoculation and vaccination. The process of multiplication deteriorates the blood, deranges the nervous system, quickens the circulation, causing rapid disintegration of the tissues, as evinced by the increased temperature, and altering the secretions from the secretory and excretory organs. Disintegration goes on with such

rapidity that the normal physiological and chemical changes cannot take place, and disintegrated substances are floating in the blood, still further deteriorating the vital fluid.

The morbid matters of the zymotic diseases are not eliminated by the usual eliminating organs. Each poison is thrown off by a distinct and separate part of the body: small-pox, by the skin; cow-pox at the point of introduction; measles, by the mucous membranes of the eyes, nose, fauces, and lungs; whooping-cough, by the mucous membranes of the respiratory organs and stomach; enteric fever, by the lower third of the ileum; cholera, by the stomach and bowels; scarlet fever, by the fauces, nose, and perhaps by the stomach. In typhus fever, the eliminating part is not so obvious, but, perhaps, it is done by the lungs. The parts specified above, however the poison may have been introduced into the blood, are always those affected. That the poison of enteric fever is thrown off by the intestines, and cholera by the intestines and stomach, there can be no doubt, for it has been proved that persons drinking water containing the discharges from these diseases have been seized with similar disorders.

It has been said that "it seems probable that in all varieties of scarlet fever a primary effect is suddenly and violently to stimulate the natural cell-growth of all the secreting organs." We have no evidence that this takes place anywhere else than in the parts pointed out; for in scarlet fever we have very seldom any disease of the lungs, liver, or bowels. Sometimes the kidneys show signs of congestion, but not more so than in pneumonia, typhoid, and typhus fever. In parts where we have always irritation or inflammation in zymotic diseases, I believe they are always caused by elimination or absorption of the poison.

The severity of the symptoms, whether general or local, in the zymotic class of diseases, depends upon the power of the system to develop the poison in the blood. For, if a number of persons be inoculated from the same person, there will be found a great variety in the number and character of the pustules. If several children be vaccinated with the same lymph, and with equal care as regards the number, depth, and extent of the scratches and quantity of matter applied, you will have a great diversity in the number of the vesicles and amount of lymph produced. In one child you may only have one vesicle, in another two or three, and so on, until you have a cluster of the size of a shilling.

At one time I thought that the small number of vesicles after vaccination depended on some imperfection in the introducing of the lymph, until I tried—when there was only one vesicle—vaccination on the other arm, and failed; showing that, however small the amount of lymph eliminated, the purpose had been accomplished, and that the power of multiplying the poison had been weak.

In every case of scarlet fever the throat is affected. The rash may be absent, but the throat-affection is never. In the mild form the fauces are red, somewhat swollen, and the secretion increased in quantity and altered in character. In scarlatina anginosa and maligna these appearances are all greatly aggravated, and they have extended themselves into the nose, and sometimes even into the Eustachian tube, causing great pain in the ear, and often suppuration. In these two forms the tonsils are found to be greatly enlarged, but in scarlatina anginosa they are often covered by a yellowish white exudation. In scarlatina maligna we have in addition ashy-coloured sloughs, and some of these sloughs go so deep into the tonsils that, when they break up, we have sometimes an artery of considerable size opened, causing alarming and dangerous hæmorrhage. In these forms pain of the throat is so great that deglutition is performed with great difficulty, and in some cases it cannot be performed at all. Secretion is greatly increased, so that it flows out of both mouth and nose, its character being so much altered that it irritates and excoriates the parts over which it flows.

I believe that in some of the zymotic diseases, where the poison can be reabsorbed, the disease is aggravated and prolonged. In enteric fever I have observed that where there was diarrhoea—although otherwise this indicates greater severity in the general and local symptoms—the course of the fever was generally shorter than where there was very little or none. The diarrhoea hurried the poison out of the bowel; but where there was no purging, or very little, it remained to be absorbed, prolonging the fever.

After these general remarks, I will now call your attention to some special points in the pathology of scarlet fever and the treatment.

A poison enters the blood, capable of extensive multiplication. After a shorter or longer period the tonsils and parts already mentioned, by some physiological law, take on the process of eliminating the poison, producing the local symptoms already stated. A great part of the eliminated poison must be swallowed, to be reabsorbed by the stomach, intensifying and prolonging the disease. In connection with this view, I will state a pathological condition of the stomach, which may, in part, be caused by the poison passing from the throat and other parts into it.

* Read in the Medicine Section before the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

It has been said by Dr. Fenwick—"With regard to the stomach, the blood-vessels get congested, the epithelium is stripped from the tubes, and the tissues become softened; the tubes are found distended by granular matter or by cells mixed with granules."

In support of this view, I would refer you to the local pathological conditions of enteric fever, which are almost identical with those of scarlet fever. We have the irritated inflamed condition, with ashy sloughs over the glands, which, when separated, leave ulcers, from which hæmorrhage often takes place. The adjacent glandular organs—mesenteric glands, liver, and spleen—are also affected.

In his article on Enteric Fever in Reynolds's *System of Medicine*, Dr. Harley says (although I do not agree with him in regard to his general views of the pathology of the disease), in speaking of the nervous symptoms, that, "if the poison be arrested by and thrown out from the liver, no general blood-poisoning, and therefore no grave nervous symptoms, are met with. If the liver be unequal to the arrest and elimination of the poison, it passes unaltered from the portal into the general circulation, and symptoms of general blood-poisoning at once appear."

There can be no doubt that the blood is deteriorated in scarlet fever; for, however bright the skin may be at the first, it soon becomes purplish, and, in bad cases, of a very deep purple colour, as if it were venous blood that was circulating, showing that the red blood-discs are in a deteriorated condition, unfitting them for their functions in the economy. It is also in a superalkaline condition. Here I will give a quotation from Dr. Chambers's *Lectures*. "Ammonia, which is always being formed and given off from the animal body, is found much more abundant in certain conditions than in others; and that these conditions are those in which nutritive metamorphosis or growth was deficient, as compared with destructive metamorphosis." He goes on to say: "For it is not shown that there is more alkali in the body than there ought to be, but more than there is acid to neutralise. Subacidity would be a synonymous term, and more suggestive of the means we have at our disposal for remedying the defect." If alkaline conditions out of the body favour the development of zymotic poisons, the same conditions in the body are likely to do the same.

With these views which I entertain of the pathology of scarlet fever, I will now give you the treatment based upon them.

In the treatment of scarlet fever, agents should be given that will prevent the reabsorption of the poison, hinder its formation, moderate and assist physiological and chemical actions and changes.

The medicine which I have used for these purposes for nearly eight years is a mixture containing tincture of steel and chlorate of potass. In this mixture we have chlorine, muriatic acid, iron, and chlorate of potass. The chlorine acts upon and destroys the poison in the stomach; and probably some of it is taken into the blood, producing the same effect there. The muriatic acid, Dr. Chambers says, "is such a large constituent of the body, that it might almost be called a food, instead of a medicine; and that it is a powerful arrestor of decomposition of animal matters." He also says about the ammonia, "Very difficult indeed would it be for the eliminator to get this alkali out; but it is easy for the restorers to get acid in." By getting the acid in, we lessen the alkalinity of the blood, and neutralise one of the conditions favourable for the development of the poison. The red discs of the blood are the carriers of oxygen; but, in their "black and melanosed condition", they are not in a condition for accomplishing this function. The iron supplies that which is likely to improve the deteriorated discs, and we give that which we know rapidly increases their number. The chlorate of potass supplies oxygen to the blood—which must be very deficient, from the condition of the red discs and the rapid disintegration that has been going on—to enable the physiological and chemical changes to take place, and oxidise the disintegrated substances that are floating in the blood.

Gentlemen, these are my views of the pathology and treatment of scarlet fever. I would not have brought them before you if it had not been that I have not seen, in the communications to the medical journals, anything like a fixed and rational method of treating scarlet fever. Before I began this treatment, there was no medicine that I believed did any good. It has been very satisfactory to myself; for, from the painful and irritated condition of the throat, it was very difficult to get children to swallow any medicine. In many instances, they could not be made to swallow even cold water; but I have no difficulty with this medicine. It is taken so readily by even the youngest child, that it seems to supply a want. The pain is very soon relieved; the exudations and superficial sloughs disappear; the throat improves in appearance; the swelling, both internal and external, diminishes; the secretions become lessened, and lose their irritating character; and refreshing sleep is enjoyed. I never have hæmorrhage from the throat, nor an abscess in the ear or neck.

The forms in which I give the medicine are the following

1. For a child two years old: \mathcal{R} Tinct. ferri perchloridi \mathfrak{z} iss vel \mathfrak{z} ij; potassæ chloratis \mathfrak{z} j; glycerinæ \mathfrak{z} iss vel syrupi simplicis \mathfrak{z} j; aquæ q. s. ad \mathfrak{z} iv. Two teaspoonfuls to be taken in water every hour or two hours.

2. For an adult: \mathcal{R} Tinct. ferri perchloridi \mathfrak{z} iv; potassæ chloratis \mathfrak{z} iiij; glycerinæ vel syrupi simplicis \mathfrak{z} iss; aquæ q. s. ad \mathfrak{z} viiij. One tablespoonful in water every hour or two hours.

ON THE SULPHOCARBOLATES AND THE ANTI-SEPTIC METHOD IN MEDICINE.*

By A. ERNEST SANSOM, M.D. Lond., M.R.C.P.,

Physician to the Royal Hospital for Diseases of the Chest, City Road; and to the North Eastern Hospital for Children.

THERE is scarcely any subject which possesses a greater interest at the present time to practitioners of medicine than what is known as "The Germ Theory of Disease." Warmly espoused by some observers, the doctrine is actively repudiated by others. Whilst some have pointed out certain definite living organisms which they have alleged to be the actual causes of transmissible disease, others have scouted the word "germ" as implying the existence of something for which not a shadow of evidence exists. Can there not be a golden mean between these expressions?

Let us first consider those points on which there can be mutual concord. There is scarcely any possibility of doubt that the transmissible diseases, such as fevers, syphilis, etc., are due each to the operation of a material poison. No one attributes them to the influence of mere conditions of force. There is abundant evidence that the physical causes of disease do not belong to the inorganic world. By exclusion, therefore, we conclude that these are material and organic. But does our knowledge of organic substances help us much in the elucidation of the problem? We know of no organic substance which can induce a train of symptoms resembling in kind and in mode of sequence the phenomena of any infectious disease; still less any poison the fatal dose of which is so minute as to be imponderable and invisible. Furthermore, we are acquainted with no simply organic material which can be, as we know the *materies morbi* to be, self-multiplying. If, then, the prime causes of disease be material organic particles, they must possess powers far transcending those with which we are ordinarily acquainted. With organic matter in a certain state, however, the effects of the contagia of disease show a strong analogy. It is not strange that from Hippocrates downwards they should be likened to leaven, and their operation to the process of fermentation. The resemblance was great, but there was no perfect understanding of the first causes of either the one process or the other. At very early times, the "peculiar condition" of the minute portion of organic material which induced the phenomena of fermentation or of disease was supposed to be a condition of motion of its particles, which motion it could communicate to the fermentescible liquid in the one case, or to the fluids of the body in the other. (See *A Mechanical Account of Poisons*, by Richard Mead, M.D., London, 1702, p. 81; see also pp. 13-15.) This is none other than the hypothesis of Liebig, which has so largely prevailed at the present day. It is needless to say, that at the present time there are two opposing views as to the nature of the first cause of the process of fermentation—the one holding that it is due to the effect of an unexplained catalytic action communicated to fermentescible material by an organic substance undergoing change; the other, that its phenomena are due from the very beginning to the acts of life of developing, growing, and multiplying organised particles. The upholders of these two views may, I fancy, be considered as nearly equally divided. There is, however, one point on which there is a pretty obvious agreement, and that is a point of great importance in regard to this question. It is that, whatever may be the *initial* cause of the changes in fermentation, the process, as soon as it becomes capable of discernment by vision, however highly aided, is seen to be most intimately connected with the development of living forms.

Let us turn for collateral evidence to the observations which have been made on the causes of cognate diseases. No one doubts now that animal and vegetable organisms, at one time enjoying separate existence, can enter the living human organism, and there initiate and continue the phenomena of disease. Well marked in cases of diseases due to parasitic animals and plants, this mode of causation has been attributed in other transmissible diseases to organisms with more and more obscurity, till it has almost reached to a *reductio ad absurdum*. Thus, cholera

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

has been attributed to fungoid spores, to oïdium, to vibrios, to urocystis. Certain modern researches throw some light on the causes of these discrepancies. The researches of Hallier (*Gährungsercheinungen*) supported as they have been by other observations, leave little room for doubt that the same "germ" will give rise to different varieties of organism, accordingly as it is cultivated under different physical conditions. In fermentation, which arises without the addition of any obvious ferment, it is not necessary for the panspermatists to concede a plurality of germs. Again, in case of vegetable parasites, it has been shown that the cultivation of the "oïdium albicans" from the mouth has given rise to the cells of "trichophyton" at one time, and to the filiform productions similar to those of pityriasis in another. This granted, it must be agreed that the pointing to such and such of the diseased process an organism found in the course of, or at the termination of, a given disease would be far from establishing it as *primum movens*. For it might be but the indication of a morsel of living matter infinitely more minute than itself, of which it was a stage of growth.

Researches on other forms of transmissible disease have contributed towards the elucidation of the question, particularly those of Beale and of Chauveau on vaccinia, variola, cattle-plague, etc. The researches of M. Chauveau have proved that the activity of the poisons of vaccinia, of glanders, and of sheep-pox, resides not in the fluids of the inoculated material, but in excessively minute elementary granules suspended in the fluid. He has shown, furthermore, by actual experiment, that this inoculable material may be communicated to a living body as well by the lungs and by the stomach as by insinuation beneath the skin. Dr. Beale has shown that the elementary granules of vaccine are minute masses of living matter (bioplasm) manifesting very active movements. In cattle-plague he has observed similar rapidly multiplying material in the blood of the affected animal.

In the cases, therefore, of such transmissible diseases as I have mentioned, the term "germ" has different significations.

In diseases produced by entozoa or epizoa, it denotes the transmitted ova of the animalcula specially concerned.

In diseases due to vegetable parasites, it indicates the sporules or minute granules whence the parasitic vegetables develop.

In zymotic diseases, it indicates those minute morsels of germinal matter which possess a vitality separate and distinct from the organism into which they may become absorbed, and, once gaining entrance, develop and circulate within the fluids of the containing organism. The word "germ", then, denotes nothing more than the minutest portion of living material which the mind can conceive, such material being ultimately derived in various ways from the animal or from the vegetable kingdom.

From remote times measures have been adopted having for their object the prevention or the arrest of transmissible disease. These measures have been adopted with two objects: to prevent the communication of disease from person to person, and to prevent the evolution of noxious material from fermenting and putrefying matters which have been recognised as sources of contamination. The object of disinfecting measures has been the destruction of the virus in the one case and the prevention of its evolution in the other. Materials capable of fulfilling the desired ends are very various. Inorganic as well as organic substances of endless variety of chemical constitution are capable of being good disinfectants. On a review of a large number of these substances, and an examination of their relative power in arresting fermentation, putrefaction, and the proliferation of low organisms, one cannot help concluding that the chemical constitution or the chemical properties of a body can be no index of its position as a disinfectant or an antiseptic. They operate in no traceable chemical way; but, when they kill the organisms which accompany the fermentative or putrefactive process, they arrest all the phenomena of the process.

The question occurs, Is it possible to arrest the vitality of the germs of disease within the living body, as we have reason to believe we can destroy them when external to the body? Can there be an internal as well as an external antiseptic method? In the case of the higher forms of parasites which induce disease, this can be at once answered in the affirmative; and it affords a *prima facie* case for the elucidation of the question in reference to the more subtle zymotic diseases. It is certain that an agent which can be taken with impunity by the higher animals can be a powerful poison to the lowest forms of life. Many of the medicines ordinarily administered, as bichloride of mercury, arsenic, the salts of iron, etc., even in very high dilution, at once kill lowly endowed organisms.

In 1857, Professor Polli of Milan, having observed the power of sulphurous acid and the sulphites in arresting fermentative processes, initiated a plan of administering the latter in cases of zymotic disease. An able paper by Dr. Polli was read at the meeting of the British Medical Association in 1867 (see BRITISH MEDICAL JOURNAL, Novem-

ber 16th, 1867). The author did not consider that the sulphites, when internally administered, acted as poisons to morbidic ferments, but that they rendered the components of the recipient organism incapable of being acted on by the catalytic germs. It is difficult to understand this hypothesis; for, whether the sulphites attack the germs directly, or whether they render the soil unsuitable for them, the ultimate result is their death. It is possible that Polli agreed with Bernard, who said, "We cannot neutralise these ferments in the living organism; it is impossible, because to effect such a purpose it would be necessary to interfere with the functions of the blood to such an extent that it would be incapable of maintaining life". This would be the case if the agent acted as a poison in virtue of its chemical properties; to oxidise or deoxidise the ferment would be to gravely interfere with the functions of the blood. But we find that the most feeble oxidisers or deodorisers are the most potent poisons to low organisms: the sulphite, which can be shown at once to kill myriads of animalculæ or fungi, can be shown to exercise scarcely any deoxidising power, for it is recoverable from the body not as sulphate, but as sulphite undecomposed. In my opinion, therefore, we should conclude that the action of the sulphite or any absorbed antiseptic would be the action of a poison upon germinal matter.

As to the success of Polli's treatment, there is discrepancy in the evidence. On the one side, many observers attested to much success. From 1861 to 1867, Polli received one hundred and forty-eight papers, which, with the exception of five or six, confirmed "in the strongest terms, by many hundreds of detailed observations, the value of the remedies". On the other hand, many who have employed them in this country have expressed themselves as disappointed with the results. From a review of the conditions, it can be at once seen that we have no right to expect from any treatment pursued with the object of arresting the course of septic poisoning, an uniformity of success. The opposing conditions are many and powerful. Common experience tells us that there may be the absorption of a morbid poison long before the manifestation of any subjective or objective symptoms, or these may be so slight as to pass unnoticed. During this incubation, there can be little doubt that collateral physical degenerations are occurring in the tissues of the body. And when the symptoms of disease have set in, a variety of induced perturbations contribute to form their complex cause; so the induced condition may be of far greater gravity than the original. Thus the ova of certain tæniæ may exist in the human body unnoticed, but their development as echinococci induces the gravest lesion. In cholera, the exfoliation of epithelium from the gastro-intestinal tract is another example of secondary disintegration. There is, therefore, abundant reason for the discrepancy between different observers. Many have probably been discouraged by a want of success at the outset. The logical conclusions are, that the value of the plan can only be determined by numerical data, and that, if it be adopted, collateral measures, suited to the various complications, should be put in force as well.

The fulfilment of the plan of treatment by the sulphites does not involve the abandonment of a plan which has been proved to have a probability of success. Our present treatment of zymotic disease is manifestly expectant. The complications which arise can be treated in the one case as in the other; and by the sulphite the functions of a saline causing the reduction of a heightened temperature are fulfilled, and something more.

Since Professor Polli's first advocacy of the sulphites, I used them in the treatment of zymotic disease, and I considered that my results confirmed his own. I felt that in the path which he had indicated there was work to be done, and that an agent might be discovered having therapeutic powers perhaps exceeding those of the sulphites. Carbolic acid then came prominently before the medical world, and its powers as an antiseptic became daily more apparent. Certain difficulties attended the internal administration of itself and its simple salts; but in 1867, my attention was called by Mr. Crookes, F.R.S., to a salt which he had procured of a compound acid, sulphocarbolic, with potassium. I pushed the inquiry further, and procured the sulphocarbolates of most of the alkalis, alkaline earths, and metals, and endeavoured to study chemically and therapeutically their various characters. (See *Obstetrical Transactions*, 1868, p. 291; *Medico-Chirurgical Transactions*, 1869, p. 139; *Practitioner*, July 1869, p. 5.)

The general mode which I have recommended for the preparation of salts is this: a definite sulphocarbolic acid is first formed by mixing 97 parts by weight of pure carbolic acid, liquefied by the acid of heat with 101 parts of strong sulphuric acid. Much heat is evolved, and a syrupy liquid results, which after a time becomes crystalline. Sulphocarbolic acid may, by slow crystallisation, be obtained in long colourless deliquescent needles. On neutralising the liquid sulphocarbolic acid with equivalent weight of the various bases, very beautiful regularly crystalline and stable salts are formed.

I.—SULPHOCARBOLATES OF ALKALINE BASES.

Of these the sodium, potassium, and ammonium salts have been obtained. In testing their therapeutical characters, I have confined myself, for the sake of uniformity, to the sodium salt. The dose has been usually twenty to thirty grains three times a day to adults, though I have given as much as a drachm every four hours. At the North-Eastern Hospital for Children, I have had abundant opportunities of testing the action of this salt in diseases of children. The patients coming from the most impoverished quarters of London, there are numerous examples of the various conditions of wasting disease. In cases of *thrush*, I have found the oidium-growth to pass away much more quickly during the administration of sulphocarbonate of sodium than under any other plan of treatment, the sulphites not excepted. There has been during the present year a great prevalence of *stomatitis*—the occurrence of small circular ulcerations upon the tongue, gums, and internal surface of the cheeks. I have noticed a very strong relation subsisting between this condition and diarrhoea. In the diarrhoea which prevails at the present time, I have, on close inspection of the mouth, been able to detect in numerous instances cicatrices indicating that a condition of stomatitis has existed unnoticed. This fact may, I think, be of subsequent importance with reference to the consideration of the causation of diarrhoea. This condition of stomatitis has invariably, under the sulphocarbonate, disappeared from the third to the seventh day of treatment.

Follicular Inflammation and Ulceration of Tonsils.—I have administered the sulphocarbonate in eleven such cases, with the result of complete recovery in one case on the third day; in eight cases on the fourth day; two were not observed till the seventh day—they were then quite well. Several of these cases had previously had the same affection going its course to suppurative tonsillitis—in none of them was there a trace of suppuration. I should add that they were all cases accompanied by severe pyrexia.

Sloughing Ulceration.—In three cases of great severity, accompanied by diphtheritic signs, there was complete recovery without complications. Convalescence took place in one case on the seventh day; in another, wherein the thermometer had registered 106 degrees Fahr., the child was able to walk on the fourteenth day; in the third, with severe pyrexia (temperature 105 degrees Fahr.), delirium, and large ashy slough over each tonsil, perfect power of swallowing returned on the sixth day, and progress was uninterrupted.

Scarlatina.—In eighteen cases in which the sulphocarbonate was administered, recovery was very rapid. The throat-signs became rapidly alleviated; it was an almost invariable rule that, at the end of the fourth day of treatment, all throat-distress had passed away. It should be added, that in all these cases not any local treatment to the throat whatever was practised, nor any other remedy save the sulphocarbonate. The pyrexia rapidly diminished. Complete convalescence took place in six cases in seven days; in one, in eleven; in one, in fourteen; in one, in fifteen days. The sequelæ were, in one case general anasarca resulting in recovery; in one, albuminuria for a single day; in one, abscess of a superficial gland in the neck; and, in one, a persistent slight glandular swelling.

Variola.—My experience of the remedy in this affection is very limited; but I think it is sufficient to induce an extended trial. I have used it in two cases; one of these was a gentleman of middle age, who made an excellent recovery. He had, however, been vaccinated, so the result could have but little weight. I have since, however, had a severe case in a child of one year and eight months, unvaccinated. The progress was uninterrupted, the pitting very slight, and complete convalescence took place at the end of the fourth week. In none of the zymotic cases thus treated did a death occur.

Enteric Fever.—I have not myself had any opportunity of using the sulphocarbonates in this disease. Dr. Ligertwood, of Newbury, has, however, put the plan in practice, and has forwarded me a tabular statement of twenty-four cases so treated. Dr. Ligertwood says: "I think the treatment was very successful. There did not seem to be the same tendency to relapse that I have found occur under other treatment. The diarrhoea, often very severe, never became so exhausting as to call for any special treatment, and the average duration of the fever was certainly not more than under the usual modes of treatment."

Tuberculosis.—In testing the therapeutic effects of sulphocarbonate of sodium upon phthisical patients at the Chest Hospital, where I first begun to employ it, I was so struck with the signs of general improvement that I determined to give it an extended trial in these cases. It must be remembered, however, that in most cases cod-liver oil was used in addition. In eleven cases of children showing signs of general tuberculosis, eight improved considerably; two seemed uninfluenced; and one went from bad to worse, the progress of tuberculation being evidently unchecked. From notes of seventy-eight cases of pul-

monary phthisis in which I employed it, the following are the results. *First Stage:* fifteen cases. In eleven much improvement, with marked decrease of symptoms and increase in nutrition. *Second Stage:* fifty-one cases. Thirty manifested much improvement; seven slight improvement; twelve uninfluenced; in two disease progressed rapidly. *Third Stage:* sixteen cases. Ten much improvement; twelve uninfluenced; in two disease progressed rapidly. I entirely leave the interpretation of these results.

II.—SULPHOCARBOLATES OF THE ALKALINE EARTHS.

The *magnesium* salt crystallises in large clear rhombic prisms. One of the most interesting of the whole series is the *calcium* salt. This is obtained in long, fine, delicate crystals, which, interlacing, somewhat resemble benzoic acid. It is exceedingly soluble; and this I consider to be a most valuable characteristic. The following expresses the solubility of calcium salts at 60 deg. Fahr.

Calcium carbonate	} insoluble.
„ phosphate	
„ hydrate	.....I part soluble in 800 of water.
„ sulphate	.....I „ 500 „
„ sulphocarbonate	.....I „ I „

I thought that the calcium sulphocarbonate might prove useful in the treatment of rachitis. I accordingly employed it in twenty-six cases, with these results: great improvement in sixteen cases (of these there was, to all seeming, complete recovery in ten); moderate improvement in five; doubtful result in five.

In some of the cases cod-liver oil was administered in addition; but in many, in which there was the most marked improvement, the sulphocarbonate alone was given. The usual dose for children between the first and second year was five grains. I have also used the sulphocarbonate added to ordinary chalk-mixture in cases of chronic diarrhoea in unhealthy children, apparently with good result. Of the efficacy of the treatment in rachitic disease I think I am entitled to speak with some confidence.

III.—SULPHOCARBOLATES OF THE METALS.

Of these I have obtained the iron, the copper, and the zinc salts, all of which present highly characteristic appearances. The zinc salt is in brilliant colourless right rhombic prisms; the copper salt possesses a blue colour, much resembling that of the sulphate. Mr. John Wood has employed these in lotions to prevent suppuration in wounds; he considers that they exercise an obvious control over the suppurative process. The only salt of the internal administration of which I have had any experience is the iron sulphocarbonate. This is a colourless very soluble salt, crystallising in rectangular plates. It assumes, in the presence of peroxide of iron, a deep mauve or purple tint. I employed it as a general tonic in diseases of debility in children; some cases of eczema and of impetigo became rapidly better under its influence, but I did not conclude that it was superior to the other salts of iron. In a case of enlarged and strumous glands, there was much amendment, and the swellings almost entirely disappeared. In ten cases of threatened tubercle there was considerable improvement in four; in the remainder it was doubtful. In cases of pulmonary tuberculosis there was much improvement in six cases; slight improvement in seven cases; no improvement in eight cases. I could state confidently that the results were not nearly so satisfactory as in the cases treated by the sodium salt.

In conclusion, I trust that these few imperfect observations will induce many of my professional brethren to test in actual practice the value of these interesting salts. Their place in therapeutics can in no sense be fixed by the experience of one individual. As to their mode of action, there may be very many who widely differ from me in the opinions which I have enunciated; but their physical characters alone will, I think, enable them to hold a useful place in our materia medica.

CASES OF INHERITED PURPURA, OR HEREDITARY HÆMORRHAGIC DIATHESIS.

By FREDERICK WATERHOUSE, M.R.C.S., Pontypridd.

IN the JOURNAL of February 5th last, I described a case showing the consequences of injury in subjects of a hæmorrhagic tendency; and it will no doubt be of interest, more especially to those working for the Jacksonian Prize, if I now record the subsequent history of the family in which that case occurred.

The mother has several times since suffered from intractable menorrhagia.

The boy, whom I have previously described, was again under treat-

ment in June and July last. He had effusion around the ankle, which, although yielding to pressure, would not give the non-elastic pitting indicative of oedema, until the third day after its appearance. He could bear no weight on his foot, and the pain was distressing. Sanguineous patches appeared in various parts, and passed off in different periods of time, varying according to the area of extravasation. From careful examinations made on several occasions, both whilst in his ordinary health and during this disturbance of function, I was able to determine a slight decrease in extent of hepatic dulness, and a more decided increase of the splenic. The temperature, taken always between 4 and 5 P.M., ranged during eighteen days between 98.2 and 100.4 deg., being highest on the third day. The urine was alkaline; average specific gravity, 1.020; daily quantity, 19 ounces; it contained no albumen, nor sugar. The treatment consisted of a jalap purge; afterwards, the ammonio-citrate of iron; bathing the ankle with water at about 60 deg. Fahr.; and moderate support with a bandage. He slowly recovered, and was well on the twentieth day.

The next case is peculiarly interesting, as affording an example of the descent of the diathesis through the female offspring; the female never exhibiting hæmorrhagic symptoms, as remarked by Mr. Christopher Heath.

On April 14th, 1870, the husband of the eldest sister of the child, the subject of the last case, brought his child, aged 16 months, to the surgery. The boy had fallen against a chair, and there was considerable extravasation in the cellular tissue of the forehead. The bleeding under the surface continued until the 19th, by which time the integument was separated from the structures beneath by an interval of at least an inch, for an extent of six inches across. After this date, the swelling slowly diminished until May 20th, when it had disappeared. The treatment consisted of aperients, pressure, and fomentations.

On August 11th, the boy had again fallen, and, knocking the upper lip against the teeth, had caused a lacerated wound of the mucous membrane. It was bleeding fast. I applied solid nitrate of silver. There was no bleeding for five hours; but it began in the evening, and continued all night until 9 A.M. on the 19th, when gallic acid caused temporary cessation. A purgative was administered. At 4 P.M., the hæmorrhage was still unabated. The skin, lips, mouth, and throat, were quite pallid. Two free sanguineous stools had occurred. I applied lint soaked in tincture of perchloride of iron and sprinkled with gallic acid. The bleeding ceased for three-quarters of an hour. At 7 P.M., there were small purple patches about the body—one on the forehead, which might have been caused by the fall, but which was not visible on the previous day. The child was very restless, and intolerant of pressure; he appeared to be sinking. I ordered a teaspoonful of the following mixture to be taken every hour: Tincture of larch, ℥ij; spirit of chloroform, ℥xl; water, ℥ij. On August 20th, he had passed a restless night. Blood was still oozing. I applied the same styptics as on the previous day. At 4 P.M., the child was stronger; the dose of tincture of larch was doubled. At 7 P.M., the hæmorrhage ceased, having continued almost incessantly for fifty-three hours. The medicine was given until the 29th; but he was not well until the middle of September.

SPONTANEOUS INVERSION OF THE UTERUS.*

By WEBSTER ADAMS, Esq., Norwich.

ON the 21st of April last, I was summoned to the house of Mrs. K., to attend her in her accouchement. On arrival at the house, I found the patient a young healthy-looking woman, about 26 years of age, 5 feet 6 inches in height, and dark-complexioned. She complained of pains in the back and other symptoms of labour. I made an examination, and found that the pains were spurious. Consequently, I administered a full dose of tincture of opium, and left directions for the nurse to send if any change occurred. Nothing, however, happened until the morning of the 22nd, when I was sent for about 9 A.M., and went immediately. The pains had completely changed; and my patient, I had no doubt at this time, was suffering the natural pains of childbirth. I made another examination now, and found the os uteri soft and dilating; the head presenting. There was no hæmorrhage; and Mrs. K., to all appearance, was doing well. The pains went on; and, after about an hour and a half, the child was expelled. No ergot was administered. The uterus did not contract for some little time after the birth of the child, probably a quarter of an hour. After that time, however, it began slowly to do so; and she complained of a great bearing down, as she termed it, which, upon examining, I believed to

be the placenta descending. I accordingly requested her to give way to that feeling, and strain slightly. She did as I directed her; and immediately, without any traction upon the cord, the uterus became inverted, and came down outside the vulva, the placenta being attached to the fundus. No hæmorrhage occurred at this time. Immediately the patient sank into a state of collapse, with cold ashy sweats. She was pulseless, to all appearance, and had a livid countenance and cold extremities. The uterus was immediately, or after the lapse of a few minutes, returned, after removing the placenta, when a gush of blood followed, which was checked by pressing the uterus firmly, and freely applying cold. Stimulants were freely administered, Liebig's essence of beef, brandy, etc. Cold water was copiously employed over the abdomen, and mustard poultices to the calves of the legs. Unconsciousness continued for several hours, when at last consciousness began to return, and the pulse became more full and perceptible, the extremities warmer; and she began to slowly return to her consciousness and feeling, as she expressed herself afterwards.

April 23rd. The pulse was about 90, soft and compressible. There were no head-symptoms, no pain, nor sickness. She was ordered to continue her beef-tea and wine and water. She had had a few hours' good sleep during the night, and was considered to be doing favourably. I visited her once or twice during the day, and she still continued improving.

April 24th. She had slept pretty well during the night. The pulse was about 90, still and soft. She countenance was a little pale; the lips were slightly blue. She told me that she felt better. The stimulants were ordered to be continued.

April 26th. She still continued to improve, and had had relief from the bowels. The tongue looked clean. No febrile symptoms of any moment were present. I ordered her a simple saline mixture, with ten-minim doses of spirit of nitrous ether.

She continued daily to improve, and at the end of a fortnight was able to leave her room. She has been taking a tonic up to the last week—viz., disulphate of quinine and tincture of perchloride of iron—from which she says she derives much benefit. She has no bearing down, no loss, no pain, no fever, and is daily recovering her usual strength.

This case is the only one which I have had since my experience began in midwifery. I have attended a very large number of cases, and have had several unusual ones; but this is the only case of inversion which I have seen in a practice extending over nine or ten years, averaging three hundred and fifty to four hundred cases annually.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

UNIVERSITY COLLEGE HOSPITAL.

CASES OF RECURRENT AND MULTIPLE CALCULUS: LITHOTOMY, MEDIAN AND LATERAL, AND LITHOTRITY.

(Under the care of Mr. ERICHSEN, Senior Surgeon to University College Hospital, Holme Professor of Clinical Surgery.)

THE three following cases of stone in the bladder are interesting from the fact of their being instances of multiple and recurrent calculus occurring at different ages. To them is added a case of lithotritry occurring at the same time.

CASE I. *Lithotomy by Median Operation: Fifty Calculi removed: Atony of the Bladder: Cure.*—J. D., aged 54, a French master, was admitted on June 27th, 1870. He always had good health. There was no history of gout, rheumatism, or syphilis. Seven years ago, the patient observed that he passed gravel, and that very often he could not pass urine, or that the stream suddenly stopped. He used to have pain in the testicles, hypogastrium, loins, and penis. The pains increased on sudden and quick movements. He used to pass urine very frequently during the day and night—sometimes as often as twenty times during the night. During the last seven years the patient had experienced the above symptoms, but they had been more or less intermittent. He said that he had passed about a hundred calculi during that time. He had been under a treatment laid down by the late Dr. Rayer of Paris, consisting mainly in the administration of carbonate of potass.

On admission, the patient appeared stout, but unhealthy. He had a

* Read before the East Anglian Branch.

sallow pasty complexion, and weak pulse. His bladder was extremely irritable. He suffered from an almost constant desire to pass urine, often being obliged to relieve himself three or four times in an hour. He was quite unable to follow his occupation as a teacher of languages. The urine was slightly alkaline; it contained pus, and occasionally was tinged with blood. The albumen was not more than could be accounted for by the pus and blood present. On microscopic examination, pus-cells, blood-cells, and crystals of triple phosphate, were found; no renal epithelial cells, nor casts.

June 29th. Mr. Erichsen sounded him, and found that there were a large number of small calculi. The bladder was extremely irritable and very sensitive. The patient was kept quiet in bed; and measures were taken to allay the irritation of the bladder before operating. The treatment consisted in rest and the administration of opiates and alkalies.

July 11th. Mr. Erichsen performed median lithotomy. He used a large rectangular staff. The first incision was made in the middle line downwards towards the anus for about two inches. The knife was then pushed in, its back towards the rectum, into the groove in the staff, in the membranous part of the urethra; and Mr. Erichsen cut forwards on the staff at its angle, opening the urethra. The finger was then passed, and the opening dilated sufficiently to allow the forceps to be introduced. After five or six introductions, nearly all the stones were removed; the removal was finished with a scoop. There was scarcely any hæmorrhage. Fifty calculi in all were extracted. They were uric acid stones, varying in size from a large pea to a bean. They weighed in all fifteen drachms. They were marked with facets from mutual rubbing, and were all, large and small, nearly of the same three-cornered shape. A tube was passed into the bladder, and tied in.

July 12th. The tube was not removed. A great deal of urine flowed through it. The tongue was clean and moist. The patient felt very comfortable. The temperature in the evening was 101.4 deg.; pulse 84.

July 13th. The tube was removed. After its removal, the patient passed no urine by the wound or penis for three or four hours. He complained of pain in the pubic region. An elastic catheter was passed, and about ten ounces of urine were drawn off. In the evening, a catheter was again passed, and tied in. About eight ounces of urine were drawn off.

July 14th. The catheter had caused no pain. No urine had passed through the wound. He took his food well. The urine passed freely through the catheter; and, as the patient suffered no inconvenience from it, the instrument was left in the bladder. The urine was very full of viscid muco-pus.

July 20th. The patient had not been able to pass urine all this week without the use of the catheter. The urine was alkaline and very foetid. The bladder had been washed out every day with warm water and Condyl's fluid. He was improving in health and strength. He was taking the perchloride of iron, and a liberal diet with wine.

July 27th. The catheter was tied in at night. During the day, it was passed four times, and urine was drawn off. The urine still continued alkaline, and mixed with muco-pus. The wound was healing slowly; it looked pale and sluggish. It was touched every morning with a solution of nitrate of silver (3ss to the ounce).

August 5th. An elastic catheter had been tied in day and night for the last week. No urine had come through the wound. The catheter was taken out this morning; and he tried during the day to pass urine through the penis, but was unable; so he was obliged to have it drawn off. The bladder was still atonic, and unable to expel the urine. It was washed out with diluted Condyl's fluid, as the urine speedily became foetid and alkaline. The patient's health, though improving, was still weak; and the wound looked pale, healing slowly. As a change of air was thought desirable, he returned to his home at Greenwich, where he rapidly improved in health, and soon recovered.

The patient applied again at the hospital in the early part of November. He stated that he had again had lumbar pains, and believed that another stone had passed into the bladder. On sounding, Mr. Erichsen found this to be correct. He accordingly introduced a lithotrite, and crushed a small uric acid calculus, removing most of the fragments in the scoop. He repeated this operation a second time; and, on sounding the patient on the 21st, the bladder was found to be clear and free from stone.

Mr. Erichsen stated, in the clinical remarks which he made on this case, that his reason for selecting the median as the operation to be performed was, that he knew the calculi to be small, though numerous; and that thus they could be extracted through a limited incision, which, considering the low and very unfavourable condition of the patient, he was anxious to make as small as possible, so as to save shock, blood, and after-drain on the system. The bladder, which had for years been in an extremely irritable state, and which had been the seat of an

abundant muco-purulent discharge, fell, after the operation, into a state of atony, and, as the wound in the perinæum closed rapidly, required to be kept emptied by means of a gum-catheter, and cleared by frequent disinfectant injections. As the patient regained strength, the organ recovered its tone and healthy state.

CASE II.—*Multiple Calculi in a Boy: Lateral Lithotomy: Cure.*—F. W., aged 13, was admitted June 20th. He had suffered from the usual symptoms of stone in the bladder for several years. It was difficult to obtain any very accurate account of his history, as he was either reticent about it or not very intelligent. On sounding him, Mr. Erichsen detected what appeared to be rather a large and rough calculus.

June 22nd. Mr. Erichsen performed the lateral operation in the usual way. One uric acid calculus, of about the size of a bean, was extracted, and a mass of freshly broken fragments of at least two, if not three, other calculi. These were dark, sharp, of various sizes, and had all the appearance of having been broken up in a lithotrite. The boy was closely questioned as to his having had any previous operation performed; but he did not know that anything more than sounding had been practised, which, he said, had been done by several surgeons. There was scarcely any bleeding.

June 25th. The urine passed chiefly by the penis; a little by the wound.

July 3rd. The wound was touched with nitrate of silver; very little urine passed through it.

He was discharged cured July 25th.

Mr. Erichsen stated that, from the appearance of the fragments removed, he had little doubt that the boy had been lithotrised without having been told of what was being done, thinking that he was only being sounded. He had seen this once before in a man whom he cut some years ago, and from whom he removed one unbroken and several crushed calculi. The patient admitted that a month before he came to the hospital a surgeon had passed an instrument; had done something, he knew not what; and said he would quickly cure him. He became worse, and then was taken into the hospital. At that time he said nothing about the previous occurrence, but confessed it afterwards.

CASE III.—*Recurring Calculus in a Child: Lateral Lithotomy a Second Time: Recovery.*—R. M., aged 6, was admitted October 8th, under the care of Mr. Erichsen. Three years previously, the child was cut by the lateral method by Mr. Heath, who removed a small lithic acid calculus. The child made a good recovery, and was discharged at the end of about three weeks. The wound, however, either did not heal completely, or, after his discharge, a small fistulous opening formed near the margin of the anus, through which a few drops of urine occasionally escaped. The child, however, was well, fat, and lively. About three months ago, he began to complain of pain about the bladder, and to pass urine frequently. A month ago he began to pass blood in his urine.

On admission, on examination of the perinæum, a small fistulous opening was found at the bottom of the old scar. Through this, urine occasionally oozed in a few drops, the rest passing freely through the penis. On sounding him, Mr. Erichsen at once detected a calculus lying, apparently, in the prostatic part of the urethra.

Oct. 19th. As the calculus had been met with apparently outside the bladder, Mr. Erichsen determined to perform the median operation. But, in passing the sound for this purpose, the stone was found to have slipped back into the bladder. He, therefore, altered his plan, and decided on lateral lithotomy, which was accordingly performed, in the usual way, through the old cicatrix, so as to lay open the sinus in connection with it. A small phosphatic calculus was found in the bladder, and removed. There were but a few drops of blood lost. No tube was introduced, and the patient was sent to bed. A few hours after the operation, another piece of phosphatic calculus was found to have escaped from the wound. The two pieces weighed nearly a drachm. With the exception of an attack of inflammation of the testicle, the child made a good recovery; the wound, however, being very sluggish and slow in healing, owing, doubtless, to the old cicatricial tissue through which it passed.

Mr. Erichsen stated, in his clinical remarks on this case, that it was evident that the recurrent calculus had formed in the way of a phosphatic deposit that remained in the sinus after the first operation. It was by no means a common thing for a child under seven years to be obliged to submit to lithotomy twice. In fact, so far as his experience went, the case was unique in this respect.

CASE IV.—*Moderate-sized Calculus: Lithotripsy: Cure.*—J. M., aged 45, was admitted June 20th. Nine months previously, the patient felt some pain in passing urine; it had increased, especially during the last two months. The pain was greatest just after micturition, and was situated at the end of the penis and down the urethra. He had never passed blood. He passed urine frequently, at intervals varying from

half an hour to two hours, day and night. He had pain on sudden movements, jumping, etc. The urine did not contain albumen. Crystals of triple phosphates were found.

June 27th. Having sounded the patient, and found a moderate-sized stone, of about half an inch in diameter, Mr. Erichsen crushed a calculus. Linseed-tea and infusion of triticum repens were ordered to be taken frequently.

June 30th. The patient had passed since the operation about a drachm of fragments. He did not complain of pain.

July 4th. Mr. Erichsen crushed a moderate-sized fragment.

July 5th. The patient complained of some pain. Hot fomentations were applied to the abdomen. He had passed several more fragments, about a drachm in weight.

July 8th. Mr. Erichsen crushed another fragment. The detritus was passed in a pulverised state on the three following days.

July 13th. The lithotrite was introduced, but no fragment could be detected. All irritation subsided, and the patient was discharged cured on the 18th.

HOSPITAL FOR DISEASES OF THE THROAT.

PRIMARY CARCINOMA IN THE CERVICAL GLANDS: SECONDARY AFFECTION OF THE LARYNX.

(Under the care of Dr. MORELL MACKENZIE.)

NATHANIEL W., aged 57, a short, rather thickset man, by occupation a blacksmith, applied as an out-patient at the latter end of September 1870, on account of cough and slight difficulty in swallowing. He stated that, in July last, he first felt pain on the right side of the neck and between the shoulders, and at the same time observed a small lump under the angle of the right jaw. Soon afterwards, he experienced some difficulty in swallowing, with great pain in the right ear, especially in deglutition. For the last two months, there had been a frequent cough with frothy expectoration. On examination, there was seen to be a hard, solid lump, as large as a bantam's egg, situated just above and behind the angle of the right jaw; it was tolerably moveable, and the skin over it was not adherent. On laryngoscopic examination, there was considerable congestion of the pharynx, of the epiglottis, and of the right ary-epiglottic fold, with some thickening of the mucous membrane covering these parts. Dr. Morell Mackenzie believed the case to be epithelial cancer in an early stage, and predicted that before long there would probably be more evident signs of the disease in the larynx. On October 13th, there was seen to be a distinct thickening of the right ary-epiglottic fold and of the right side of the pharynx; swallowing was now very difficult; nothing but sopped food could be taken, and that only with great effort. The patient was losing flesh rapidly; he now weighed only 9 stone 8 lbs., and said that before his illness he had weighed 12 stone.

On October 25th he was admitted into the wards. On laryngoscopic examination, there was now seen to be a distinctly lobulated tumour of a dark red colour, involving the whole of the right ary-epiglottic fold, right arytenoid cartilage, and right angle of the epiglottis; it appeared to be quite incorporated with the normal tissues, so as to entirely prevent any line of demarcation from being drawn between them and the tumour. Swallowing was much more difficult, and the emaciation had increased, the patient now weighing only 9 stone 1 lb. There was, however, no pain, except when deglutition was attempted. A fortnight later, the tumour had considerably increased; it had extended upwards towards the tongue and involved the right glosso-epiglottic fold. It was deeply fissured at its posterior part, and presented the appearance shown in the accompanying woodcut. There was also complete paralysis of the abductor of the right vocal cord. The patient's present condition is much the same, except that his breathing is rather more laboured, and that he sleeps badly except when under the influence of narcotics.

CLINICAL REMARKS.—Dr. Morell Mackenzie observed that this case was exceedingly interesting and very rare, on account of the disease



occurring primarily in the gland, and the larynx and pharynx being only consecutively affected—thus entirely transposing the ordinary sequence of events. He remarked that in these cases there was always considerable increase of morbid structure before any ulceration took place, but that extensive ulceration usually occurred before the fatal termination.

STABBING WOUNDS IN THE NECK, WITH INJURY OF SEVERAL OF THE CEREBRAL NERVES AND PROBABLY OF BRANCHES OF THE SUPERIOR CERVICAL GANGLION.

(Under the care of Dr. MORELL MACKENZIE.)

William C., aged 30, a coachman, applied as an out-patient on October 4th, 1870, giving the following history. On his way home late on the night of the 14th of August, he had been suddenly stabbed from behind; the instrument used was a double edged knife about four inches in length. One wound had been received in the left side over the sixth rib, and four other wounds had been inflicted in the back of the neck. Profuse hæmorrhage followed, and he became very weak. The next day there was great difficulty of swallowing, and an inability to properly masticate the food. He also felt great heat on the right side of the face, and both eyes were suffused with tears. After fourteen days he went into the country; swallowing became more difficult and his state of health more impaired. About six weeks after the accident, a swelling took place in the front of the throat. On application, the patient was seen to be a strongly built man, but in a pale anæmic condition. Four nearly healed wounds were found in the following situations: one just below the prominence of the occiput; a second over the right side of the second cervical vertebra; a third just below and a quarter of an inch behind the mastoid process—this wound was stated in evidence to have been one inch and three quarters deep. A fourth wound was situated about midway between the second and third. On examination further, there was seen to be paralysis of the right side of the tongue, and slight paralysis of the muscles of the upper jaw on the right side. There were diminished sensibility and loss of power of the abductors and adductors of the right side of the larynx, and considerable enlargement of the thyroid body. The patient was given mild tonics and generous diet. No special treatment was adopted, and the patient is now nearly well.

CLINICAL REMARKS.—Dr. Morell-Mackenzie observed, that in this case the loss of sensibility of the mucous membrane, the impaired action of the muscles on the right side of the larynx, and the dysphagia, all pointed to an injury of some fibres of the pneumogastric, as it is only by injury of the trunk itself that both the motor and sensitive branches could be affected. The paralysis of the right side of the tongue clearly shewed injury of the hypoglossal nerve. It was difficult to account for the apparent paralysis of the temporal and masseter muscles, unless it were that this condition had been caused by some tumefaction and stiffness of the articulation of the jaw. As the man had not been seen by Dr. Mackenzie at the time of the accident, the account as to heat of the face could not be entirely relied on, and might possibly have been due to inflammatory hyperæmia. There did not appear to have been any affection of the pupil, though the eyes had been suffused with tears. The sudden enlargement of the thyroid body did, however, in conjunction with the other symptoms, seem to imply that there had been injury of some branches of the superior cervical ganglion.

NEW BOOKS AND NEW EDITIONS.

LETTS's *Diaries for 1871* are produced this year with still increasing care and intelligence. The *Medical Diary* is issued in several varieties of shape, which make it suitable to large and small practices. In each there is given an excellent condensation of the facts and figures to which medical men need constant reference; and the general execution of the Diaries is as perfect in finish as they are admirable in conception. Since these experienced publishers have turned their attention to supplying the wants of medical men, they have effected some great improvements in the character and arrangements of professional diaries; and in their hands a perfectly handy and compact little pocket-companion will serve at once for diary, account-book, and instrument-case. In order to occupy the least possible space in the pocket, some editions can be had divided into monthly parts: this will be found very convenient by many.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 24TH, 1870.

NAVAL MEDICAL REFORM.

NAVAL medical reform is a subject which to our readers needs no apology for its introduction. The recollection of what has been achieved for it by the Association and the JOURNAL in past years will afford a guarantee that, in introducing this subject anew to their notice, we are actuated by no factious feeling, and are moved by no other reasons than that the time and the circumstances are such as seem to us to justify a favourable anticipation of the results of an effort to redress some grievances and complaints which still affect the popularity of the service, and render nugatory in no small degree the important concessions which have been made, and the efforts of the able and judicious administrator who is now at the head of the department. Means have lately been taken by one of the most trustworthy and experienced of the friends of the service to gauge the causes which have left the Naval Medical Service still bare of candidates, which make the service discontented, and keep candidates aloof. To ascertain these points, Dr. Frederick Brown of Rochester has addressed a series of queries to officers of all ranks, and has gained the benefit of their views. No man who did not possess their confidence to the complete extent in which it is enjoyed by Dr. Brown could have accomplished this so successfully. His heads of query cover all the principal points at issue.

We shall not anticipate Dr. Brown's forthcoming statement by attempting to give what would be a much less perfect statement of what we believe to be the prevalent opinion of the service, and the measure of improvement which will give contentment; but we may say that, on many of these points, we believe that a strong opinion prevails. As to the first, men who possess double diplomas in surgery and medicine, and who have, moreover, passed special further examinations, find themselves placed at a disadvantage in the public service by the prefix of assistant to their natural title of surgeon, which they won when they won their diploma. Every new-fledged member of the College in Lincoln's Inn Fields or at Dublin, who pleases to buy a brass plate, can see himself announced to the whole world as *Surgeon*, and is in the full exercise of his legal and social privileges as such. Only the officers of the public services, after going through a further ordeal, are set down as assistant-surgeons. This carries with it many social disadvantages in the two services, which are probably most felt in the navy. To drop the prefix "assistant" will be the first thing asked. The complaint is, mainly, that the optional retirement is postponed, and retired pay is not equal to that of the officers ranking with staff-surgeons. In order to carry out the views of all sound reformers as to promotion, and to fulfil the programme of the Admiralty, it will, we judge, be necessary to grant an earlier retirement, and, in the inspectorial rank, greater inducements for inspectors to retire. If deputy-inspectors were allowed to retire with the retired pay of their relative rank of captain at sixty, this would, we believe, give satisfaction. To rectify the principle of retirement, it should be made irrespective of age, and dependent upon length of service; and a period of thirty years' full-pay service should entitle every man to his just promotion and retirement, whether he be then fifty-five or sixty, as sure of retiring with the pay of £450 as if he were a chaplain and naval instructor, or a paymaster. In respect to Greenwich pensions, the service has felt it as an injury that, while every other grade of officer was amply provided for on the abolition of that establishment, the inspectors and deputy-inspectors of hospitals were

dealt with much more harshly, and only one deputy-inspector received a Greenwich Hospital pension. Greenwich Hospital pensions, then, are due to the inspectorial rank—good-service pensions abound for admirals and captains; medical officers have but three, and these much below the scale of relative rank. From this brief outline, our associates will see that the grievances of the naval medical service are neither petty nor vague, but substantial and clear. We shall take a further opportunity of laying before them in detail a precise scheme of reform; and we feel assured that, when collected in the Branches, they will not fail to consider how far they can assist their brethren in the navy, to whom agitation is forbidden by the rules of the service; and how far they can, by addresses, resolutions, and in other ways which we shall indicate, bring this matter to an issue useful to the country, the service, and our profession.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

VII.

On the present Method of Rejection of Candidates.

It seems worth consideration, in relation to the requirements of Examining Boards, whether, in conjunction with improvements in the method of examination, and a greatly increased strictness in the demands made of candidates, there should be a modification of the manner of "rejection". At the present time, the practice seems universal to strike the average of a man's attainments and pluck or pass him accordingly; with a certain understanding on the part of some Examination Boards that he must, in order to pass, show a minimum of knowledge of every subject. The practice is so general as to make one hesitate in thinking it may be wrong. There are, however, many objections to it; and it is at least worth considering whether it would not be better to pass or reject in particular *subjects*, and not necessarily on the whole examination; for, in the first place, it may happen—although this is not common, probably, in the ordinary examinations, but only in the stricter—that a good man is rejected because he is very ignorant of a particular subject; not wilfully, perhaps, and yet not excusably altogether, but still not so wrongly as to deserve such heavy punishment as rejection. Perhaps the candidate mistook honestly the requirements of the examiners, or was ill, or temporarily muddled, or nervous—all these things have happened. Now, in such a case it would seem far preferable to make a man study over again that in which he is deficient, than to pass him when unfit on the one hand, or commit the injustice of rejecting him altogether on the other. Much more commonly it happens that indifferent men "pass" because examiners are unwilling to commit a possible wrong, as a jury will refuse to convict a doubtful murderer. Examiners, moreover, are prevented from testing a candidate's knowledge very strictly in a particular direction, lest the doing so should lead to greater punishment than they would wish to see inflicted.

Perhaps the greatest evil of the present system, however, is to be found in the encouragement which it gives to incomplete preparation for examinations. All who have to do with students in medical schools must know how difficult it is to persuade some men of their ignorance and unfitness for an examination. They may be tolerably or perhaps well prepared in some things, but very ignorant of others; nevertheless, they are quite willing to risk an examination. "Such a man got through with less knowledge than I have"; "I don't know much of that, certainly, but I know a good deal of this." He is pretty well up, so he expresses it, and must trust to his luck for the rest; and, it must be confessed, his confidence is not always misplaced. He often passes, commonly the first time, generally the second, almost invariably the third.

The passing after one or two rejections is by no means always the result of any real improvement in his mental condition, or not to any great extent. But, with judicious coaching, and a little grinding, and a little real knowledge, and a good deal of second-hand and second-rate know-

ledge, and a good-tempered manner, and, above all, a good-tempered examiner, the chances are, for numbers of undeserving men, always in favour of their passing. Examiners are, notwithstanding all that is supposed to the contrary, only "flesh and blood"; and, although they would not object to search a man thoroughly if they knew that the detection of ignorance would lead to partial rejection, they are not always prepared to examine thoroughly when the result would be a complete plucking. To expect examiners to be rigidly, although justly, severe in doubtful cases, is about the same thing as to expect people to leave off lending money to their undeserving friends, or to cease giving gratuities to railway servants, or to cease being guilty of any other like frailties. Some people apparently do expect such things not to take place; but we know what happens when legislation is made on the supposition that people will do what they ought to do. Successful laws rest on stronger ground than this.

AN UNWORKED MINE.

GREAT interest attaches to the work of the members of the medical department of the convict service. Under the present arrangements it is stifled and repressed; and the work itself is discouraged, so that any facts that come to the surface seem to do so accidentally. Now this should not be. Here we have between 8,000 and 9,000 individuals, some younger, some older, but mostly in the prime of life, living together in groups, and in conditions which are as uniform as it is possible to maintain with such numbers. The years thus spent vary, of course, in number, but it would appear that the average time of those at present undergoing sentences is from five to six years; and the tendency is for this to increase.

Speaking from a medical point of view, what history have we of those so placed? The only official records published are those in the annual Blue Books of the directors of convict prisons, wherein are contained certain statistical returns of health, with remarks by the medical officers of the different establishments. These reports are expected to be as brief as possible, and of course their utility is thus curtailed; but with brevity there is risk of sacrifice in other directions.

The medical officers of the convict prisons are in a position to make returns of a most interesting and valuable character. The prisoners under their care come from all classes and represent almost every condition of life, intellectual as well as physical, to be met with outside. They start with a prisoner in a certain state of health, bodily and mental; they have him more or less under their notice during his imprisonment; they know the conditions which that imprisonment imposes upon him, the confinement, the discipline, the dietary, the work; and, finally, they may make themselves acquainted with his condition just before he gets his release. Thus, many points of value could be elicited with regard to the effects of imprisonment upon those who are delicate, as well as upon those who are in good health at the time of reception; for nearly a half those prisoners who were received into Millbank during 1869 were of a weak or enfeebled constitution.

The most important questions in connection with the criminal class, whether in or out of prison, are those which have relation to the existence, hereditary or otherwise, of psychological defects or of tubercular diseases. These, no doubt, are touched upon in the various reports; but the value of any conclusions that might be formed is lost, owing to the disjointed manner in which they are put, and the absence of some link necessary to their establishment. Hygiene and diet, too, are subjects upon which a good deal of information ought to be obtained, and there is the kindred topic of the relation of the amount of good to the work done. Many other questions best known to the officers themselves could be developed and wrought out if sufficient opportunity were given to them. The prison-surgeons, with whom such work essentially lies, are a staff of men who know its nature and the circumstances in which it has to be conducted, and are thus well able to give effective returns on matters connected with the department. But, as a body without a head, so are they in the non-existence of a principal

medical officer or responsible superior who could direct attention to particular questions, and that, too, in the way best calculated to promote their solution. Such a head of the department must be in a position to enter personally into the work, and be able to put the statistics and reports together in a collective and official form, so as to give them their full value. A wide field of experience would thus be utilised, with great benefit not only to the convict service itself, but also to the outer world.

Much depends upon the form of the statistical tables, which have hitherto been certainly anything but adequate or satisfactory. New forms, we believe, are coming out, and we trust they may be more useful. A little more attention to the filling up of certain details at the various prisons is not only advisable, but necessary. To take but one instance: under the head of "amputations", we are not told whether the removal was that of a phalanx or of a thigh, while at one prison they are "included under fractures". Such laxity can only bring confusion, and could never have occurred if it had been the custom for the reports, which are all printed separately, to be elaborated and condensed into one. We have done this with the last report for 1869, and the result will appear in an early number. We have thought it our duty to speak out thus in order that, by a proper ventilation of the subject, it may be brought under notice, and receive more of that attention which is certainly its due.

REGISTRATION IN IRELAND.

THE Quarterly Returns of the Registrar-General of Ireland, which, as usual, come to hand several weeks later than the English, are of a character which seems to us to call imperatively for inquiry. Why is it that, after the Registration Act has been nearly seven years in force, there is little or no improvement in its working? Of what possible use is it to publish, with the full impress of official authority, statistics so utterly delusive as those which we are about to quote?

The registered marriages in Ireland during the second quarter of the present year were in the annual ratio of 1 in every 259 of the estimated population. The registered births in the third quarter of the year were in the annual ratio of 1 in every 40, and the deaths of 1 in 75 of the population. This is for the whole of Ireland. When we come to look at the different divisions of the country, we find marriage-ratios ranging from 1 in 182 to 1 in 432; birth-ratios ranging from 1 in 35 to 1 in 47; and death-ratios ranging from 1 in 60 to 1 in 97. Making every allowance for the effect of emigration in modifying the character of the population left behind, it must be obvious on the face of it that these official returns do not anything like represent the actual facts. And this is, indeed, fully admitted by the Irish Registrar-General in the following paragraph, which we quote from the Return.

"It is apparent from the foregoing figures that the registration of births and deaths is still very imperfect, the annual ratio of births to the *estimated* population in England being about 1 in 29 or 30, and of deaths 1 in 44 or 45. The registration of marriages under the provisions of the 26 and 27 Vic., cap. 90, it is greatly to be regretted, is still more unsatisfactory."

Now, if we remember correctly, this paragraph has for a long time been stereotyped in these Irish Returns; so that it would seem as if the state of things which it reveals is tacitly accepted by the Registrar-General as irremediable. We can hardly be expected to acquiesce in such a view of the case, without clear evidence that every endeavour has been used to exhaust the powers conferred by the Irish Registration Act. It must be recollected that the law in Ireland is more stringent than in England. The registration of all *births* there is compulsory, while in England it is not so. The results, nevertheless, as shown by the comparison of the Irish and English rates of marriage, birth, and death, are conclusive as to the serious defects of the Irish returns. Are the same pains taken in Ireland as in England to detect and punish evasions of the Registration Act? and if not, why not? The following sentence, quoted from a note by one of the Irish registrars in the Return before us, would go far to justify the opinion that more satisfactory

results than have hitherto been obtained are to be realised, if energetically worked for. "Allusion having been made in your last Annual Report to the imperfect registration of births and deaths, as far as this district is concerned, I can safely say that, *owing to the vigilance employed*, it is scarcely possible that any birth or death could escape detection." The words we have underlined in this passage strike the key-note of our present questioning. Can the Irish Registrar-General show that the necessary "vigilance" is not lacking, either on the part of himself or his officers? He owes it to the public, which continues to be so perplexed by his statistics, to make such a statement on this subject as will show unmistakably what measures are called for to render the Irish returns fairly comparable with those of England and Scotland. We hope to find in his next Report something more explicit and satisfactory than the meagre stereotyped paragraph which is all that he has hitherto vouchsafed in the way of explanation.

It is gratifying to learn that the provisions of the Compulsory Vaccination Act are admirably carried out through Ireland, and that the results have been such as the most sanguine could scarcely have anticipated.

SKIN-GRAFTING.

THE rapidly accumulating experience of surgeons will probably soon afford very exact data for estimating the true nature and value of the highly interesting process introduced by M. Reverdin, and first employed in this country by Mr. Pollock, which consists in the transplantation of skin to ulcerated surfaces, so as to hasten the healing process. The clinical details of the already numerous experiments by surgeons, both intra- and extra-metropolitan, suffice to show that we have here an important addition to the resources of surgical practice in dealing with a hitherto very intractable class of cases—callous and extensive ulcers of various kinds, injuries from burns, and other kinds of large superficial wounds, either difficult to heal, or likely to cause excessive contraction in healing. The field of application will probably be widened by ingenious applications such as those which Mr. Durham of Guy's Hospital has made, and of which he is about to give an account in our pages; and, on the other hand, its limits of utility will be more accurately defined. The comprehension of the physiological character of the process will do much to aid this. The investigation of Dr. David Page of Edinburgh, which we last week published, throws a very important and interesting light on this subject. All observers agree in describing the disappearance of the characters of true skin in the piece laid on the wound, and the resulting appearance of a small pellicle, which ultimately becomes a centre of cicatrisation. Mr. Nelson Dobson, in the paper which he read at the Bath and Bristol Branch of the British Medical Association, described the excellent results from splitting up fine shavings of skin into small pieces; and all authorities have agreed from the first that the skin taken should be completely free from subjacent areolar or adipose tissue. Dr. Page goes still further. Microscopic examinations into the physiological characters of the process have convinced him that "the so-called skin-grafting consists in truth, not of a transplantation of true skin, but of epithelium." The pellicle, which retained its vitality, and proved of initial value in inducing cicatrisation, was found to consist of young epithelial cells. Further, the cicatrix thus induced, and that formed by the ordinary normal process elsewhere, were undistinguishable one from the other, and, under the microscope, proved to be of the same fibro-cellular character.

Dr. David Fiddes, of the Royal Infirmary, Aberdeen, has clinically arrived at a conclusion which affords a remarkable support of Dr. Page's observations and deductions, if confirmed by further observations. He says that it is quite unnecessary to put the patient to the pain of cutting a piece of healthy skin from the body for the purpose of transplanting it on the sore. "All that is necessary to be done," he says, "is to take a long bistoury, or razor, and shave or scrape off the epidermic scales from the convex parts of the extremities,

such as the outer and convex aspects of the forearms and thighs, and place them on the healthy granulations. This can best be done by brushing the scales off the bistoury with a camel-hair pencil. After securing them *in situ* for three or four days by means of common adhesive plaster, the granulations on which the epidermic scales were placed assume a glazed bluish appearance, which gradually grows into skin, and meets the nearest edge of the healing ulcer, which edge shoots out and meets the newly formed skin on the granulations. The result is a continuity of healthy skin." This last, it will be observed, is a very important statement. Dr. Page's observations lead him to the opposite conclusion, that there is no nearer approach to the condition of true skin than in cases of ordinary cicatrisation, but only a more rapid formation, and from a greater number of centres, of a tissue of very low vitality, deficient in many of the functions of the true skin, and easily destroyed by causes that would not affect the latter. The sphere of usefulness of the operation will be largely affected, according as the one or other view proves to be correct. No doubt clinical observations will multiply; and we direct attention to these points, as the best method of furthering the discovery of the place in surgery of this new and suggestive practice.

WE shall publish next week a further letter from Dr. Rumsey, Cheltenham, continuing the correspondence on the Medical Council.

WE are informed by a correspondent in Liverpool that the medical library of the late Dr. Beddoes of Shrewsbury, consisting of one hundred and fifty volumes of modern works, has been liberally presented by his widow to the Liverpool School of Medicine.

CHOLÉRA has broken out in the camp of His Majesty the Shah of Persia, who had set out on his pilgrimage to Kerbela. The Turkish quarantine authorities were in doubts as to how they could turn his Majesty aside for a time from Turkish territory. The expedient of a grand hunt had been thought of.

SIR WILLIAM FERGUSSON, as he stands in the operating theatre in his most familiar and characteristic attitude, has been sketched by the artist of *Vanity Fair*, and appears this week as the subject of the principal coloured cartoon, with the epigraph, "There is no man of greater weight in his profession."

FOR the appointment of public vaccinator in Marylebone, at a salary of £150 a-year, there were fifty-four candidates, of whom the list lies before us. The selected candidates are Dr. Montague Thomas, one of the district medical officers; Dr. G. McDonald, medical officer at the Southall Schools; Mr. W. A. Sumner, St. John's Wood; Mr. J. R. Stocker, late house-physician at Guy's Hospital; Dr. Britton, medical officer St. John's Relief District.

SUBCUTANEOUS OSTEOTOMY.

MR. JESSOP has forwarded to us the notes of a case of subcutaneous section of the neck of the femur by Mr. Adams's method, described at the August meeting of the Association, and detailed in the paper which we publish to-day. In doing so, he writes: "It seems to me the operation will prove to be a great boon to surgery."

AN EXPERIENCE LARGER THAN JENNER'S.

DR. J. P. LOINES of New York, vaccine-physician to the chief dispensary of that city, in bearing testimony to the immense services and complete harmlessness of vaccination, is able to refer to a public and authenticated experience for the past sixteen years, in the vaccination and protection from small-pox, even in periods of epidemic and constant contact with the disease, of about 300,000 persons, with humanised lymph from more than 40,000 infants. He has distributed more than 1,000,000 charges of vaccine lymph to about 3,000 different physicians. In no one instance has he received any complaint of injury, or of failure of its product in true prophylaxis.

PATENT MEDICINE LICENCES.

THE number of persons who took out patent medicine licences in 1869 was 11,422 in England and 849 in Scotland. The increase in five years in the number of licences granted has been 1,349. The amount of duty received on patent medicines in 1869 was £66,860, being almost an increase of cent. per cent. in the last fifteen years.

SCALPED BY INDIANS.

THE following case is reported by Dr. R. C. Moore, in the transactions of the Nebraska State Medical Society for 1870. William Thompson, an *employé* of the Union Pacific Railroad Company, was scalped by the Cheyennes, near Plum Creek Station, Nebraska, on the night of August 6th, 1867. He was placed under Dr. Moore's care about thirty-six hours after the wounds were inflicted. The scalp was entirely removed from a space measuring nine inches antero-posteriorly, and seven inches laterally. The denuded surface extended from one inch above the left eyebrow, backward nearly to the occipital protuberance, and laterally from one temporal region to the opposite. The pericranium was in places detached, but the greater portion of that membrane was adherent to the bone. There were also a severe tomahawk wound of the right parietal bone, and a slight gunshot wound through the fleshy part of the right arm. The only dressing used during the whole course of treatment was surgeons' lint, saturated with pure olive oil, which excluded the air, and was easily removed for the purpose of cleaning the wound. Healthy granulations soon appeared on the tissue surrounding the denuded skull, but showed no disposition to extend. In about three weeks, the outer table began to exfoliate; at first at the margins, then under the adhering pericranial membrane. As this process progressed, granulations sprang from the substance of the bone, till the entire surface presented the appearance of a healthy wound. The last portions of the outer table to become detached were the spots from which the pericranium had been removed. The suppuration was very profuse; but the patient, being strong, and enjoying excellent health at the time the wounds were inflicted, did not at any time during the course of treatment present symptoms of depression or of inflammation of the brain or its membranes. The only inconvenience was a severe neuralgic pain, extending down the right side of the head and face; but after the external table of the skull was cast off the pain ceased, and there was no further disturbance of that character. In about three months from the time when the scalp was removed, nearly the entire surface was cicatrised.

DRUGGISTS' CHARGES.

A GREAT deal is being said just now in various places about the high charges of dispensing chemists, for the most part very unreasonably, and even mischievously. No one pretends to believe that the average income of the class of pharmaceutical chemists from their business is greater than that of other classes of retailers. It is well known to be less than the general average in businesses demanding a far less onerous training, and in which it is by no means so important that a highly instructed and conscientious class of men should be employed, and that they should be conveniently numerous and widely dispersed. It is of the first importance that the cheap and nasty system should not be encouraged in dispensing. Every one knows that he can buy a hat for nine shillings in one place, and for twenty-four shillings in another. He will not expect to have them of the same quality, unless he belong to the deluded race of bargain-hunters. A man can put up with a bad hat; or he can renew his purchase more frequently; but the immediate danger which he will suffer from stale infusions and extemporised makeshifts of the cheaper kinds for the most costly pharmacopœial preparations is not so easily estimated or repaired. Lucky if he escape without plaster of Paris in his sulphur, or if he get a tithe of quinine in his crystals of quinine and iron. The whole question, however, does not lie in that of the use of inferior, stale, or adulterated materials. The price of a bottle of medicine represents many things besides the ingredients: it represents skill, responsibility, character, and outward and

material guarantees for all these. When a physician writes a prescription, the question is frequently asked, "Where shall I get it made up?" There are two usual ways of answering it; either to say, "Go to any respectable chemist in your neighbourhood;" or, if it be a prescription involving materials of special novelty, delicacy, or difficulty of perfect preparation, to name half a dozen establishments well known for their perfect arrangements, either of which can be selected. Then the importance of what we speak of as material guarantees is at once seen. There are in every large town some establishments where all the arrangements are obviously made so as to secure perfection, irrespective of cost. There are others where the special labours of the pharmaceutical chemist have been such as to inspire special confidence in his dispensing. These are all things to be paid for. Many of them are costly in themselves; all are valuable to prescribers and the public, and have a fair market-value. Druggists in poor neighbourhoods must suit their prices to the pockets of their customers. They are helped to do so by smaller shop-rents, a cheaper way of living, much less exigence and expenditure as to the elegancies of dispensing, and by consulting economy in every possible way in laying in their stock, and in the *personnel* and the arrangements of their establishments. With all this, they may resist the temptations to actual inferiority; but it is perfectly clear that the more costly arrangements, and the sole regard for perfection of material and method, are those things which we seek to secure for our patients, and which they have the greatest interest and desire to have, where they can afford to pay for them. We are not at all concerned to defend druggists against charges of extortion, or to uphold a system of unduly high prices; but we feel assured that the danger lies chiefly in the other direction. We have more to guard against in the interests of effectual prescribing, in the interests of healing, and for the security of the public and ourselves, in dealing with cheap, than with dear druggists. Those medical practitioners who dispense their own medicines will certainly not be the last to recognise the truth of this proposition. Those who prescribe only well know how important it is for their patients to fall into the hands of conscientious and well educated dispensers, who have studied their business, and charge a fair price, and supply fresh and honestly prepared medicines, without that single eye to cheeseparings which is characteristic of the cutting down system in retail businesses. Above all, it is certain that the worst evils of counter-practice go always hand in hand with cheap dispensing. If any success should attend an attempt to reduce dispensing to a system on which it could yield even smaller profits than it now does in the aggregate, the probable results, we think, would be greatly to diminish the number of places to which we could confidently allow our patients to apply for their medicines, and to degrade the practice of pharmacy to an injuriously low level. This would be both inconvenient and disastrous to all concerned. But we do not expect that any success will attend so ill-favoured and unreasonable a proposition.

THE RETIREMENT OF DR. MOUAT.

SURGEON-MAJOR F. J. MOUAT, Inspector-General of Gaols, Lower Provinces, Bengal, has been permitted to retire from the service on a pension of £550 *per annum*. Dr. Mouat is to be succeeded by Dr. Fawcus, the Deputy Inspector-General. On this subject the *Times'* correspondent writes:—

"The retirement of Dr. Mouat from the Inspectorship of Gaols in Lower Bengal has caused a little difficulty. His place has been filled by Dr. Fawcus, his late deputy, a capital gaol-manager, only altogether out of the groove of seniority; and, indeed, not yet a surgeon, only assistant-surgeon. Dr. Norman Chevers, a gentleman, perhaps, at the head of the profession in India, is held to have had the prior claim in every way; and, it is said, that he was quite willing to accept the post. On the other hand, it is argued that Dr. Chevers would very soon, from age, be unequal to the great labour of such an office. The appointment rested with the Lieutenant-Governor of Bengal; and he is charged, as usual in such cases, with giving his decision on narrow grounds, which, I should say, is the reverse of the fact. Whatever else may be said of the appointment, Dr. Fawcus certainly has proved himself the man for gaol-management, and in that light the question would be viewed by

Sir William Grey. No one, however, hints that Dr. Chevers would not also have proved a good gaol-superintendent; and every one admits his high attainments, character, and claims. The dispute, however, is a purely parochial one, and sways to either side according to the feeling of the advocate. Dr. Mouat has been mentioned in some quarters as a gentleman eminently entitled to the Star of India, which has never yet been given to a medical man for purely civil services."

PROMOTION OF NAVAL MEDICAL OFFICERS.

WE are glad to notice the advancement of some assistant-surgeons who were passed over in the last seniority promotion, and that their lordships have dated back the commission of one of these officers to August last. It would have been more gratifying, however, had their lordships taken into consideration that this officer, of good services and repute, was neglected in November 1869, when two juniors were advanced over him, and had given him his seniority as a surgeon from that date.

THE MIDDLESEX HOSPITAL.

A DRAMATIC performance was given at St. George's Hall on Monday, December 19th, by the members of the Philo-Dramatic Society, in aid of the funds of the Middlesex Hospital. Shakespeare's *Hamlet* and the farce of *Whitebait at Greenwich* were played. The acting was, as a rule, of more than average merit throughout the pieces; that of Mr. Holl as Hamlet being worthy of the most finished artist.

THE COMPARATIVE ENERGY OF ANTISEPTICS.

DR. F. CRACE CALVERT has performed two series of experiments in order to ascertain the comparative powers of various substances ordinarily used as antiseptics. The first consisted in placing in bottles (not corked) solutions of albumen and flour paste. To these he added various proportions of some of the substances patronised at the present time as antiseptics, and the following table shows the results obtained.

Antiseptic employed.	Percent. of antiseptic.	Time in which it acquired an offensive odour. Temperature from 70 to 80 deg. F.	
		Albumen.	Flour-paste.
McDougall's disinfecting powder	5	11 days.	25 days.
Carbolic disinfecting powder	5	Remained sound.	Remained sound.
Chloralum (made lately)	2	9 days.	—
Chloride of zinc.....	2	15 days.	—
Chloride of lime.....	5	16 days.	14 days.
Permanganate of potash..	5	—	—
Tar oil.....	2	11 days.	25 days.
Carbolic acid.....	2	Remained sound.	Remained sound.
Cresylic acid	2	Remained sound.	Remained sound.
None	—	5 days.	7 days.

The above table he considers clearly to show that the only true antiseptics are carbolic and cresylic acids; and these results coincide with those obtained by Mr. William Crookes, F.R.S., Dr. Angus Smith, F.R.S., and Dr. Sansom. These two acids continued their action till the albumen solution and paste dried up. The second series had the object of ascertaining which of the undermentioned substances would possess the most active power in destroying such germs, and thus preserving the animal substance from decay. At the bottom of wide-mouthed pint bottles, Dr. Calvert placed a known quantity of each of the antiseptics, and suspended over them by a thread a piece of sound meat; and, by daily examination, it was easily ascertained when the meat became tainted or putrid. The following table gives the results obtained.

Antiseptic used.	Became tainted.	Putrid.
Permanganate of potash	2 days.	4 days.
Chloralum	2 „	10 „
McDougall's disinfecting powder	12 „	19 „
Chloride of lime.....	14 „	21 „
Tar oil.....	16 „	25 „
Chloride of zinc.....	19 „	—
Carbolic disinfecting powder ...	Did not become tainted, but dried up and became quite hard.	
Carbolic acid		
Cresylic acid		

THE COMMITTEE ON OUT-PATIENT ADMINISTRATION.

AN important meeting of this Committee will be held at the Hospital for Women, Soho Square, on Friday, January 6th, when the report on Provident and other Dispensaries will be discussed, and resolutions will be moved on the question of payment by out-patients to medical officers.

SKIN-GRAFTING.

DR. H. R. WILLIAMS, of the Charity Hospital, New York, has, at the instance of Dr. Frank Hamilton, experimented on healing ulcers by transplantation in fifty cases at this institution. His results, on the whole, were not equal to those attained by English experimenters up to this time. A great number of the patients were not kept in bed; these were all failures. In only six out of the fifty cases were the results successful. He found the most successful plan of operation to be as follows. A small piece on the surface of the granulations was freshened by the knife, and the bleeding carefully stopped. Upon this point was then laid the piece of skin, which, being supported by the finger, in a short time became quite adherent; it was dressed afterwards with a piece of lint, smeared with simple cerate, placed over the whole ulcer. Dr. Williams concludes by observing that "it is a singular fact that, in the successful cases mentioned, the piece inserted entirely disappeared; and it yet remains to be determined how these perishable bits of skin set in motion a process which bids fair, in the cases experimented upon, to completely heal them, and to mark a new era in the treatment of chronic ulcers."

THE PERILS OF THE STREETS.

THE statement made in another column of street-accidents admitted at Charing Cross Hospital shows that, apart from the deaths reported by the Registrar-General, there must be an immense amount of needless suffering daily caused by the feud existing between drivers and pedestrians, which, as a rule, does not come before the public; for not one of these cases has ended fatally. It was pointed out in August last in the *Pall Mall Gazette*, in remarks which may usefully be revived, that there is really no reason for all these wounds and bloodshed. A little carefulness on the part of pedestrians and a little forbearance on the part of drivers are alone required to put a stop to this needless misery and death. The time has surely arrived when the British Government might offer its mediation between the two belligerents, and at all events make an attempt to restore safety to our London crossings. No person should be permitted to drive light carts, vans, or public vehicles, through the streets of London, without a licence for so doing, which should not be granted until he can produce trustworthy evidence that he is properly qualified by skill and steadiness to undertake a duty the improper performance of which involves such serious consequences. All drivers should also be required, under penalties, to slacken their pace when turning a corner. These steps would alone save a number of valuable lives; and the list of killed and wounded would be still further diminished if penalties were imposed on any parents sending children of tender years to toddle across the streets without reasoning power to know the danger they incur, or physical power to evade it. The police also, instead of permitting drunken men and women to stagger off their beats, should arrest the mentally as well as the physically incapable. No man or woman who cannot walk straight is fit to thread his or her way through a crowd of carriages. Yet a constable never thinks of taking into custody any drunken person unless insensible, abusive, or unable to stand upright. Last, but not least, the general walking public might condescend to show a little carefulness in crowded thoroughfares. Great as is the recklessness of drivers, it is almost equalled by the recklessness of pedestrians, who seem to take it as a personal insult if they are shouted at for the salvation of their lives. Yet the cabman's imprecation, horrible as it is, has often rescued a fellow-creature from the jaws of death, when a prayer might have been unavailing, even were there time to offer it. Trespassers on railway-lines are liable to penalties; and it is well worth consideration, whether fines might not properly be imposed on those who attempt to

cross carriage-roads except at recognised crossings, of which there should be a sufficient number, and where every possible precaution, by means of refuges and proper regulation of the street-traffic, should be taken for the public safety.

GENERAL INFIRMARY, LEEDS.

NOTICE has been given of a proposal to alter the rules, at the next meeting of the General Board, to vest the election of physicians and surgeons in a special committee, to be appointed for the purpose, instead of in the General Board as hitherto.

THE ENDELL STREET LYING-IN HOSPITAL.

WE regret to learn that the governors have been compelled to close this hospital for a month, owing to the occurrence, within the past few weeks, of several cases of puerperal fever, four of which have proved fatal. The wards are to be thoroughly disinfected and whitewashed.

PROPAGATION OF DISEASE.

LORD BYRON (says a writer in the *Daily Telegraph*) talked very forcibly once about propagating death and multiplying murder; but the views which he expounded were of a Malthusian nature. Those who desire the preservation of that very sacred thing, human life, may more legitimately join in the protest against the wanton and wicked carelessness with which, in defiance of the law, persons infected with contagious diseases are conveyed in the hackney carriages of the metropolis. An inspector of police has taken out a summons against a man living in Whitechapel, for the offence of hiring a cab and riding in it without warning the driver that he was suffering from typhus fever; and against the cabman for neglecting to disinfect the vehicle when rid of its unwholesome fare. Of the driver's culpable carelessness there could be no doubt. The sick man requested to be driven to the Fever Hospital; the people in charge there warned the driver that the case was one of malignant fever; but he continued to ply for hire without fumigating the cab or taking any measures to disinfect it. Mr. Paget made some laudably strong observations on granting the summons, and repeated the warning that persons afflicted with malignant fever or small-pox, who rode in cabs or other public vehicles without having previously given notice of their malady, were liable to heavy penalties; while the drivers of vehicles were equally liable if they did not properly disinfect their carriages after carrying fever-patients. There is an entry in an old churchwarden's account-book of the seventeenth century which has puzzled many antiquaries: "Paid for whipping two people that had ye small-pox, sevenpence." Why should affliction from variola have subjected the unhappy sufferers to the lash of the beadle? On reflection, it would seem that the punishment was dictated by the rough-and-ready wisdom of our ancestors. The small-pox patients had, doubtless, when they entered the village, neglected to inform the constables of the contagious disease under which they laboured. We have substituted fining for flogging; and, for the sake of the entire community, it is to be hoped that no ill-judged leniency will be shown to those who contravene a simple and yet most valuable sanitary law.

MEDICAL CLUB.

THE members held their monthly dinner on Monday last, when Dr. Lory Marsh took the chair. The Chairman, in speaking to the toast of "Success to the Club", stated that the future prosperity of the institution seemed to be assured, from the facts that the members had generally responded to the appeal for increased subscriptions, that many new members were joining, and that next year they hoped to be established in a building in Pall Mall which would in every way satisfy their wants and be creditable to the profession. Dr. Lush, M.P., responding to the toast of "The House of Commons", alluded to the subject of medical reform, and characterised the Government proposal of last session as totally unsuitable, on account of its ignoring the just claim of the members of the profession to be represented in the Medical Council. In other respects, he approved of the Bill, which was admirable as far as its details were concerned. Dr. Lush strongly recom-

mended that, whilst the Council should be elected by the profession, the Crown should appoint a Chairman who had a seat in Parliament, in order that he might be the mouthpiece and representative of the medical body. "The President of the College of Surgeons" was proposed by Dr. Lush, and responded to by Sir William Fergusson, Bart.; and the meeting terminated, the members and friends present professing their interest in the development of the Club as a means of maintaining good-fellowship and union in the medical world.

SCOTLAND.

THE Town Council of Edinburgh have purchased the Canongate Poorhouse for £1600, with the intention of converting it into a fever infirmary.

MEMORIAL OF THE LATE SIR J. V. SIMPSON, BART.

THE subscriptions already announced towards this memorial amount to about £3200. The executors of the late baronet are making arrangements for the preparation of a biography, and have requested communications containing interesting information regarding him to be forwarded.

DEATH OF A SCOTCH MEDICAL STUDENT AT SAARBRUCK.

WE are sorry to learn that Mr. McIntosh, of Hamilton, Scotland, a third year's student of medicine, has succumbed to an attack of quinsy at the National Aid Society's Hospital at Saarbruck. He had been attached to this hospital for some little time, and been most active in rendering aid to the sick and wounded.

THE FEMALE MEDICAL STUDENTS.

ON Monday last, at a meeting of the Royal College of Surgeons, Edinburgh, it was moved by Dr. Andrew Wood, and seconded by Dr. Gairdner, Treasurer of the College, "That, in the opinion of this College, it is neither proper nor expedient that males and females should be associated together in the study of medicine, either in hospitals or in classes." An amendment was moved by Dr. Handyside, and seconded by Dr. Watson, "That, in the opinion of the College, it is not expedient that the College come to any resolution in regard to mixed classes." On a division, Dr. Wood's motion was carried by a majority of 27 to 4. A memorial signed by sixty-six students attending the extra-academical classes at the College of Surgeons, on the subject of mixed classes, was sent to the President of the College, and received an answer to the effect that the College, with every disposition at all times to promote the interests of the students of the Medical School of Edinburgh, cannot interfere with the teachers who have adopted mixed classes; it can only indicate that the proper quarter to which the petitioners should apply is the Association of Lecturers, who occupy the premises at Surgeons' Hall, and are merely tenants of the College.

IRELAND.

BELFAST GENERAL HOSPITAL.

AT a meeting of the Board of Management of the Belfast General Hospital held November 5th, the following resolution was unanimously passed: "As it has been announced to the Board of Management of the Belfast General Hospital that Mr. William Mac Cormac intends to leave Belfast in order to pursue his professional career in London: Resolved, that the Board of Management request him to retain his position for the present as one of the surgeons of this institution, as they would regard with deep regret the severance of his connexion with the hospital in which his skill as a surgeon, his unremitting attention to the welfare of his patients, and his eminent success as a teacher of surgery, have alike reflected the highest credit on himself and done honour to the institution."

THE PROPOSED APOTHECARY-GENERAL.

THE appointment of Apothecary-General, proposed by the Irish Poor-law Commissioners, is creating universal dissatisfaction, both amongst guardians and medical men as well as those engaged in the drug business. The faults of the present system are flagrant enough. The names of the medicines in the contracts are vague—that is, not pharmacopœial; the tenders are accepted by guardians, who know nothing of the subject. If the medical men report unfavourably to the guardians, they are snubbed and abused. But, under the present system, they could appeal if the medicines were really bad. If an Apothecary-General be appointed, such a post will afford opportunities for unlimited jobbing, and will leave no appeal. In order to remedy one system of jobbing, it does not seem necessary to create facilities for another yet more extensive and uncontrollable. Why should not the simple expedient be adopted which has been proposed, of appointing inspectors, who will see that the contracts are properly drawn out, and that the medicines are supplied of good quality and at fair prices?

STREET ACCIDENTS.

THE following accidents were admitted at Charing Cross Hospital, caused by vehicles and horses in the streets, in the month ending Saturday, December 17th.

James Mumford, aged 17, contusions of back and leg—knocked down by a cab.

Robert Kirby, aged 29, fractured clavicle—knocked down by a Hansom cab in Chandos Street, Covent Garden.

William Ireton, aged 34, contusion of shoulder—knocked down by a cart.

Michael Mahoney, aged 53, injury to ankle—run over by a Hansom cab at the Quadrant; not sober at the time of the accident.

Thomas Messenger, aged 16, spinal concussion—knocked down by a carriage at Charing Cross.

William Crook, aged 34, fractured skull—knocked down by a cab at the top of Endell Street.

THE BRANCH MEDICAL COUNCIL FOR ENGLAND.

THE Branch Council for England and the General Medical Council met on the 15th December. There were present: Dr. Paget, President, in the Chair; Dr. Bennett; Mr. Cooper; Dr. Humphry; Dr. Embleton; Dr. Storrar; Dr. Quain; Dr. Rumsey; and Dr. Francis Hawkins, Registrar. Mr. Quain was introduced as the representative of the College of Surgeons of England. Dr. Bennett and Dr. Storrar were appointed auditors. Two cases of complaint made against certain registered practitioners for improper conduct were referred to Mr. Ouvry, with a request that he will advise the Council as to the course which it is desirable to adopt. Mr. Harry Wells was admitted to registration under the 46th section of the Medical Act, on the ground of his having held an appointment in the army before the passing of the Medical Act. The Treasurers were directed to contribute towards defraying the expenses of the prosecution a penalty amounting to £9 19s., which had been received in December 1869, on the conviction of Robert Wilson of East Keswick, under the 40th section of the Medical Act. The President and Treasurers were requested to ascertain whether accommodation could be obtained more suitable for the Council than the rooms at present occupied by them.

OUT-PATIENT REFORM AT HOSPITALS AND DISPENSARIES.

THE Committee appointed to report on the reform of the out-patient departments met at the Hospital for Women, Soho Square, on Friday evening, the 16th instant; Dr. Meadows in the Chair.

Dr. HEYWOOD SMITH brought up a report on the Dispensaries of the metropolis, which was ordered to be circulated amongst the members of the Committee.

The Committee resolved that it would be desirable to have a special meeting of the Committee to consider the questions—(1) of payments by patients; (2) of payments to the members of the staff; (3) of the establishment of provident dispensaries.

Dr. STALLARD gave notice that he would move the following resolutions in reference to these subjects.

“1. That the principle of accepting small payments from patients at the time of their attendance at hospitals and dispensaries ought not, under any circumstances whatever, to be countenanced; such a practice tending, first, to unfair competition with medical men who are willing to attend the poorer independent classes on terms suitable to their means; and, secondly, to seriously interfere with the introduction of provident dispensaries, it being most unlikely that the poor will make small payments during health, if at a neighbouring hospital or dispensary they can secure, when ill, advice and medicine by immediate payments not greater than those which must be made at provident dispensaries when they are also well.

“2. That it is desirable that the dispensaries should be converted into provident dispensaries, particularly as this can be done without injury to the class of necessitous poor who are not absolutely paupers. The subscribers to the present dispensaries can pay the entrance fee demanded of patients when they are actually ill, either by means of a ticket or direct payment, such patients undertaking to become permanent members. The subscribers will thus have it in their power to relieve the present distress, and in doing so will promote habits of providence amongst the labouring poor.

“3. That in order to promote the extension of provident dispensaries, it is desirable to restrict gratuitous advice and medicine to public hospitals provided with beds; and that all such hospitals should be requested to carry out the recommendations adopted by this Committee with the object of diminishing abuse.

“4. That it is not desirable to pay the staffs of dispensaries not conducted on the provident principle.”

The Committee adjourned to Friday, the 6th of January, when the members are requested to meet at the Board-room of the Hospital for Women, Soho Square, at 8 o'clock P.M.

SMALL-POX IN LONDON.

DR. ROBERT GRIEVE, the Medical Superintendent of the temporary Hospital at Hampstead, writes—“I annex the weekly report. As I expected, the admissions, owing to the number we have been compelled to decline, are less than in the previous week. The deaths from small-pox have gone up to eighteen, but only two have occurred in vaccinated cases.”

Name of Union or Parish.	For the week ending Dec. 20, 1870.	Since the opening of the hospital, Dec. 1, 1870.
St. Leonard, Shoreditch	7	29
St. George's Union (Hanover Square)	3	19
St. Matthew, Bethnal Green.....	8	16
Holborn	2	10
City of London	1	8
St. George-in-the-East	1	8
Stepney	2	7
Poplar	2	6
Camberwell.....	2	5
St. Mary, Lambeth	5	5
Mile End Old Town	1	7
St. Saviour	0	4
Fulham	0	4
Strand	0	4
Hackney	0	4
Whitechapel	1	4
Westminster	0	3
Kensington	0	3
Wandsworth	2	2
St. Olave.....	0	1
Greenwich	0	1
St. Luke's, Chelsea	1	1
St. Mary, Islington	1	1
Lewisham	0	1
Total...	39	153
According to Age.		
Males over 15 years of age	20	61
Females „	7	30
Males between 5 and 15 years of age	7	26
Females „	3	21
Children under 5 years	2	15
Total...	39	153

SPECIAL CORRESPONDENCE.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

Explosion at Witton.

THE pressure upon the hospital staff and the hospital space is gradually lessening by the death of the sufferers from the explosion at Witton. Since their admission into the hospital on Friday week, December 10, thirty have died, twenty-one still remaining in the wards. Of these it is probable that at least half will die.

The deaths have been occasioned by pulmonary complications. In every case, there has been found either extreme congestion of the lungs, or effusion into the pleural cavity, or both conditions combined. As a rule, these conditions have not been preceded by active symptoms of chest-disorder, though in a few cases slight cough has been noticed. The general state of the patients, and the extreme pain caused by moving them, have prevented the making frequent examinations, and recording the changing conditions during life.

The sudden admission of over fifty patients into the General Hospital, of course, prevented their reception into the ordinary burn-wards, which were already nearly full of patients from the three former explosions. The cases had, therefore, to be distributed throughout the ordinary wards, and so great was the urgency, that females had to be placed in the male accident wards; as beds became vacant in the female ward, the patients were transferred to them, and now only one woman remains in the male ward, her case, amputation of the thigh, with burns, not justifying her removal.

It was feared that the presence of so many suppurating wounds throughout the hospital would infect the wards, and lower the healthiness of the hospital, which has for many years been exceptional; cases of pyæmia are almost unknown, and spreading sores and erysipelas not very common, and when they recur are quite as frequently admitted from the out-patients as developed in the hospital. To prevent this healthy condition of the hospital from being interfered with, and also in anticipation of future contingencies of a kind similar to the explosion at Witton, the House Committee of the hospital decided upon erecting a ward in the grounds at the back of the institution for cases of burns. This has been so energetically carried into effect, that, in six days, a handsome and commodious ward, built of brick and stone, and having nurses' room and other offices, has been completed, and will be ready for use on December 22nd. The ward is sixty feet long by twenty-five feet wide, has seven windows on each side, and will contain 1300 cubic feet for each of the sixteen patients it is arranged to accommodate. In addition to the cross ventilation through the windows, there are five improved ventilators in the roof, one being an Archimedian screw ventilator, kept in action by the wind. The walls have been built of dry bricks, so as to permit its occupation with safety at as early a period as possible.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

THE next meeting of the Section will be held at the Midland Institute, Birmingham, on Friday, December 30th, at 3 P.M.

BALTHAZAR W. FOSTER, M.D., } *Honorary Secretaries.*
T. VINCENT JACKSON, }

Birmingham, December 20th, 1870.

CAMBRIDGE AND HUNTINGDON BRANCH.

A MEETING of the above Branch will be held at Huntingdon in the month of April next, at which Michael Foster, Esq., has been requested to preside. This is to meet the wishes of those members who cannot conveniently attend the combined meeting with the East Anglian Branch, to be held at Norwich in the summer.

Dr. P. W. Latham has retired from the office of Honorary Secretary, the duties of which are now undertaken by Dr. Bradbury, Cambridge.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE third meeting of this Branch during the present session was held at Birmingham, on December 8th.* Present: C. A. NEWNHAM, Esq., in the chair, and forty-five members and visitors.

New Members.—The following gentlemen were elected members of the Branch: Mr. James Darke, Malvern; Mr. P. A. Lafargue, Fillingley; Mr. Walter Tyrrell, Great Malvern; Mr. Henry Bowen, Kineton; Mr. H. T. Lomax, Stafford; Mr. E. F. Weston, Stafford; Mr. G. B. Dartnell, Inspector General of Hospitals, Henley-in-Arden; Dr. Thomas Jackson, Leamington.

Communications.—1. Dr. BALTHAZAR FOSTER exhibited a specimen of Ruptured Aortic Valve from Muscular Exertion.

2. Mr. LAWSON TAIT showed a Cast of a case, for which he was indebted to the generosity of his friend, Dr. Burton of Walsall. The subject had fallen from a height on his feet, and the appearance of the cast, together with the history of the case, occurring in a lad of sixteen, left no doubt that the tibia had been cleft longitudinally upwards, but not broken.

3. Mr. BENNETT MAY exhibited the Duodenum of a Boy, aged 14 years, who died from Burns of General Surface on the fifth day. There was a perforating ulcer, about four inches from the pylorus, about the size of a shilling; the edges were clean cut, and the surrounding mucous membrane was congested and softened. The burns involved the face, arms, and back, in all about one-sixth of the entire surface of the body. The contents were extravasated into the abdominal cavity. He also showed several other Duodena in different stages of Congestion and Softening, from patients who had died, at periods of from six to fourteen days, after severe superficial burns, showing apparently little connection between the extent of surface and the condition of the duodenum.

4. Mr. WHITCOMBE showed a portion of the Dura Mater and Arachnoid of a patient who had died in the Borough Asylum, from Meningitis. The patient had a fall in the street in August last, and a few days afterwards was admitted into the Asylum. She had symptoms of general paralysis, and in November had an apoplectic attack, from which she died. After death, the arachnoid was found much thickened and opaque, and a false membrane intervened between it and the dura mater. A linear fracture was found across the mastoid process of the temporal bone about an inch and a half in length.

5. Mr. BARTLEET showed a Foreign Body which he had removed from the Bladder of a female a few days previously. It was a part of the handle of a parasol, and consisted of a bone ferule three and a quarter inches in length. Mr. Bartleet, having slightly dilated the urethra, passed his finger into the bladder, where he found the foreign body lying transversely. Having rectified the position with his finger, the bone was easily seized and extracted by forceps. It had been only five days in the bladder, but was coated with phosphates.

6. Mr. LAWSON TAIT read a paper on Primary and Progressive Fibrous Cancer of the Skin. The subject of the paper was a woman, aged 37, who suffered from a tumour on the outer side of the left nipple, in the skin, and moveable over the subjacent textures. The disease finally spread until the thorax was begirt with a belt of brawny induration, resembling the *squirrhe en cuirasse* of Velpeau, both scapulae were fixed, the left arm oedematous, and the right mamma involved. As the disease slowly spread, Mr. Tait noticed that the margin of the scleriosis was always slightly moveable in the subjacent textures. When first seen by Mr. Tait, the left mamma had become quite fixed, so that interference was hopeless. Death occurred ultimately from hydrothorax. At the *post mortem* examination, it was found that the liver and kidneys were occupied by numbers of nodules, afterwards shown to be medullary cancer. The disease of the skin corresponded in microscopic appearances precisely to the fibrous cancer of Paget, and differed entirely from the case of cancer of the skin recorded by Rasmussen.

7. Dr. WILLIAM HINDS gave details of a case in which a Fistulous Communication was spontaneously produced between the small Intestine and the exterior of the Abdomen just below the umbilicus. Emma N., aged 39, married six years, and having two children, the last being three years old, and being previously in good health, began, in May 1865, to feel weak and low. She had cough, with subsequent emaciation and purulent expectoration. Physical examination detected a presumed cavity under the left clavicle. In twelve months, she began to

* Received December 20th.

improve, and after a while resumed her ordinary duties. In March 1867, she was attacked with peritonitis. Mercury was used, and she recovered in two months, and again resumed her duties; but by this time she had begun to feel a little soreness and a smarting sensation in and near a spot about midway between the umbilicus and pubes. In the course of two or three weeks, some tumefaction had supervened, flattish, and some five inches in diameter, and apparently close beneath the integument. A small centre was very elastic, elevated, thin, and vesicular. A sharp-pointed bistoury was used to puncture this, and gas only escaped at first. In a short time, some yeast-like fluid escaped, which had a most intolerably offensive odour. No faecal matter proper appeared at this stage to pass out. The bowels had generally been quite regular, and thus no obstruction could be assumed. There was no vomiting, and no severe prostration. After a few days, a yellowish liquid replaced the first discharge, and this latter was not offensive. Ultimately, the discharge became more or less feculent. The patient lingered for months, when, on December 19, 1868, violent and intense pain of the abdomen supervened suddenly, and death occurred after twenty-four hours of unendurable agony, in spite of remedies. A *post mortem* examination, a few hours after death, showed the peritoneal surface of the abdomen red and angry, and the intestines were much glued to the surface by old adhesions. Yellow faecal matter appeared on the surface of the intestines, and an opening was found to lead from the small intestine to the old opening on the exterior, which, it may be mentioned, had closed for two or three weeks before death. In such cases, the etiology is not particularly clear. Several questions of interest occur as to what relation the peritonitis bore to the after symptoms, or what relation the presumed tubercular deposit might have to the peritonitis. There was no obstruction of the bowels at any time; and the true reason why the patient should not recover is not particularly clear. Measures for the cure of such a case seem also somewhat difficult to devise. The case is one of, no doubt, considerable rarity.

8. Mr. HARMAN read a paper on Operation Mortality in large Hospitals.

The discussion on Mr. Harman's paper was adjourned to the next meeting, on the motion of Mr. LAWSON TAIT, seconded by Mr. OAKES; and Mr. Harman was requested to give a *resumé* of his paper at the commencement of the meeting.

New Members of the Association.—After the meeting, a Council Meeting was held, at which the following gentlemen were elected members of the Association: Dr. Greenway, General Hospital; Mr. Standish, Cradley; Mr. E. G. Smith, Queen's Hospital; Mr. Hogg; Mr. Rickards, General Hospital; Mr. H. Brown, jun., West Bromwich; Dr. Thomas Jackson, Leamington; and Dr. Thompson, Leamington.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

THE second ordinary meeting of the session was held on November 25th, 1870.* Present: ALFRED BAKER, Esq., in the Chair, and thirty-four members and visitors.

Mr. GAMGEE exhibited a case of extensive Contusion of the Leg with Swelling, to prove the nature of uniform Compression in such cases by pasteboard-splints and circular bandaging. In forty-eight hours, the swollen limb so treated had decreased an inch and a half in circumference.

Dr. SAWYER showed the Heart of a boy, aged 10, who had suffered from Cyanosis during the whole of his life. The foramen ovale was persistent, but partly covered by a valve-like process of the endocardium; the orifice of the pulmonary artery was considerably narrowed; the tricuspid orifice only admitted the tip of the finger; the walls of the right ventricle were three-fourths of an inch in thickness, while the cavity was much diminished in size; at the orifice of the aorta there were only two sigmoid valves, one of them showing traces of rudimentary division.

Mr. LAWSON TAIT showed a photograph of a case of Ichthyosis; and in his remarks objected to Mr. Erasmus Wilson's attempts at a new nomenclature for the disease. He expressed his concurrence that the ichthyosis brune of Devergie was not a sebaceous disease; and he concurred with Dr. Hilton Fagge, that it was due simply to the retention of effete epithelium on the skin. The anatomical distribution and the chemical and microscopic examination of the scales gave no support to the views of Wilson and Warburton Begbie, but confirmed those of Fagge. He proposed to retain the term "ichthyosis", and to name two varieties ichthyosis uvida and ichthyosis sicca. The case which he showed illustrated the latter variety. He remarked it as somewhat

peculiar that this disease was always most marked in winter, and in some cases disappeared altogether in summer. He also showed a transverse section of true human horn, composed of laminated epithelium scales, very much resembling in arrangement the structure of true horn, and differing widely from the seborrhœa sicca which generally went by the name of human horn; and a well-marked instance of the "ichthyosis cornea" of Alibert and Warren, from the end of a finger. In the patient from whom it was removed, three other fingers were somewhat similarly affected.

Mr. HICKINBOTHAM showed a specimen of Abscess occurring in a Moveable Kidney. The woman from whose body the specimen was taken had repeatedly suffered from great pain in the region of the bladder, with difficult and painful micturition; the urine being loaded with pus. She had never had any pain in the kidney itself until about fourteen days before death, when acute inflammatory symptoms came on, and, in spite of treatment, she sank and died on the 17th September. The *post mortem* examination showed general inflammation of the whole peritoneum; and the right kidney, which lay midway between the umbilicus and the anterior superior spine of the ilium, was completely riddled by abscesses. The ureter was dilated and thickened. The bladder, except near the opening of the right ureter, where there were traces of inflammation, was healthy.—The specimen was referred to the Microscopical Committee, with the addition of Dr. Hilliard and Dr. Hickinbotham.

Mr. C. J. BRACEY related the history and exhibited drawings of a case of Hydrocephalus treated by Paracentesis.

REPORTS OF SOCIETIES.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

SATURDAY, DEC. 17.

R. DRUITT, Esq., M.D., President, in the Chair.

AFTER the minutes of the preceding monthly meeting had been read and confirmed, Dr. Gibbon asked leave for Dr. Elizabeth Blackwell to be present; but the permission was not granted, on the ground that the subject of the presence of ladies at the meetings had been already discussed at the General Purposes Committee, and unanimously refused.

The Small-pox Epidemic.—Mr. LIDDLE spoke of the necessity of having power to Remove Dead Bodies from houses, and to order the people to go out, that the houses might be properly disinfected.—Dr. ALDIS said that small-pox was extending very fast into his district, and urged the necessity of accommodation being provided for the patients.—Dr. TRIPE said he had obtained two orders for removal that day. In parishes where there was no mortuary, it was still possible to obtain an order from a magistrate for immediate burial; the expense could be recovered from the family.—Dr. VINEN concurred in this view.—Mr. LIDDLE said that at the London Hospital separate sheds had been erected for the isolation of small-pox patients, with great advantage.—Dr. GIBBON approved of Mr. Liddle's suggestion, and thought that every hospital ought to be provided with separate buildings of the kind.

Chloralum.—Dr. STEVENSON read his report on Chloralum as an Antiseptic and Disinfectant. The substance, aluminic chloride, was not new to chemists. It seemed to have no action on sulphuretted hydrogen. It would deodorise some compounds perhaps, because it fixed ammonias and organic ammonias. In its antiseptic properties, it seemed to be like many other mineral salts. It stopped putrefactive change to a great extent, but seemed inferior to carbolic acid. It was difficult to determine whether it had disinfectant powers; probably it had. Dr. Stevenson thought that in any case its expensiveness, as compared with carbolic acid and other disinfectants now in use, would weigh against it. It might be of advantage in the case of dead bodies, where the preservation of colour was of importance.—Mr. JOHN GAMGEE had been assured by Dr. Angus Smith and others, that this was almost an untouched subject. He claimed for chloralum a superiority over carbolic acid, on account of its inoffensiveness and harmlessness; and because the strength could be moderated at pleasure. It was applicable to ten times as many purposes as carbolic acid, and could eventually be manufactured at one-third the price.

Scarlet Fever.—Dr. ALDIS read a paper on Scarlet Fever for ten years in the Parish of St. George, Hanover Square. After some introductory remarks, Dr. Aldis said he would first call attention to (1) the population of St. George's; (2) its elevation and area; (3) its geology. Referring to the propagation of scarlet fever, he said in 1865 it was contracted by two boys while in St. George's Hospital for the cure of other complaints. Cases of scarlet and other fevers were still

* Received December 20th.

admitted into the wards of some hospitals containing patients affected with other diseases. There was a model lodging-house in his parish in which there was a deficiency in the general sweep of air over the whole building. Here twelve cases of scarlet fever occurred; while in another, erected under proper conditions, not a single case arose. Respecting the coincidence of contagious diseases in the same house, Dr. Aldis gave a history of six or seven months of illness from scarlet fever, typhus, and small-pox, in a most crowded and ill-ventilated house, in which the greatest exertions were needed to get the people to make any move for their own benefit. Out of 499 persons who had died of this disease, 476 were under twenty years of age. The greater number of deaths in the Belgrave district, compared with that of the other districts, he attributed to the rapid increase of population and of new houses, to its lower level, and its geological features. As to the means of prevention of scarlet fever, there was no doubt that isolation was among the best, but without houses of refuge it was difficult to effect this, especially among the poor. They often concealed the disease, and broke promises of taking their children to the hospital, although living in the kitchen with their children, and letting the rest of the house to lodgers. In his own practice, he never thought it necessary to break up a school or disperse a private family. He found the isolation sufficiently effective when he allotted apartments on separate floors to the sick and the healthy, and prohibited intercommunication. On the same principle, special carriages ought to be provided for the removal of these patients to hospitals. Suitable apparatus for disinfection is likewise necessary; and the poorer classes especially ought to have a constant supply of water. The principal disinfectant which he used was sulphurous acid (for which he quoted Homer's *Odyssey*, Bk. xxii, as an authority), carbolic acid, carbolic acid powder, and Condry's fluid.—Dr. TRIPE said that isolation could be effected if the patients could be got to live in separate rooms, shut off from the rest of the family, and were not allowed to mix with them too soon. He also objected to patients being removed to hospital in an upright position.

Country and Town Milk.—Mr. GAMGEE read a paper on Country v. Town Milk. The conclusions at which he arrived were: that the supply from town-dairies should be limited, and only supplementary; that the more we have of good grazing land, and the less we have of artificial food, the better; and that if medical men required a supply close at hand, a rational system ought to be devised.—Mr. LIDDLE concurred with Mr. Gamgee in banishing cows from London.—Dr. TRIPE had made some analyses as to the influence of diet. For instance, he found that when cows were given distillers' wash, there was a great increase of quantity but deterioration of quality in the milk.—Dr. SUTTON urged that medical officers of health should oppose the licensing of cowsheds in London as much as possible. He found much disease existing in the cowsheds of Shoreditch.—Dr. GIBBON did not think it proved that disease arose from the milk of diseased cows. Since the introduction of the country supply, epidemics had been more prevalent than before.

Dr. BALLARD read notes of a Case of Pemphigus, in which the disease was contracted by Inoculation from an Eruption of the Teats of a Cow. He described the symptoms of the case, from its first beginning to the recovery of the patient. Mr. Ceely, with whom he had been in communication, called it the white blister hock. The case was a very peculiar one.

OBSTETRICAL SOCIETY OF LONDON.

DECEMBER 7TH, 1870.

GRAILY HEWITT, M.D., President, in the Chair.

A REPORT on Dr. HALL DAVIS's specimen of Extrauterine Foetation, exhibited at the November meeting, was read.

Dr. LLOYD ROBERTS, of Manchester, exhibited drawings of cases of Spina Bifida.

Mr. J. T. MITCHELL read a paper on a case of Extraordinarily Protracted Labour of more than six days' duration, the consequence of the unrelieved impaction of an immense Hydrocephalic Head, necessitating craniotomy, which had been too long delayed. After giving a detailed account of the case, the author dwelt on the importance of early delivery in cases of impaction. The patient, whose case was narrated, made a good recovery.

Dr. BARNES read a paper describing a new form of Suture to be used in cases of Cæsarean Section. It was intended not only to close the uterine wound, but to bring and keep it in close apposition to the peritoneum. It was arranged so that it might eventually be withdrawn *per vaginam*.—Dr. BRAXTON HICKS thought that Dr. Barnes's plan would probably be found preferable to that of drawing out the sutures

externally. He (Dr. Hicks) had been the first to recommend the plan, and also to put it into practice in a case described before the Society. It had since been advocated in France. In his case, it appeared satisfactory; for, although there was severe vomiting, the contents of the uterus were not extruded into the peritoneal cavity.

A paper by Mr. CULLINWORTH, of Manchester, on a case of Pelvic Cellulitis, noted with special reference to the Temperature, was read. This paper gave a full account of the case, and contained a carefully recorded thermometrical chart constructed from observations taken during its progress.

Dr. WILTSHIRE read a paper on a case of Fibro-enchondromatous Tumour complicating Pregnancy. The patient had a hard tumour about the size of a pudding-basin springing from the right ilium and parts adjoining, and projecting into the abdominal cavity. The foetal head being well below the tumour, Dr. Wiltshire decided to let her pregnancy go the full term, when the patient was comfortably delivered of a fine and apparently healthy child by the natural efforts. For the first time in the patient's life, she had missed two catamenial periods immediately prior to conception; this might have led to deplorable results had premature labour been induced on such data. Although the mother was, and had always been, in perfect health, her infant died at the age of seven weeks, from congenital syphilis. The paper contained a complete thermometric record of the case, which, Dr. Wiltshire stated, presented a type of the normal thermometrics of the puerperal state, the rise at the advent of lactation, and its fall on the establishment of that process, being well marked. Dr. Wiltshire suggested that, if cysts were found in enchondromata, and it became necessary for obstetric reasons to puncture one or more, it would be well to use a large cannula, the contents of such cysts being thick and viscid.—Dr. MARTYN thought that a quick pulse and high temperature setting in about the third day, pointed rather to puerperal fever than to lactation, and that such a condition depended mostly on offensive lochia. A turgid state of the mammae might cause some degree of fever; but when the temperature and pulse rose in the degree mentioned by Dr. Wiltshire, it was due to contamination from offensive discharges. Such fever might subside quickly, but the injection into the vagina of some disinfectant was the best means of securing this result.—Dr. ROUTH thought that Dr. Wiltshire had given an unusual example of fibroid disease. He was anxious to know if the tumour had enlarged *pari passu* with the uterus. An uterine fibroid generally increased under the impetus of pregnancy, and after delivery again diminished in size, and sometimes became smaller than before. His own experience was that, in such cases, about the third or fourth month, miscarriage generally occurred, owing to the interference of the tumour with the due development of the uterus. With regard to the non-presence of syphilis in the mother, although the child and father were affected, Dr. Routh believed that the woman might have had uterine syphilis, which had escaped observation. Indeed, this variety of syphilis was often overlooked. He could endorse Dr. Martyn's opinion that a pulse of 120 generally indicated incipient puerperal fever. He had often seen cases with great milk-fever one day, and when the secretion was established all the symptoms subsided, and the pulse fell to 80 or even lower; the lochia, carefully observed at the time, giving no indication of smell or anything abnormal.—Dr. EDIS agreed with Dr. Wiltshire's statement as regarded the increase in the frequency of the pulse when the milk was distending the mammae. He had noticed that an initiatory rigor, an acceleration of the pulse, and an increase in the temperature, were by no means unfrequent about the end of the second, or commencement of the third day after parturition, and were not explained by any other complication. The pulse and temperature returned to their normal standard as soon as the secretion of milk was established.—Dr. T. BALLARD said that, in reference to the rise in temperature, the feverishness was mainly caused by the irritation which resulted from putting the child to the breast before the milk was secreted. He asked what were the symptoms that indicated that the child was syphilitic. Dr. Wiltshire had only mentioned some spots on the skin, and some snuffling. There were no symptoms of syphilis in the mother; and the child was not cured by mercury. He (Dr. Ballard) thought the indications of infantile syphilis were rather vague. He had been long searching for a specimen of infantile syphilis, but in vain.—Dr. WILTSHIRE, in reply, said that the child had inherited syphilis from the father. The exaltation of temperature on the third day was no doubt due to the establishment of lactation. The tumour, not being uterine, but attached to the pelvic bones, could not be expected to undergo alteration. As it did not extend into the lower pelvis, premature delivery was not called for. The mother had never shown the least symptom of bad health, and, therefore, could not be supposed to be the subject of syphilitic disease. There could be no doubt of the child being affected with that disease.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, DECEMBER 13TH, 1870.

GEORGE BURROWS, M.D., F.R.S., President, in the Chair.

TEMPORARY GLYCOSURIA AS A SEQUEL OF CHOLERA. BY WILLIAM SEDGWICK, M.R.C.S., L.S.A.

THE author remarked that the first and albuminous urine passed or withdrawn after the usually prolonged suppression of the secretion was usually deficient in urea, and free from sugar; and that the subsequent temporary glycosuria was preceded by the occurrence of a blue colouring matter. Sugar in the urine occurred not, as a rule, in the first urine secreted after suppression, but subsequently to the occurrence of albumen; and whilst there was a relative deficiency of urea when albumen was present, sugar was associated with urea in excess. The production of the blue colouring matter in the urine of patients suffering from cholera was very closely associated with the development of glycosuria; the occurrence of the sugar in the urine in such cases appearing to be a somewhat later stage in a series of pathological changes, apparently traceable to one common origin. Attention was directed to the frequent occurrence of a blue colouring matter in the urine in many other diseases, which, like cholera, could be more or less directly referred to the alimentary canal; and, as sugar had been found in the same cases, those two abnormally increased, if not altogether abnormal, constituents of the urine were perhaps derived from the same source. In reviewing the pathology of the urine in cholera, the chief facts to which attention should be directed, with reference to the occurrence of glycosuria, were—the suppression of the urinary secretion as a primary result of the disease, with arrested formation of urea; albuminuria, with deficiency of urea; the presence of a blue colouring principle; and, finally, diuresis, with excess of urea and sugar in place of albumen. The presence of sugar during convalescence, when albumen was no longer present, suggested that the temporary glycosuria of cholera might be due rather to the progress of reparation than of destruction, and that it was, as it were, the result of an excess of restorative effort. In diabetic patients, during fever, or during the last agony, sugar in the urine was apt to be replaced by albumen. Temporary glycosuria, like the previous suppression of urine, had no claim to be regarded as an exceptional phenomenon characteristic of cholera; on the contrary, it occurred during convalescence from other forms of acute disease, in which it was often associated with the previous development of a blue colouring principle. It also occurred apart from disease, as a physiological condition during certain stages of development, and at certain epochs of life; and it could be experimentally produced. In all such experiments, the primary effect produced must be on the vascular system, to which the branches of the sympathetic nerve were distributed, and any effect produced on other parts of the organism must be secondary. The fact observed by Eckhardt in 1867, of the absence of sugar from the urine after section of the splanchnic nerves, taken in conjunction with the fact observed by Moreau in 1868, that section of those nerves was followed by an intestinal flux possessing the same characters as the flux of cholera, indicated very clearly the direction in which the inquiry should be pursued. For, when the neuro-paralytic condition of the digestive canal so produced was compared with what occurred after the influence of the central portion of the sympathetic nervous system had been artificially increased by the application of galvanism or electricity to the part during life, as shown in MM. Linati and Caggiati's experiments, it would be found that the results then obtained were essentially opposed to those which followed arrest or diminution of that influence, either from section of the nerves or from cholera. The temporary glycosuria observed in all the various cases cited might be regarded as a consequence of long-continued and immoderate secretion, consequent on a previous diminution or arrest of the influence of the sympathetic or vaso-motory nervous system, which acted as the moderator of secretion in virtue of its action as controller of the circulation. The author had been led to infer that all secretion was associated with saccharine transformation; and that whilst, on the one hand, an excess of secretion was accompanied by a corresponding excess in the formation of sugar and consequent glycosuria, a moderate exercise of secretory function was, on the other hand, accompanied by a corresponding moderate formation of sugar, which could be disposed of in the system; and that it was only when the blood contained sugar in excess from such causes as those which had been already referred to that some of it was eliminated by the kidneys. Consequently, in those cases of cholera which terminated favourably, and in which glycosuria had been observed to occur during convalescence, the subsequent disappearance of sugar from the urine might be accepted as evi-

dence in favour of the normal balance of organic function having been satisfactorily restored.

Dr. SYMES THOMPSON said that the cessation of sugar in diabetic patients assailed with inflammatory fever had puzzled several; and he thought that Mr. Sedgwick's explanation was as good as could be suggested. The question arose from this, whether the production of local inflammation, by means of a seton, for instance, might not be useful in diabetes.—Mr. SEDGWICK did not think that advantage would be derived from the proceeding suggested by Dr. Thompson.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, DEC. 3RD.

JAMES STANNUS HUGHES, M.D., President, in the Chair.

Mr. HENRY WILSON presented a case of Glaucoma combined with Posterior Staphyloma of the Eyeball. The characteristic excavation of the optic nerve was very well marked, and there was an absence of pigment in the choroid membrane, the arterial vessels of this substance being extremely atrophied.

Dr. W. MOORE detailed the particulars of a case of extensive Hepatic Abscess, in a man aged 40, of temperate habits. The disease was ushered in by severe diarrhoea, which lasted twelve days, and was succeeded by violent pain in the right side. Shivering fits ensued, and, after a few days, there was a slight enlargement in the right hypochondriac region. About half a pint only of pus was evacuated by operation. The patient, however, gradually lost ground, vomiting, with obstinate hiccup, supervened, and he sank rapidly. The liver, which was exhibited, presented a large cavity in its interior, from which two quarts of pus escaped. This cavity occupied the inferior half of the right lobe, and was five inches and a half in diameter. There were three points of interest in the case: viz., the absence of jaundice, the absence of ascites, and the absence of pulsation in the abscess.

Dr. E. H. BENNETT showed two specimens illustrative of the fatal results of Caries of the Temporal Bone. Both patients were women, and had, previously to their fatal illnesses, enjoyed good health with the exception of occasional slight otorrhoea. The first patient, aged 40 years, became suddenly excited, violent headache set in, and in two or three days she became comatose, and never rallied. After death, appearances similar to those observed in fatal cases of cerebro-spinal arachnitis were noticed. An extensive deposition of lymph had taken place in the pia mater beneath the arachnoid membrane. The lymph lay thickest close to the origin of the seventh nerve of the affected side; and around its insertion into the medulla oblongata, a perceptible induration existed. The lateral sinus was healthy, but the entire petrous portion of the temporal bone was softened and red. The portio mollis was adherent in the internal meatus, and the tympanum was destroyed. These latter lesions were evidently of an old date. The inflammatory action in the fatal attack had probably originated in the seat of the primary disease, and spread thence inwards along the course of the portio mollis. The second patient, aged 35, had been attacked with severe pain in the head. Sudden symptoms of general pyrexia followed, and shortly afterwards complete paralysis of the portio dura on the affected side. In this instance, death was clearly due to pyæmia, pleuritis and general pulmonic congestion having set in before death. Here, signs of meningitis were wanting; for, though the brain was somewhat congested, no purulent deposits had occurred. An encysted abscess was found in the temporal bone, and the petrosal and cavernous sinuses were full of purulent matter. Deposits of pus were discovered in the lungs. A remarkable symptom which had been present during life, was explained by the condition of the cavernous sinuses. This was the extreme distension of both conjunctivæ with serous fluid, the result of passive congestion in the ophthalmic veins. The nerve-trunk of the portio dura had apparently been destroyed shortly before death.

Dr. GRIMSHAW presented a Malignant Tumour involving the Pylorus and upper portion of the Duodenum in a man of middle age. The patient had sought admission to hospital for weakness and obstinate vomiting. A hard uneven tumour was detected in the middle line, just below the xiphoid cartilage. Subsequently, this swelling sank to a lower level in the abdomen. Obstruction of the bowels, tympanitis, and other symptoms set in, and the patient died. The stomach was enormously distended, measuring thirty-eight inches in circumference round the great curvature. It contained a dark-coloured fluid. The internal surface of the tumour was ulcerated in places, and presented fungoid growths. The hepatic and pancreatic ducts were pervious. The tumour was an example of fungoid cancer. A microscopic section showed it to consist of a stroma containing large nucleated cells and circular cells of a smaller size with granular matter.

CORRESPONDENCE.

SKIN-GRAFTING.

SIR,—On reading Dr. Page's article "On the True Nature of Skin-Grafting," and the remarks lately made on several successful cases, I cannot find that those advocating the operation do so under the hope that such complicated physiological changes shall take place as would change an ordinary cicatrix into so much normal skin.

I think Dr. Page's case shows us how much we may hope for in the process of skin-grafting. The ulcer, after appropriate treatment, aided by the inherent power of the surrounding tissues to contract and thus help cicatrization—but also by the power of contraction residing in the granulations of the ulcer—is nearly healed. But a time comes when it becomes no smaller; the surrounding tissues have contracted to their utmost; the granulations produce, or act as, pabulum for the formation of pus-cells; and the ulcer, to all intents and purposes, is incurable: and many must confess that they have often in such cases unwillingly been forced to the same conclusion. But the pieces of skin transplanted are placed where there is a large blood-supply, and are thus placed in the most favourable circumstances for taking root, which is soon exemplified by the action that springs up around them. This seems to be the process of simple cell-formation going on from each as a centre for a limited distance around; hence the benefit of having several of these centres, so as by increasing the points of healing the ulcer is speedily coated over. This, I think, is all the good we can expect from this method of treatment; and experience teaches us that cicatrices, even under the most favourable circumstances, never acquire the complete functions of true skin; and I doubt if those who have been loudest in its praise even dared to hope that from each of the minute grafts should spring a covering of tissues having all the complicated structure of the skin itself, of the subjacent structures, and of the glands and appendages present in the minutest portion of skin, and on which its functions depend. Indeed, we have only to consider that we are dealing with a new product, which is of the simplest formation of low vitality, to feel pleased at the results arising from it, instead of longing after what I am afraid will never come. If skin-grafting be no great stride in surgery, it is just one of those small helps that give fresh courage and hope to the anxious but baffled practitioner. It will help us to treat successfully many cases occurring in patients who often have, though very unable to afford it, been early laid aside from work; viz., among our labouring population.

I hope yet to hear that Mr. Steele has successfully transplanted a piece sufficiently large that may not only considerably forward the healing process, but also, by retaining its elasticity, give a greater chance to the cure being permanent.

I am, etc.

J. MITCHELL WILSON, M.B.

Chatteris, Cambridgeshire, 20th December.

INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND
THE ALLIED SCIENCES.

CHALYBEATE BISCUITS.

WE have received a specimen of these biscuits from Messrs. Spiking and Co., the manufacturers. They are said to possess all the invigorating and alterative properties of the most celebrated mineral waters. Certainly, the idea of administering in this form a medicine that is far from agreeable, must be regarded as having the merit of novelty, and to be taking a chalybeate when supposing one is eating gingerbread-nuts, may be described as a triumph of pharmaceutic art. In this case the illusion is complete, and the astringent taste of the iron preparation is very effectually masked. Our analyst reports that one biscuit contains about five grains of iron.

A meeting of the medical officers of the North and South Dublin Unions will be held in the small room, Rotundo, Dublin, on Saturday, December 24th, at 4 P.M., for the purpose of presenting Dr. Maunsell with a testimonial, in appreciation of his services in the cause of the Poor-law medical officers of Ireland.

THE POOR-LAW MEDICAL SERVICE
OF
GREAT BRITAIN AND IRELAND.

THE COST OF POOR-RELIEF.

SIR,—A severe epidemic of scarlet fever having recently appeared in one of the districts of the Taunton Union, and several children being affected with it, at the Board meeting, a fortnight ago, a letter was read from the medical officer, applying for an ounce of quinine. It was refused, only two of the guardians besides the Chairman supporting the application; the majority holding that, if granted, it would establish a *bad precedent*. Accidentally hearing of this proceeding, I turned to the Annual Reports of the Poor-law Board, and found that in 1852 the acreage of this Union was 7,194, and the population 35,126. Medical relief at that date is put at £544:10; gross relief, £12,466:5, or 7s. 1d. per head of population. In 1869, population had increased to 35,601, or 475 more; medical relief is put at £737, whilst gross relief had expanded to £15,597:8:9, or 8s. 9d. per head; the average for England and Wales being 7s. 0½d.

These figures, standing alone, would perhaps prove little as to the ultimate relation between imperfectly cared for sickness and the growth of pauperism. I have, therefore, extracted the statistics of the Kilkenny Union for the year 1869 from the Irish Commissioners' Report, and with this result. The acreage is 110,943, or 40,000 more; the population, 35,499, or nearly the same; the cost of medical relief, £1,238:12:3, or £501 more. From this amount must be subtracted £226:14:7 expended in drugs alone, against nothing for this purpose in Taunton Union; whilst gross relief, inclusive of medical relief, cost £8,371:19:9, or 4s. 5d. per head. Now, although the expenditure on the poor in the Kilkenny Union is considerably in excess of the average 2s. 11¼d. of the whole of Ireland, I think I am justified in stating that it contrasts most favourably with the Taunton Union, and that it fully bears out the view expressed by one of the most enlightened of our Poor-law reformers, that the dispensary system, conjoined with liberal medical arrangements and sanitary observances, is the best corrective for the growing pauperism of the country. It is not improbable that the excessive area of this Irish Union might explain its comparatively lower poor-relief expenditure. Whether such be the case or not, it is well to note that in England and Wales we have 664 districts with either a similar or vastly larger amount of acreage.

In conclusion, allow me to state that there are eight medical officers only in the Taunton, and ten in the Kilkenny Union; so that the disparity in acreage is not so great after all.

I am, etc.,

JOSEPH ROGERS.

Dean Street, December 18th, 1870.

ST. PANCRAS.

THE guardians of St. Pancras have made a redistribution of the medical districts of the parish, increasing the number from six to eight, and have appointed the following medical officers: 1, Mr. Reuben Warn, Highgate Road; 2, Dr. Andrew Browne, Bartholomew Road, N.W.; 3, Mr. Robert A. W. Westley, Camden Road; 4, Dr. J. Thompson, Oakley Square, N.W.; 5, Mr. W. Turnbull, Hampstead Road; 6, Mr. Walter Smith, William Street, Regent's Park; 7, Mr. J. W. Barnes, Gower Street; 8, Mr. T. W. Harding, Gray's Inn Road. Of the present medical officers, four were elected, one withdrew, and one (Mr. Harley) lost his election. There were twenty-nine candidates for the appointments.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At an extraordinary meeting of the College, on Monday, December 19th, the following gentlemen, having conformed to the bye-laws and regulations, and passed the required examinations, were granted Licences to practise physic, including therein the practice of medicine, surgery, and midwifery.

Air, Alexander Cummings, M.R.C.S., 33, Lorrismore Square
Evans, Ernest Richard, M.R.C.S., St. Bartholomew's Hospital
Evans, Samuel, M.R.C.S., 23, Manchester Street
Hughes, John Howe, M.R.C.S., Gosforth, Carnforth
Kipling, William, M.R.C.S., Ronaldkirk, Darlington
Pitcock, Francis William, M.R.C.S., Trentham Villas, "The Elms", Ramsgate
Risdon, Alfred, M.R.C.S., 67, Warwick Street
Saunders, William Egerton, M.R.C.S., Guy's Hospital
Vasey, Charles Lyon, M.R.C.S., 5, Cavendish Place

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received a certificate to practise, on Thursday, December 15th, 1870.

Wade, George Herbert, Plymouth

The following gentlemen also on the same day passed their first professional examination.

Duke, Maurice S., Guy's Hospital

Graham, George William, Guy's Hospital

Hacon, Walter Edward, Guy's Hospital

Hirst, Albert, Manchester Hospital

Skaife, Frederic, St. Bartholomew's Hospital

Whitmarsh, John Lloyd, London Hospital

As Assistants in compounding and dispensing medicines.

Fegan, John, Torquay, Devon

Parker, John Samuel, Peterborough

MEDICAL VACANCIES.

THE following vacancies are announced:—

ALDERBURY UNION, Wiltshire—Medical Officer and Public Vaccinator for District No. 3: applications, Jan. 5th; election, 6th.

AUCKLAND UNION, Durham—Medical Officer for the Crook District.

BIRMINGHAM GENERAL DISPENSARY—Resident-Surgeon: applications, 28th.

BOWDEN CLOSE, BEECHBURN, WOODFIELD, COLD KNOTT, WHITE LEE, PEASIS WEST, WATER HOUSES, and ESH COLLIERIES, co. Durham—Surgeon.

CHARING CROSS HOSPITAL—Assistant-Physician; Assistant-Surgeon: applications, Jan. 10th.

CHELSEA PARISH—Dispenser: applications, 27th; election, 28th.

CLAYTON HOSPITAL and WAKEFIELD GENERAL DISPENSARY—House-Surgeon: applications, 30th.

CLONMEL DISTRICT LUNATIC ASYLUM—Assistant Resident Physician: applications, Jan. 25th; election, Feb. 2nd.

COOTEHILL UNION, co. Cavan—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Tullyvin Dispensary District: Jan. 3rd.

COUNTY DOWN INFIRMARY, Downpatrick—Resident Surgeon's Assistant and Registrar: election, Jan. 10th.

FEVER HOSPITAL AND HOUSE OF RECOVERY, Cork Street, Dublin—Temporary Physician: applications, Jan. 4th.

GLASGOW TOWNS HOSPITAL—Assistant Medical Officer.

GREAT NORTHERN HOSPITAL, Caledonian Road—Ophthalmic Surgeon.

KERRY DISTRICT LUNATIC ASYLUM, Killarney—Resident Medical Superintendent.

KING'S COLLEGE, London—Demonstrator of Chemistry.

LARNE UNION, co. Antrim—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Glenarm Dispensary District: 27th.

LIVERPOOL DISPENSARIES—Assistant Resident House-Surgeon: applications, 27th; Medical Board, 28th.

MIDDLESEX HOSPITAL—Medical Registrar and Superintendent of Post Mortem Examinations: applications, 31st.

MONMOUTH HOSPITAL and DISPENSARY—Surgeon.

MONMOUTHSHIRE GAOL—Surgeon.

NEWCASTLE-UPON-TYNE BOROUGH LUNATIC ASYLUM—Resident Medical Superintendent: applications, 24th.

NORTH EASTERN RAILWAY—Surgeon for the Crook District.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY—House-Surgeon: applications, Jan. 2nd; duties, Feb. 7th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL—Medical Officer: Jan. 2nd; election, 9th.

ROYAL SOUTH LONDON DISPENSARY, St. George's Cross—Honorary District Surgeon.

STAMFORD AND RUTLAND GENERAL INFIRMARY—Apothecary and Secretary: applications, 31st; election, Jan. 31st.

TRANENT, Haddingtonshire—Parochial Medical Officer: applications, 28th.

UNIVERSITY OF DURHAM, College of Medicine, Newcastle-upon-Tyne—Medical Tutor: duties after Christmas.

WEST KENT GENERAL HOSPITAL, Maidstone—Resident House-Surgeon: election, Jan. 3rd; duties, 28th.

WIGAN DISPENSARY—Surgeon.

BIRTHS.

BROWNE.—On December 17th, at Camberwell Green, the wife of Charles Browne, Esq., Surgeon, of a son.

CLARK.—On December 18th, at Cavendish Square, the wife of *Andrew Clark, M.D., of a son.

COPE.—On December 19th, at Croydon, the wife of *Walter H. Cope, Esq., Surgeon, of a son.

CROSSMAN.—On December 8th, at White's Hill, Hambrook, the wife of *Edward Crossman, L.R.C.P., of a son.

EASTES.—On December 16th, at Albion Place, Hyde Park Square, the wife of George Eastes, M.B., of a son.

MACTIER.—On December 9th, at Blairgowrie, Perthshire, the wife of W. F. Mactier, M.D., late Bengal Service, of a daughter.

MARRIAGES.

BELLAMY, Edward, Esq., Surgeon, to Emily Sarah, youngest daughter of George LEGG, Esq., of Westbourne Place, Eaton Square, on December 15th.

CARR, J. King, M.D., Surgeon-Major Royal Artillery, to Frances Rebecca, third daughter of Major BENT, Exeter, on December 15th.

DALTON, Henry, M.B., to Grace Spright, daughter of the late Thomas JENNINGS, Esq., of Leeds, at Georgetown, Demerara, on November 9th.

FAIRLAND, Edwin, M.D., Assistant-Surgeon 21st Hussars, to Emma Maggie, only surviving daughter of the late Major-General W. B. THOMPSON, C.B., Bengal Army, at Lucknow, on November 3rd.

DEATHS.

ALDERSON.—On December 14th, at Hammersmith, Albert Edward, infant son of Frederick H. Alderson, Esq., Surgeon.

JENKINS, Griffith R., M.D., of Her Majesty's Legation, Japan, at Cardigan, aged 36, on December 13th.

LAURANCE, Richard Moore, M.D., at South Street, Thurloe Square, aged 46, on December 14th.

MILLER, Charles, Esq., Surgeon, at Stamford Villas, Fulham, on December 16th.

NEVILL.—On November 18th, at Dungannon, Mary, wife of Wm. Nevill, M.B.

TESSIER.—At Tynemouth, on December 11th, aged 6, M. B. Maud, daughter of *W. H. Cecil Tessier, M.D.

WINDER, William, M.D., at Greenwich, aged 80, on December 7th.

THE DENTAL HOSPITAL OF LONDON.—The Grocers' Company have sent a donation of twenty guineas to the funds of this institution.

THE amount realised by simultaneous collections at Manchester on Sunday for the local medical charities was £1,742 15s. 9d.

STAFF-SURGEON WILLIAM H. SLOGGETT has been authorised to assume the honorary rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet, whilst administering duties in connexion with the Contagious Diseases Act.

HOSPITAL FOR DISEASES OF THE THROAT.—Dr. Patrick Fraser has resigned the post of senior physician, and has been succeeded by Dr. Morell Mackenzie. Dr. R. H. Semple has been appointed second physician; and Dr. Prosser James third physician.

THE Chelsea Vestry have decided to have cards printed with the information that there is in the parish a disinfecting apparatus to which infected clothes, etc., may be sent, and that in cases where clothes were destroyed compensation would be given. It was also decided to instruct the Inspector of Nuisances to distribute these cards where necessary.

EPSOM SALTS.—In reply to a query propounded by the American Pharmaceutical Association, as to the best method of disguising the taste of Epsom Salt, Mr. J. W. Smith of Nashville suggests the following:—℞ Liquorice root (deprived of the outer bark), 4 oz.; boiling water, 2 pints, or a sufficiency. Mix and allow to strain, with occasional stirring until cold; express through muslin, adding more water, if necessary, until the residue in the strainer is tasteless; then filter, and to the filtrate add four ounces of sulphate of magnesia. Finally, evaporate to dryness over a water-bath. Each ounce of the compound represents about one ounce of the crystallised salt.—*Pharmaceutical Journal*.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. Pollock, London; Mr. E. C. Board, Bristol; Dr. Procter, York; Mr. W. G. Davis, Heytesbury; Dr. Duke, Dover; Mr. M. A. Fenton, Coventry; Mr. G. Ward, Coventry; Mr. R. Baker, Sunderland; Mr. W. B. Whitmore, London; Dr. Barclay, London; Dr. Southey, London; Mr. J. Hinton, London; Dr. J. W. F. Smith, Aberdeen; Dr. Simpson, Manchester; Mr. De Berdt Hovell, London; Mr. Liddle, London; Mr. Eugene J. Jackson, New York; Dr. George Johnson, London; An Old Member; Dr. A. P. Stewart, London; Mr. Thomas Flower, Guildford; Mr. Spencer Watson, London; Dr. J. Langmore, Algiers; Dr. Fuller, London; Dr. Fincham, London; Dr. Sieveking, London; Mr. E. C. Hulme, Guildford; Dr. H. C. Bastian, London; Mr. Arthur Sargeant, Sandy; Dr. Morley Rooke, Cheltenham; Dr. Holden, Lorne; Mr. Haward, London; Dr. Littleton, Plymouth; Dr. James Gardner, Box, near Chippenham; Mr. Arkwright, Bowden; Dr. Robert Liveing, London; Dr. Dyce Duckworth, London; Dr. Russell Reynolds, London; Dr. Reginald Southey, London; etc.

LETTERS, etc. (with enclosures) from:—

Dr. Hyde Salter, London; Mr. Wm. Adams, London; Dr. Tessier, Tynemouth; Dr. A. Wiltshire, London; Mr. J. Edwards, Sparkbrook; Messrs. Bird and Co., London; Mr. W. Squire, London; Mr. P. Miall, Bradford; Mr. Vincent Jackson, Wolverhampton; Dr. Michael Taylor, Penrith; Mr. James Lane, London; Mr. Fitch, Riverhead; Dr. Chevallier, Ipswich; Mr. Reginald Harrison, Liverpool; Dr. H. Barnes, Carlisle; Dr. Rumsey, Cheltenham; Dr. Kelly, London; Dr. A. W. Edis, London; Dr. Broadbent, London; Dr. Black, London; Dr. Ramskill, London; Dr. Habershon, London; Mr. A. Haviland, London; M.R.C.S. Eng.; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Our Dublin Correspondent; Dr. A. Ernest Sansom, London; Our Glasgow Correspondent; Dr. Macnaught, Liverpool; Mr. W. Mac Cormac, London; Messrs. Calvert and Co., Manchester; Mr. F. H. Gervis, London; Mr. S. A. Harrison, Alton; Dr. Morell-Mackenzie, London; The Secretary of the Royal College of Physicians; Dr. H. T. Lanchester, Croydon; Dr. Walker, Greenwich; Dr. J. Lang, Southport; Dr. Joseph Rogers, London; Messrs. Condry and Co., London; Our Manchester Correspondent; Messrs. A. and C. Black, Edinburgh; Dr. Bryan, Northampton; Mr. H. Wintle, Wootton Bassett; Mr. G. C. Coles, London; Mr. H. Verbeke, Edinburgh; Mr. Jessop, Leeds; Dr. Roberts, London; Dr. Nash, Brooklyn Hall, near Bristol; Dr. Styrap, Shrewsbury; Mr. Hardie, Manchester; Dr. Bradbury, Cambridge; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.

THURSDAY...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 1 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.—Hospital for Women, 9.30 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. 8 P.M.

WEDNESDAY.—Hunterian Society.

THURSDAY.—Royal Society.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

To PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

DR. HOLDEN will find some particulars of an Asylum for Inebriates in our advertising columns of December 3rd.

TRAUMATIC TETANUS.

SIR,—In your account of the discussion on my case of traumatic tetanus at the Royal Medical and Chirurgical Society, I am reported to have "questioned whether recovery would have taken place if the patient had been left without medicine." This does not quite accurately represent what I said, and it tends somewhat to obscure the chief practical point which the case was intended to illustrate. Tetanus had followed a wound inflicted in the upper part of the thigh by a sharp piece of wood, which had pierced the boy's trousers. The wound had healed, but the cicatrix was hard and very tender.

Dr. Taylor, in his book on poisons, relates two cases of fatal traumatic tetanus. In both cases the wound had healed, but in one case there was found beneath the cicatrix, after death, a piece of iron, and, in another, a piece of wood. Remembering these two cases, I suspected that there might be some foreign body beneath the skin of my patient, and accordingly I had the cicatrix incised; when a piece of woollen stuff, a fragment of the boy's trousers, was discovered and removed by the House Surgeon, Mr. Whitmore.

I believe that, if the foreign body had not been removed, the patient would not have recovered. I also believe that the soothing and soporific influence of the chloral assisted the recovery; which, however, might probably have occurred without the aid of the medicine.

Savile Row, December 12th.

I am, etc.,

GEORGE JOHNSON.

AN OLD MEMBER.—We assume that you want an elementary work on Chemistry, which shall not be too superficial, and at the same time not give more than should be known by a beginner. For this purpose, we would recommend Gill's *Chemistry for Schools* (published by Walton, Gower Street), or the late Professor Miller's *Introduction to the Study of Inorganic Chemistry* (just published by Longmans and Co.) Both these books are sold at a very cheap price. The latest edition of Fownes's well known *Manual of Chemistry* is also an excellent book, and may with advantage follow either of the others which we have named.

THE ANTI-VACCINATION LEAGUE.

THE proceedings of the Anti-Vaccination League are very shocking and painful by their persistent perversion of plain facts, and the mischief they do to the credulous and ignorant, to whose prejudices they appeal. We find "Dr. Pearce" and Mr. Gibbs figuring at these meetings, but they do not appear on the Medical Register as holding legalised medical titles and qualifications in this country. Northampton, which they have lately visited, is fearfully unprotected by the neglect of vaccination; and in case of an epidemic, the population would suffer terribly for the neglect, for which the guardians are responsible. The complete efficacy and harmlessness of vaccination properly carried out is proved by so overwhelming a mass of evidence, that the Northampton guardians incur a terrible responsibility in failing to carry out the law. As to the best means of counteracting the mischievous representations of this league, we shall have something to say soon; and we intend to prepare a brief memorandum in reply to their stock misrepresentations, which we shall keep permanently at the service of medical men who wish to enlighten the intellects of those whom these agitators endeavour to beguile.

NEPTUNE's paper shall receive attention.

WE have to thank Mr. Harrison, Liverpool, Dr. Lang, Southport, and a correspondent at Merthyr, for the useful information contained in their letters.

MR. E. C. HULME's (Guildford) request shall be attended to.

DR. C. H. T. asks what is the most convenient vehicle for administering and covering the flavour of the hydrate of chloral?

THE GREAT BRITAIN MEDICAL AID ASSOCIATION.

SIR,—The Secretary of a Society styling itself the Great Britain Medical Aid Association having sent me a circular requesting to know if I should like to be its Agent for the locality in which I reside, and, as I did not consider it necessary to take any notice of the application, having sent a second written request that I would inform the Committee "as to my decision," I have thought it better to forward the following reply.

"Sir,—I did not reply to the circular of the Society which you represent; because, in the first place, I did not suppose that it was seriously addressed to me individually any more than to many other medical men in my locality; and, in the second place, because I entirely disapprove of the whole thing, as calculated to inflict a wanton injury on the medical profession, and as being sure to prove in the end no less injurious to the public, who may be led to suppose that they are going to receive medical services for next to nothing, but who will in the end find out to their cost that such services, when really worth having, like everything else in the same category, cannot be had without due payment."

I am, etc.,

T. MORLEY ROOKE.

Montague Lodge, Cambray, Cheltenham, December 20th, 1870.

PROPAGATION OF DISEASE BY MILK.—Mr. Condry informs us that the addition of Condry's Fluid, in the proportion of a wine-glassful in a pail, to the water in which dairy utensils are washed, has the effect of immediately rendering them perfectly sweet. The mixture is also of great use for washing butter. It rapidly removes bad flavours without communicating any of its own. A tea-spoonful of Condry's Fluid added to a gallon of milk effectually prevents its turning and improves its appearance and flavour.

A COMMUNICATION on "Obstinate Constipation" has been sent, without the author's name attached. We have no means of identifying it, and will be obliged if he will forward the required information.

MR. T. P. DANIEL (Beaminster).—The error shall be rectified.

THE INCREASE OF SMALL-POX.

SIR,—Considering the great increase of small-pox at the present time, it would surely be well that the Privy Council should increase instead of diminish the facilities for vaccination. Since the passing of the last Vaccination Act, however, the tendency has been in the latter direction. Take, for instance, one metropolitan parish—Islington. Formerly, each of the eight district medical officers was vaccinator for his district. He had, therefore, peculiar facilities for, and an interest in, seeing that the children of the poor were vaccinated; and, as he vaccinated at his own residence, there was a station within easy reach of all. What is the case now? There are four vaccination districts, and thus each vaccinator serves two medical districts. Two of these vaccinators are appointed to districts with which they have nothing whatever to do as district medical officers; and one at least of the stations is two miles from the farthest extremity of the district. In another very large metropolitan parish, there are but one vaccinator and two stations.

The poor are sufficiently prejudiced against vaccination; and if such difficulties are thrown in their way as having to walk four miles for an operation in which they have little faith, and to which they have much aversion, they will certainly shirk it if they can. Before the passing of the late Act, I vaccinated many children at their own homes, whose parents would have been very unwilling, perhaps unable, to bring them to a station; but now, if I were vaccinator for my district, I could not charge the fee for any such vaccination. This appears to me to be another drawback to the present system.

I am, etc., AN EX-VACCINATOR.

*** There are many complaints on this subject, and the Poor-law medical officers suffer by the change. The scientific grounds on which it has been urged by the Privy Council are explained with great care and force in Dr. Seaton's commentary on the Vaccination Act in his *Handbook*. We should like our correspondents to turn their attention to these arguments, and give us an "all-round" view of the case.

AN ANXIOUS TUTOR.—The result of the Arts examination for the diplomas of Fellowship and Membership of the College of Surgeons, which only terminated on Thursday last, cannot be known for several weeks. There were about 350 candidates.

DR. H. M.—The case will be found recorded in the JOURNAL for 1867.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News, Dec. 17th; The New York Medical Gazette, Dec. 3rd; The New York Medical Record, Dec. 8th; The Boston Medical and Surgical Journal, Dec. 8th; The Madras Mail, Oct. 10th; The Shield, Dec. 17th; The Brighton Examiner, Fashionable Directory, etc., Dec. 13th; The Merthyr Telegraph, Dec. 17th; The Birmingham Daily Post and Journal, Dec. 17th; etc.

BOOKS, ETC., RECEIVED.

Diseases of Children. By Fleetwood Churchill, M.D. Dublin: 1870.

On Phthisis and Supposed Influence of Climate. By W. Thomson, L.R.C.S. Edin. Melbourne: 1870.

Some Remarks on the Mode of Admission to our Medical Charities. By J. Thorburn, M.D. Manchester: 1870.

The Fourth Annual Report of the Fife and Kinross District Board of Lunacy, September 1870.

Transactions of the Pathological Society. Vol. xxi. London: 1870.

Pathology and Treatment of Venereal Diseases. By F. J. Bumstead, M.D. Philadelphia: 1870.

Lessons in Elementary Physics. By Balfour Stewart, LL.D., F.R.S., etc. London: 1870.

The Harveian Oration. By W. Gull, M.D., F.R.S. London: 1870.

CASES AND COMMENTARIES.

By HYDE SALTER, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Physician to Charing Cross Hospital; Lecturer on Medicine at the Charing Cross Hospital Medical School; etc.

III.—*Dissecting Aneurism.*

CATHERINE DOOLEY, aged 24, but looking much older, and with a turgid bloated aspect about her face, the eyes being very much puffed and semi-closed, as if from œdema, giving her a Chinese appearance, by occupation a servant, and having worked very hard at her situations, but led a regular and quiet life, was admitted into Charing Cross Hospital in November 1868. Her father is living; her mother died when she was young, cause unknown. She has four brothers and a sister living; one sister died of cholera.

She was always quite well up to four years ago, when she had rheumatic fever very severely; she was confined by it to her bed for six months, and did not get over it for twelve months. She was ill three months at home, and the remaining nine months she was in a metropolitan Hospital. There was some doubt, from the state of her knee after her recovery, whether she might not be obliged to have her leg amputated. She had no special shortness of breath, or palpitation, at the time of the attack, and does not remember whether her heart was examined, or even whether the stethoscope was used; but she was so delirious during a portion of her illness that it might have been used without her recollection of it. For six or seven months after leaving the hospital, she did not notice anything the matter with her heart; she was then seized, one evening when she was taking her tea, with a sudden attack of palpitation—the heart beat most violently, and there was a severe pain passing through from the chest to the back; she was obliged to walk up and down the room, not knowing what was going to happen to her; there was no shortness of breath. In the course of the evening, on going upstairs, she found she was obliged to stop from renewed palpitation and pain in the back. She has never been free from these symptoms since; in three months she had to leave her place owing to them, and since that time has frequently lost places in consequence of them. She has found, too, ever since, that her breath has been affected; she is unable to run upstairs, but is obliged to stop half way and recover her breathing. On three or four occasions she has brought up blood, in small portions, mixed with phlegm, and bright. She has suffered, too, very much from headache. She is often obliged to jump up in bed for breath when she is asleep, and has been compelled to sleep high at head, lying low immediately bringing on the breathlessness. These symptoms have all gradually increased since their first appearance. Before coming into the hospital her feet swelled a good deal, but the swelling has nearly subsided. For the last twice she has been regular; previous to that she saw nothing for ten months. For about a month previous to her admission she first noticed a difficulty in swallowing—the food seemed to lodge, and she was unable to get each mouthful down without a drink. This has improved a good deal since she was in the hospital, but she has still some difficulty of deglutition left.

Physical Examination.—The first things that strike one on exposing the chest for examination, are:—(1) a conspicuousness of the veins ramifying over the front of the chest, especially on the left side; and (2) the difference of the shape of the neck on the two sides, the posterior triangle being conspicuous on the right side, concave, and well-marked, whereas on the left it is filled up and effaced, being, in fact, occupied by a general swelling, passing down from the neck to the clavicle, and giving a fulness and convexity to that side. On the right side the edge of the clavicle and sternomastoid are sharp and prominent; on the left they are invisible. On listening to the heart, a basic diastolic murmur is heard, of maximum intensity at the right border of the sternum, at the junction of the cartilage of the third rib, but heard from that point at a radius of three inches in all directions. At the sternum, downwards, upwards, and to the left, it appears single and confined to the diastole, the systole being clear and natural; but to the right, not only is the tone of the diastolic murmur altered, but there appears a systolic murmur, short and rough, preceding it. I can, I think, by the greatest care, detect the slightest possible thrill, accompanying both sounds at the base. Both pupils are alike, both pulses alike, 80 in the minute and jerking in character; respirations 34.

The patient remained under observation in the hospital for two months; and the conclusion that we came to with regard to the nature

of her case was, that there was some source of pressure in the upper part of the chest, as evinced by the enlargement of the veins, the puffed condition of the neck and face, and the difficulty of swallowing, and that this pressure, in spite of the exceptional character of some signs and the absence of others, was probably aneurismal.

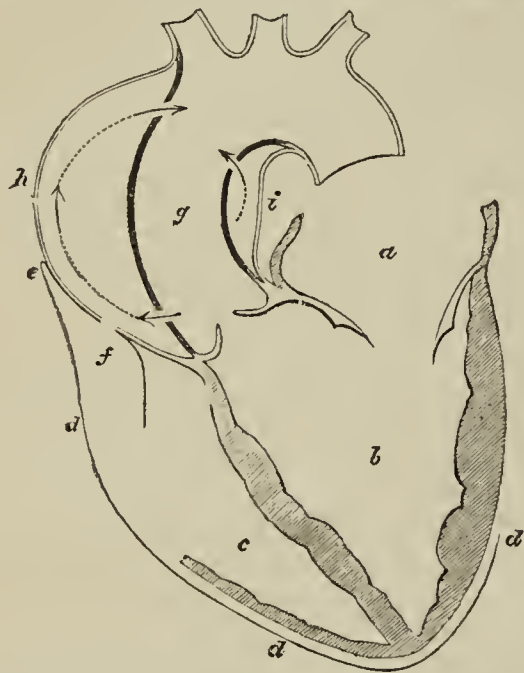
On February 25th, 1869, she presented herself to me at my house, evidently in great distress, and complaining of breathlessness, and an agonising pain passing through the upper part of the breast-bone to the back. The pain was accompanied by a sense of burning, and fulness, as if the contents of the chest were rising up into the throat. She stated that these symptoms had been increasing for some days past, that they were aggravated by the slightest exertion, and that the day before, in one of the paroxysms of them, she had fallen down unconscious. Her distress was evidently very great; she could hardly sit still in her chair; she kept putting her hand to her chest and exclaiming "oh! dear!" and breathing deeply, as if to get rid of a sense of oppression there. I examined the heart and found its action rather laboured and occasionally a little irregular, and the diastolic murmur much louder than I had heard it before. Except the evidences of cardiac hypertrophy, this was all I observed. This was Thursday. On the following Monday, March 1st, her master called and told me that on the previous Saturday, two days after I had seen her, she had fallen down dead suddenly on the kitchen floor. She had only a few minutes before carried up a tray to her mistress, and seemed no worse than she had done for several days. Shortly after this, her mistress, ringing, and not getting any answer, went down into the kitchen, and found her quite dead on the floor. Mr. Adams, of Harrington Square, was immediately sent for, but on his arrival found life quite extinct. An inquest was ordered, and Mr. Adams made the *post mortem* examination. He removed the heart, and, knowing that I had previously seen the girl and took an interest in the case, set it aside that we might examine it together, which we did the next day, and found the following state of things. But, first, I must mention that on opening the pericardium, before removing the heart from the body, he found it full of coagulated blood, and discovered a rupture in the aorta through which the blood had escaped into the pericardial sac, thus revealing the immediate cause of death.

Both ventricles were empty. On cutting them open the walls of the left were found to be considerably thickened, from three-quarters to seven-eighths of an inch thick; the right, I think, attenuated, and over the chief part of its surface its muscular tissue seemed supplanted by fat, to as much as half the thickness of the wall, so that, indeed, in some parts, there seemed very little muscular tissue at all. The roots of the great vessels were matted together, and covered and thickened by a quantity of exudation, which evidently was seated in the subpericardial areolar tissue surrounding the vessels, and was of a firm gelatinous consistence—except that it was almost too hard to be called gelatinous. The little hole in the pericardium through which the blood had escaped into the sac was linear, and, when stretched open, about as big as a small pea; it was just behind the right or convex margin of the vessel, and about three quarters of an inch from its root. On examining the aperture more minutely, it was found that the pericardium here, and its subserous areolar tissue, was detached from the vessel beneath, that the two could be moved freely one over the other, and that the small aperture in the pericardium corresponded to a much larger one in the vessel. On slitting up the aorta from the ventricle the state of things on which this separation depended, and its extent, and the method of its production, were shown. Three considerable slits, or transverse tears, through the middle coat of the vessel were seen, clean and sharp, and exactly transverse, and about three quarters of an inch in length—one just above the free margin of the semilunar valves, one about four inches up the arch on its right or convex side, and the third hardly so high up on the left or concave side. On inserting a probe into these transverse slits, they were found to open into a free and capacious space, bounded externally by the dilated outer wall of the vessel, which was everywhere thickened and strengthened, as I have already said, by a quantity of adventitious areolar tissue, and internally by the inner and middle coats, which were undilated, maintaining the natural cylindrical form of the vessel. It would perhaps be more correct to say that the middle coat was split, that its inner portion, together with the lining membrane, maintained its natural size and shape, while its outer portion, together with the external areolar coat, was distended into a more or less cylindrical aneurismal dilatation. Into this aneurismal dilatation the blood found free access through the three transverse slits which I have described, and thus the inner portion of the aortic wall formed a tube, of the natural size and shape of the vessel, lying free within that portion of the wall that had undergone the dilatation, and bathed with blood on both sides; in fact, it lay in the current of blood, in mid-stream, part of the blood flowing through it, and part escaping by the

slits and flowing outside of it. The inner surface of the vessel was atheromatous throughout, rough, opaque, and brittle.

It is easy to see how such a state of things was produced. It was, in fact, simply a dissecting aneurism of peculiar structure and relations. The first step must have been the insinuation of a little blood through the frayed or cracked lining of the vessel; this must have burrowed into the middle coat, and, extending among its fibres, split it up into an inner and outer portion; the outer gradually becoming more and more dilated, and thickened by adventitious fibrous tissue. It was through this outer portion, at a point where it was thinner than elsewhere, near the root of the vessel, that the blood ultimately burst into the cavity of the pericardium. It was probably not until the aneurismal dilatation had attained considerable dimensions, and there was a large volume of blood passing through it, that the transverse splits extended to such a degree as was found after death; and, of course, it was not till the instant before death that the outer wall gave way, and the blood burst into the sac of the pericardium.

The whole thing will be much better understood by reference to the accompanying diagram, which represents an imaginary section of the

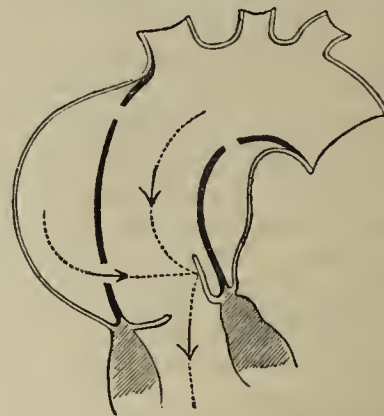


left ventricle and arch of the aorta. At *a* is shown the cavity of the left auricle; at *b*, the cavity of the left ventricle; at *c*, part of cavity of right ventricle; *d d d*, sac of pericardium; *e*, its point of reflection on the aorta; *f*, part of imaginary cavity of pericardium. At *g* is shown the inner cylinder of the ascending aorta, consisting of the inner portion of the split middle coat and the lining membrane, and maintaining its natural cylindrical and undilated shape and course. Three apertures are seen in this portion of the wall of the vessel, two on its convex and one on its concave side; these represent the three transverse slits I have referred to, and I have indicated by arrows the course I conceive the blood to have taken through these slits at the time the ventricular systole was driving the blood forward through the arch; of the two on the convex side I have but little doubt; through the proximal one, the current must have set out of the vessel, and through the distal one, I should think it must necessarily, as a consequence, have set in. Of the direction of the current through the single slit on the concave side I do not feel so certain; if it was inwards, as I have represented it, the blood must have been derived by that escaping from the proximal slit. At *h* and *i* are represented the outer wall of the aneurismal dilatation, composed of the external areolar coat and the outer portion of the split middle coat; the diameter of the entire dilatation is, of course, the distance from *h* to *i*. The splitting of the coats of the vessel is seen both above and below—below on each side close to the root of the aorta, in the immediate neighbourhood of the valves; and above, on the convex side at the root of the innominate artery, and on the concave side, in the concavity of the arch. The course of the blood in the adventitious cavity external to the undilated portion of the vessel's walls is shown by the arrows and dotted lines, and it is at once seen how the inner portion of the split walls must have been bathed with blood on both sides. Just above *f* is seen the aperture in the outer wall of the aneurism, through which the blood finally escaped into the pericardial cavity. This figure must be understood as simply a diagram, and not in any way representing a drawing of the dissected parts.

There are two points about this case of special interest, besides some

others of secondary importance. One is the isolation of the inner portion of the split vessel-wall, its maintenance of its original shape unchanged in spite of its diseased state, and the peculiarity of its relation to the blood-stream. Its comparative integrity, in spite of its thinness and atheromatous condition, and the fidelity with which it had kept its shape, were probably owing to this very relation to the blood-stream—to its being supported by blood on both sides of it. Although there could be nothing like a free stream in the outer chamber between the split coats of the vessel, and although the main bulk of the blood must have passed through its accustomed channel, yet the communication between the inner and outer blood through the splits was probably sufficiently free to establish a tolerable equality of pressure on both sides; otherwise one can hardly understand how an arterial wall robbed of half its thickness and eaten out with atheroma could have so long supported the force of a ventricle so considerably hypertrophied. One question that arises, in connection with this dissected condition of the ascending aorta and the isolation of its inner portion, is how it could have been nourished. The *vasa vasorum* of an artery ramify and break up in the external areolar coat—the supply of nutrition to its walls is from without. Now, here, the inner cylinder was entirely cut off all round from such supply. The answer, therefore, to the question how it was nourished probably is that it was not nourished at all—that all nutritional change was, and has been for some time, suspended in it; and the degree of toughness and resisting power which it still possessed, furnishes an example of the tenacity with which white and yellow fibrous tissue retain their physical properties in spite of the most powerful disorganising agencies.

The second point of interest relates to the murmur. The principal murmur, as I have stated, was diastolic, strong and of extended area; but there was, besides, a systolic murmur, much less pronounced, and confined to the right border of the upper sternum. Now, on examining the aortic valves after death, they were found, in spite of the atheromatous condition of the walls of the vessel in their immediate neighbourhood, to be perfectly healthy and competent. Here, then, was a puzzle; how were we to reconcile the existence of a murmur pointing to aortic regurgitation with the competency and healthy condition of the valves? The only way in which I can explain it is by imagining that at the diastole some of the blood in the outer chamber of the aneurism rushed back into the inner cylinder through the proximal slit close to the valves, and impinging on the valve opposite it, as shown in



the accompanying diagram, prevented its falling in, and so kept the orifice imperfectly closed. There was no appreciable dilatation of the vessel at the circle of attachment of the valves, so that it seemed difficult to explain the regurgitation in any other way. If this was its true explanation it is a most curious example of a way in which, by a fortuitous piece of morbid anatomy, regurgitation may comport with healthy valves.

The very existence of atheroma at such a degree at such an age is in itself a remarkable thing. Atheroma and its accompanying calcification is, as a rule, a change of advanced life. In estimating, irrespective of other circumstances, the probable nature of valvular lesions, I generally consider them to be probably of inflammatory origin if the age of the patient is below forty, and probably atheromatous if the age is above fifty. The same rule, of course, would apply to the vessel as to the valves. Now, here we have a girl of 24 with as advanced atheroma as I have ever seen. The healthy condition of the valves, the regurgitant murmur, the girl's age, and the atheromatous nature of the mischief, constitute a group of circumstances the more remarkable and the less such as might have been expected, when we remember that the symptoms began to develop themselves about six months after an attack of rheumatic fever four years previous to her death. The case raises a question in my mind, which many cases have raised—whether the aorta itself may be the seat of rheumatic inflammation, and whether

the disorganisation resulting therefrom may favour the development of atheromatous change. Of the association of gout and rheumatism with a tendency to early atheroma there can be no doubt.

With regard to the mode of formation of dissecting aneurisms, certainly such an aorta as this favours Dr. Peacock's view (which, indeed, I suppose would be the general view) rather than Rokitsansky's. Dr. Peacock believes that the first event is the giving way of the inner coat, and the consequent insinuation of a portion of blood, which splits up the middle coat and thus produces the dissection. Rokitsansky thinks that the first step wrong, at any rate in some instances, is a morbid condition of the external coat, which causes its separation from the other coats, and that they, being thus unsupported, give way. The disease here was certainly in the inner coat and inner portion of the middle coat, which were so eaten out with atheroma as to account for any amount of giving way in any part of the vessel. An inner coat so broken up as this could hardly be conceived capable of preventing the leakage of blood at some points into the wall of the artery. Moreover, the two principal ruptures were situated exactly at the part where the brunt of the stream would fall, and where the force from within and the penetrating power of the blood would be most felt.

REMARKS ON AN EPIDEMIC OF INTERMITTENT FEVER IN MAURITIUS DURING 1866-67-68.*

By W. H. CECIL TESSIER, M.D., Tynemouth;
Late Medical Superintendent Poor-Law Commission, Mauritius.

My excuse for venturing to read to the British Medical Association a paper on a disease so well known and understood as intermittent fever, is that, as late Medical Superintendent of the Poor-law Commission of Mauritius, I had certain opportunities favourable for observation afforded me. My objects are to endeavour to lay before you some of the facts connected with the appearance of intermittent fever in a new field—a colony to which it had been previously a stranger—and to trace its progress around and over the island; not for the purpose of submitting my deductions and opinions, but rather that the members of the Association may have data for forming their own: and to mention, very briefly, a mode of treatment which a consideration of the causes of malaria suggested to me; the result of which treatment, as far as it was carried out, was, I think, one more fact confirmative of the theory that this disease owes its origin to the spores or seeds of a vegetable growth of low order. And for these objects it will perhaps be permitted me to give a short account of Mauritius, its climate and meteorology, and of its inhabitants and their condition.

The island is situated within the tropics, is of volcanic origin, and, up to the appearance of a so-called Bombay fever, to which I shall presently allude, bore the character of being extremely salubrious—so much so, that at one time it had been a resort for those of our Indian invalids who lacked time or means to reach their native land. It has a surface of seven hundred square miles, and of this from one-half to two-thirds is cultivated, principally in the production of the sugar-cane; the remaining third being crown reserves, mountain, and forest.

The mountains are in some parts bare, but the majority are covered with trees to their summits; and it is a noteworthy fact, that it was to a dense leafy screen of this kind that the inhabitants of Savanne owed their immunity from this fever for some fifteen or more months after its first outbreak in an adjoining district.

The rivers exhibit a diminished, and, it is feared, a diminishing quantity of water, owing partly (possibly) to geological changes, partly to a decreased rainfall—this decrease again being by many considered to be the consequence of the destruction of forests and trees bordering on water-courses.

The whole island is surrounded by a coral reef, having several inlets. The water between the coast and the reef is, in places, shallow; and organic matter brought by the rivers to the sea is neither fairly nor quickly carried away. This reef is distant from an eighth of a mile to three or four miles. There are large marshes existing even in the higher portions of the country.

The seasons are hot or hurricane, and cool or winter: the former lasts from December to April, and the latter absorbs the remainder of the year. The mean temperature of the hurricane season is from 84 to 86 degrees; of the cool, about 77; the mean of the whole year, 81 degrees. In the hills, at times, you may enjoy 50 degrees and a fire; in the plains, you may groan under a temperature of 90 to 95 degrees. The barometer is highest in July, lowest in January.

The prevailing winds are south-east and east-south-east; but during

the hurricane season the hot wind of Madagascar, which has passed over the arid plains of Africa, seldom fails to visit the island for a few days, and its effects are depressing, blighting, and even destructive, to animal and vegetable life.

The rainfall has been gradually decreasing: 1866 was exceptionally dry, thirty-four inches only having fallen during the year. On the 12th and 13th February, 1865, not less than ten inches fell.

The population at the end of 1866 amounted to 360,000. Less than one-fifth, or about 65,000, were Africans, who had been slaves, and their descendants; three-fifths, or 220,000, were Indians, with a few Chinese; and rather more than a fifth, or 80,000, were Europeans and creoles. Of these last I do not think more than 3000 or 4000 were Europeans; the rest being creoles, a few white, and the great majority of all shades of colour between white and black; of all kinds of parentage, crosses of English, French, Spanish, Dutch, etc., with Bengalis, Madrassees, Africans, and Malgaches, *cum multis aliis*; and recrosses innumerable and incomprehensible of the descendants of these with each other. I may safely say that the manners of these coloured creoles are polite, their customs beastly; but I cannot enter into particulars. Suffice it that many of them lead dirty, vicious lives, and, being improvident and wanting in energy, are content to continue their existence in the midst of filth, huddling together in one small room or mud-hovel, with every door and window close fastened. A creole hates nothing more than clean water and fresh air. The diet is simple. Indians and Malabars eat rice, a very little salt-fish, and manioc or cassava; creoles add to this more salt-fish or pork, and brèdes (the leaves of the *Solanum nigrum*), and other vegetables. Very little nitrogenised food is consumed by either of these classes; they both indulge freely in condiments, and when they can in country rum, which, until a recent increase in the duty, was very cheap. It may be added that want and themselves are always near neighbours; a slight rise in the price of the staple food, rice, invariably causing great distress and its consequences, as was well shown in 1865, during which year there was a famine in India, whence is principally drawn the supply of rice for Mauritius, and its dearth caused great misery; added to this was the fact that the dependent and pauper population was larger than ever, because, owing to failures in sugar-crops during this and former years, many proprietors had been obliged to turn adrift whole gangs of labourers, whom they were no longer able to employ; and the always large loafing community of this colony had received too many recruits from families who had been in better circumstances.

A few remarks are required about a former epidemic of fever, and these will, I regret to say, involve some statistics; but I have made them as few and short as possible, and have selected them from three representative institutions, as being those in which the greatest care and skill would be likely to be exhibited, and whose returns and observations would be considered as reliable and trustworthy. They are the civil hospital of Port Louis, admitting all classes and sections, being both a *pension médicale* and a public hospital, under the charge of several English medical gentlemen; the prisons' hospitals, admitting all sections of the community, representing every district, and under the charge of government medical officers; and the vagrant dépôt at Grande Rivière, which receives only the most miserable and destitute, and which is under the care of the superintendent of the government lunatic asylum. These statistics, and some of the observations contained in this paper on the previous condition of the island, I owe to the blue-book, and to the reports of the Fever Commission of 1868.

Some of the older practitioners speak of the occasional and limited appearances of remittent and bilious remittent fevers among Indians as early as 1839-43-44, and opinions were divided as to whether the disease was or was not contagious, malarious, endemic. In 1862, there was recognised by some of our English brethren a disease called by them bilious remittent fever, but, I think, considered by a majority of our French *confrères*, and by some English practitioners also, to be a bilious-typhoid or pseudo-continued fever, with splenic and hepatic complications. From this time to 1867, when intermittent seemed to supersede remittent, this Bombay fever, as it was popularly called, became epidemic in one district after another. I have not time to give even a brief outline of this disease; it was exceedingly fatal, the mortality in proportion to the attacks being very great; and it was almost confined to the Indian population. In 1867, the percentage of deaths to attacks in the three institutions I have just named was twenty-six; in 1868, it was only ten per cent. You may observe that the ratio was very much diminished in the second year: this was not the case with the intermittent epidemic.

We have now arrived at, and even passed, the period at which intermittent declared itself; and I beg a few moments to place before you, as well as I can, the condition of the country and of its people at this time.

For some years there had been a diminishing rain-fall; trees and

* Read before the Medical Section at the Annual Meeting of the British Medical Association, in Newcastle-upon-Tyne, August 1870.

even whole forests had been cut down and removed; large quantities of soil had been disturbed in the making of railways and gas-works; no hurricane had occurred for some years; an extraordinary fall of rain and tremendous flood in February 1865 had carried down a mass of organic matter which remained decaying under water; 1866 was remarkable by an exceptional heat and drought, by an absence of the usually prevailing cool south-easterly wind, and by the frequency of the hot, unhealthy Malgash wind—the consequences of which circumstances were, the drying up of rivers, pools, and marshes, and the free exposure to the air of this fermenting mass of animal and vegetable matter. Again, we had an ill-bred population, constitutionally feeble, and rendered still more feeble and less able to resist attacks by the remains of a remittent fever, and by the increase of paupers and decrease of food, amounting too frequently, I fear, to famine; and an impoverished upper class, unable to assist, and constantly adding to the number of, the poor. It was just at this time that a large barrachois at the mouth of Petite Rivière, on Union Estate in Black River district, was cleaned out, and the mud, said to have been of an overpowering fetor, was heaped on the banks of the river to dry, and subsequently carted to the land for manure. A very short time after this—that is to say, in January 1866—intermittent fever began modestly on this very estate with one attack; in February there were 26, and in March 211 cases, and so it went on, increasing and diminishing according to the seasons, until we find that in this and an adjoining farm there occurred during the twelve month 724 cases and 72 deaths.

I shall endeavour to trace the progress of the fever from this point—the point at which, I believe, the intermittent epidemic commenced in January 1866, and from which it spread over the whole island, or very nearly so. This Petite Rivière, then, is about ten or twelve miles south-west of Port Louis, and this distance the disease traversed in three months, fever attacking the capital in April. It had hardly extended beyond it when it was arrested by the advent of the cold season. In December of the same year, being the commencement of summer, it continued its progress along the west coast, northwards and eastwards, until it reached the most northern point of the island in Feb. 1867; thence it descended southwards along the eastern shore, attaining in June, Rivière Sèche, at a spot on the eastern coast, nearly corresponding to that at which it commenced on the western, the direct distance across being twenty-four miles only. Thus it had occupied a space of some eighteen months in embracing the north and north-eastern coasts (about sixty miles of circumference); but all this time, too, it travelled inland, extending laterally, and killed in the northern districts many thousands. It did not mount the hills and carry all before it; probably it never during this period attained a height exceeding 550 feet, but it crept up ravines and river-beds, and enforced itself by marshes and in jungles, ceasing its ravages only on the reappearance of the cold weather. Returning to its starting point, Petite Rivière, let us now follow it in its course southwards, a very short one. Step by step it advanced slowly or rapidly, until it occupied a strip of land some twenty miles in length and from one to four in breadth, containing over forty square miles of ground—resting, however, here as everywhere, during the winter, to rouse up at the very commencement of summer, and attack with an increasing virulence the inhabitants of the newly invaded territories. But in the midst of its career, during the very heat of summer, it was arrested, and beyond this south-west corner of the island it never passed or penetrated. Here, running from north-east to south-west, from north-west to south-east, and almost directly from east to west, are chains of mountains, among the highest in the colony; and they formed a double, almost a triple, barrier of from 1000 to 2500 feet in height. At the foot of these the intermittent fever stayed, occasionally throwing out an attack which might reach a few hundred feet up. Round the flanks it could not pass; one was guarded by dense forests on rising ground, the other seawards, by a huge, nearly square, mass of basaltic rock, called La Morne de Brabant, having a height of, I should think, not less than 1000 feet, with a base of two or three square miles. This grand rock stands out boldly from the coast nearly directly west, and no seeds of malaria could pass it to again reach the island, unless the wind veered first from south-east to east, then to north; again from north to west, and finally to the south—a very improbable occurrence.

Finding the enemy completely checked in the south, we rejoin him where we left him in June 1867, at Rivière Sèche—that point on the east coast which corresponded to his initiation on the west. Recovering from the torpor of the cold season, December again warmed him into activity. With rapid strides he continued his southerly course, passed the south-east corner of the island, involving Flacq, Grand Port, and Savanne, in succession, attacking here, as he did in the north, places far inland as well as on the coast, and was finally arrested only when he had reached the southern aspect of that Morne de Brabant, whose northern face had checked his career more than a year before. Thus it

took three hot seasons, or about two and a half years, to surround Mauritius. All flat and marshy districts inland were reached, and suffered severely; and only those who lived in the mountains or on the high table-land in the centre of the island escaped, or, if attacked, recovered quickly; while those living in the lowlands who did not yield to the repeated attacks of fever, too frequently perished of dysentery and paludal cachexia.

Up to this appearance of intermittent fever at Petite Rivière, in 1866, be it remembered, there had never been an epidemic of ague, nor had the inhabitants of any portion of the island suffered from paludal fever. It had been remarked by successive chief medical officers and by other professional men that, in an island like Mauritius, presenting circumstances so favourable to the development of malarious fever, it was extraordinary that this disease had had no existence. All have not held quite this opinion; but all agree completely as to the rarity of intermittent, and as to its never having prevailed in an epidemic form until 1866. The very few cases that were treated in hospital were generally those of persons who had had the opportunity of contracting ague in other countries. Soldiers fresh from the Kentish and Essex marshes, and Indian emigrants from swampy districts in Bombay and Madras, here experienced relapses. Only 35 cases were registered in the military hospitals during the thirty-five years between 1823 and 1858, or just one *per annum*. In the civil hospital of Port Louis, there were admitted in the four years preceding the epidemic, that is to say, in 1862, 4 cases; in 1863, 24; in 1864, 14; and in 1865, 43 cases, being a total of 85, with 7 deaths; and it is remarkable that of this number 75 were Europeans, of whom 5 died, nine Indians with two deaths, and one creole, who recovered. Note the very extraordinary change in the numbers attacked of the different sections in the same civil hospital during the next eighteen months ending June 1867, when there were attacked 571 Europeans with 33 deaths (5.75 cent.), 240 creoles with 41 deaths (17 per cent.), and 1735 Indians with 272 deaths (15 per cent.).

For the two years 1866-67 the percentages of deaths to attacks were as follows:—European, 5.17; Indian, 14.19; and Creole, 19.20. To show how much more the Creole, the native of the country, suffered from this new disease than he did from the bilious remittent, and than did the white and black population, to both of whom intermittent need not be deemed to have been an absolutely new thing, I hold the two in contrast. In Europeans, in the bilious remittent, the percentage of deaths to attacks was 16.50; in Indians, 45.75; in Creoles, 6.50 per cent.; while in intermittent, of Europeans attacked, 5.17; in Indians, 14.19; and in Creoles, just 20 per cent. died.

Again, taking the three representative institutions, I find that in 1867 there were 10,780 admissions of intermittent, and 732 deaths, being about 7 per cent. The total registered mortality from this disease during the year was 31,920; and the estimated death-ratio of Port Louis was 274 per 1,000 of the population. During the six months ending June 30th, 1868, there were in these same institutions 4,456 admissions, with 415 deaths, being about 9.3 per cent. The registered mortality of the colony for the half year, from the same cause, was 8,343.

To give an idea of the gradual diminution of fever, I take March as the best month for averaging deaths from this cause. In 1867, there were 6,671; 1868, 2,817; 1869, 1,412; and in 1870, 691. The present state of the colony is very good, the death-rate from all causes being only twenty-six and a quarter per thousand.

Let me bring forward a few more figures. In the dispensary and hospital which I first established in Plaine Magnien, and which were under my charge for the five months ending October 22d, 1868, I treated 937 cases of uncomplicated intermittent fever. Of these 144 suffered relapses more or less numerous, and fifteen died. There were under my care fourteen cases of dysentery followed by intermittent, with a death-rate of 14 per cent.; of intermittent followed by dysentery, thirty-three cases and a death-rate of 6 per cent.; of uncomplicated dysentery, forty-six cases and a death-rate of 13 per cent. I ought to add that the registered mortality does not give the whole of the victims of malaria; some died on cane-fields and roadsides, and many more were entered as dying from other causes, which were frequently sequelæ of fever.

Our systematic writers have described, and most of us are familiar with, the symptoms of ague; the fever of which I am speaking exhibited pretty much these appearances. Premonitory symptoms were oftener absent than present, the attack being frequently sudden; occasionally only was there a complaint of general malaise; then came insomnia, formication, pain more or less severe in the regions of the stomach, duodenum, liver, and spleen, accompanied by nausea, giddiness, and vomiting; rigors often frightfully severe, and which no amount of blankets, hot-water, and stimulants seemed to alleviate. These were followed by reaction and the sweating stage, the two generally occupying a period of time in pretty regular proportion to the severity of the attack. In a few cases, if the patient were at once removed to a non-malarious

district, it happened that, after one or two mild seizures, complete recovery ensued. Much more frequently there was no intermission of perfect health; the pulse, skin, and tongue might be in their normal state, or nearly so, but the capability of the individual to resist the attack was much lowered; generally, too, during this partial recovery, there continued the sense of prostration, the loss of appetite and of energy, and a dull pain in the neighbourhood of the liver and spleen: remaining, as the majority had to remain, subject to malarious influences, yet properly treated and sufficiently fed, the attacks became more distant, quotidian becoming tertian, quartan, erratic, or ceasing altogether. It is perhaps hardly necessary to say that the stages were not always well marked. We had malaria without fever. Sometimes, but rarely, typhoid symptoms occurred; there was no longer an intermission, scarcely a remission; it became a continued fever with accessions at regular or irregular periods; in these we had the typhoid symptoms only before death. On examination *post mortem*, it was found that Peyer's patches were never involved. The relative frequency of quotidian, tertian, quartan, and erratic was, according to the Civil Hospital returns, as follows:—Quotidian, 82.90; tertian, 13.08; quartan, 0.45; and erratic, 3.57; and my experience would yield somewhat similar results. The sequelæ were hæmorrhages, anasarca, ascites, hæmaturia, constipation, diarrhœa, and, by far the most fatal, dysentery.

The *post mortem* appearances were very various; these depended, to some extent, upon whether the patient had yielded to one sudden, sharp attack, or whether he died only after having made a stout resistance. I am greatly indebted to my friend Dr. Dickson of Grande Rivière for information on this subject, and I regret that I am not able to furnish the more exact data that his necropsical journal would afford. There were generally present cerebral congestion and effusion; after many attacks, softening of the brain, which, too, was often stained of a yellow colour. The heart was flaccid; the ventricles contained yellow fibrinous clots, which sometimes extended to a considerable distance into the aorta and pulmonary artery; the liver was enlarged, congested, softened, and friable—more rarely hard and shrivelled; the spleen much enlarged, and after numerous seizures, of a dark slaty colour, and softened; the mucous membrane of the stomach and intestinal canal was very much congested; the kidneys normal, or flabby, white, and bloodless; more rarely shrivelled and dry; more frequently softened.

The treatment was that usually adopted:—emetics, purgatives, and antiperiodics during the intermission; stimulants, diaphoretics, and counterirritants during the paroxysm. It was, I think, pretty generally established that a large dose of quinine, administered about an hour before the expected attack, modified, shortened, or postponed it. I may here mention some large doses of that alkaloid. Usually from three to five grains were prescribed; after a time, 10, 20, 30, 40 grains, the last being the largest dose I ever employed, or took. I have known a hundred grains given in two doses, with an interval of twelve hours between them; and Dr. André speaks of its being not uncommon to administer 160 grains in the twenty-four hours. Arsenic, iron, beeberrine, strychnine, sulphur, hyposulphite of soda, Warburg's tincture, and other remedies were tried, (especially at a time when quinine sold for £19 an ounce,) and found of little or no use. Carbolic acid administered by mouth was valueless, but, hypodermically injected, gave favourable results. It was to this mode of treatment I alluded in the early portion of my paper. I used a solution containing two minims of the crystallised acid to a drachm of water, and, when I could do so, injected from twenty to forty minims a short time before the attack was expected, and at the same hour on two or three consecutive days. I regret that I was only able to treat in this manner thirty-six cases in hospital and dispensary. Of these twenty-two were cured, but eight relapsed after an interval of from six to thirty days; in seven cases failure was more or less complete, and the remaining seven not having reported themselves at the Dispensary, the result in these cases was not positively known.

The time during which the fever-poison will remain, and the very peculiar manner in which it will exhibit its power, its erratic course, and its periodicity, may be shown in my own case. My last attack in Mauritius—a very mild one—occurred in March 1869. I arrived in London in May, and spent more than six months there and at Reesmouth on North Tyne, quite free from fever. Attending the November meeting of the Northumberland and Durham Medical Society, I experienced my first attack in England in the library of the Infirmary, and, by the time I reached my hotel, it became a pretty sharp one. I had a return every twenty-seven days for five months, remaining perfectly well during each interval. Although it is now more than four months since the last seizure, I need not say that I do not consider myself safe.

The inferences and opinions deduced from the facts herein narrated, with certain advice, were duly forwarded by me to the colonial office for consideration, and, belonging as they do to that department of government, are not for publication.

ANOTHER SOURCE OF LEAD-POISONING.

By ALFRED WILTSHIRE, M.D., M.R.C.P. Lond.,
Junior Physician to the West London Hospital; Physician to the Samaritan Hospital for Women and Children; Physician to the British Lying-in Hospital; late Medical Inspector to Her Majesty's Privy Council.

I AM desirous of recording a case of lead-poisoning, in which the discovery of the source whence the metal was derived was somewhat difficult, although, as will be seen, it was superficial enough.

A middle-aged man, a coach-builder by trade, came to me complaining of pains which had troubled him for years, and for which he could get no relief. The man was gouty, and the pains he suffered from partook of the gouty character; occasionally during an exacerbation developing into ordinary arthritic gout. His aspect was very much that of chronic Bright's disease; he was anæmic and pasty-looking; but repeated careful examinations of his urine excluded the possibility of that disease being present.

Knowing the influence of lead in predisposing to gout, I looked to the gums, and there found a marked blue line. I now set myself to discover the source of the metal, and made careful inquiries in every direction that suggested itself to me. To begin with, the man assured me that he had nothing to do with painting or with the metal-work of coach-building; he confined himself exclusively to the wood-work. I then investigated the character of the water-supply, and looked into the possibility of his food or drink being the agents whereby the poison was introduced into his body, but with negative results. I was baffled at every turn; yet I felt convinced that his system was impregnated with lead, and the happy results of treatment by iodide of potassium confirmed me in this belief.

Determined not to be frustrated if I could possibly avoid it, I one day asked him to describe to me in detail exactly what his work was, thinking it just possible that he might use leaden rivets or something of that kind in fastening his work together. He then told me, with an expression of surprise, that he had not thought of it before, that he was a coach panel-maker, and that the panels were fitted into carriages by means of *white lead*, no screws or bolts of any kind being used. Here, then, was the source of the metal which, superficial as it may appear, for some time eluded discovery. I have since learned that carpenters, joiners, cabinet-makers, and other workers in wood, not unfrequently use white lead for fastening joints, etc.

I need hardly say that the foundation of the man's sufferings being disclosed, he soon got relief. He told me he had been a sufferer for years, and had frequently been under the treatment of surgeons in general practice, and had consulted one or two well-known physicians, but, beyond relief of the more urgent symptoms of acute gout, he could get no ease. Iodide of potassium and iron, Epsom salts and sulphuric acid, cured him.

57, Wimpole Street, November 1870.

ABNORMAL FORMATION OF THE VAGINA.

SOME months since, I was called to attend a woman in her first confinement. On examination I could not pass my finger more than an inch in any direction into the vagina. It was some time before I could feel on the soft flat muscular substance which met my fingers anything like an os uteri. I at last detected, lying very much forward and against the pubes, a slit feeling something like an os. I could not make out the presentation; and, as the pains were irregular and no urgency about the case, I gave a dose of opium and went to bed. On visiting the case ten hours afterwards, I found that one foot had descended through the opening by the pubis, and the other made a rent for itself through the centre of what I may describe as the false or abnormal floor of this vagina, which seemed of average capacity. I put back this foot and brought it down with the other. I could now, on passing my finger through the rent in the centre, feel the os and uterus, which was well dilated and very moveable. I thought for some time that the opening through which the feet protruded seemed inclined to dilate sufficiently to admit of the child passing, but it was not so; therefore, with the traction which it was necessary to make, and the size of the child, the two rents soon became one. Even after this, there was much difficulty in delivering, the uterus seeming to come down with the child as traction was made. I gave ergot, used external pressure, and made as gentle traction as possible, although much force was required before delivery was completed. There was a good deal of hæmorrhage, evidently from the torn muscle, which made me glad I did not divide it with the knife, its vascularity seemed so great. The woman made a very good recovery. This abnormal muscle again contracted, and keeps up the uterus as before.

C. J. DENNY, Malvern Wells.

HYDROA AND ITS ALLIED DISEASES.

THE following table shews the principal points in the cases of Hydroa which have already been published in the JOURNAL (see July 23rd, p. 86), and in four which have been since noted. The first four cases in the list are those of M. Bazin.

Table showing the Principal Points in Cases of Hydroa.

No.	Age, sex, and name.	Seasons at which attacks occur.	Number of previous attacks.	History of the disease in relations of the patient.	Usual duration of an attack.	An attack consists of a crop or of several successive crops.	Attacks are becoming more or less severe with age.	Chief Seats of Eruption in Present Attack: Characters of Eruption.	Remarks on Previous History, and "Rheumatic" Complications.
1	26 .. M. Case I, B. M. J., 1870, vol. i, p. 490.	First attack.	None.	A brother had attacks every five or six months for fourteen years.	First attack.	First attack.	First attack.	Backs of fore-arms, base of uvula. Papules and vesicles.	The rash had come out two days before. In twelve days the whole had disappeared.
2	17 .. F. Case II, p. 490.	Winter.	One.	None.	Short.	One.	Only second attack.	Backs of hands and fingers, fronts of knees, on the lower lip. Vesicles and papules.	Very little disturbance. Duration two days.
3	52 .. F. Case III, p. 491.	Not known.	One.	None.	Not stated.	Several crops in the previous attack.	Only second attack.	Hands, fore-arms, and knees. Papules, vesicles, and pustules.	Liable to gout. Previous attack three months before. Only a few spots on the hands and fore-arms. Relapses occurred for a month, and then ceased.
4	19 .. M. Case IV, p. 491.	Not known.	Three.	None.	A month.	Not stated.	Not stated.	Hands, knees, feet, buccal mucous membrane. First a rosy spot, then a vesicle, which soon dries up.	At the end of a week, the rash had nearly gone. There was no relapse. No rheumatic complication was present.
5	.. M. "Young Man." Case V, p. 492.	No special season.	Seven or eight in one year.	None.	Four days.	One crop. On the last occasion, however, the eruption relapsed before the previous crop had fairly disappeared.		Face, neck, backs of hands and wrists. Erythema papulatum in parts; in some places, eczema-like vesication and discharge; in others, more or less pointed papules, with the epidermis sodden as if by fluid, although none exuded on puncture. He got well of this attack; but had relapses of erythema on the backs of his hands and face twice within about six weeks.	He thinks the eruption is caused by purgative medicine. It is probably more likely that constipation precedes an attack.
6	7 .. M. E. Nicholls. Case VI, p. 492.	No special season.	None.	None.	On the fifth day it is said to be subsiding.	One crop.	No previous attack.	Most abundant on legs; less so on forearms and wrists, cheeks, nose, and trunk; one or two spots on back of hand. It everywhere chooses the extensor surfaces of the limbs. The eruption consists of abortive vesicles with very congested bases; the spots dry up without ever containing more than a trace of liquid.	There is pain and tenderness of one knee-joint, with slight effusion. His mother is said to have had rheumatism.
7	21 .. M. Jas. Smith. Case VII, p. 492.	End of summer.	One.	A brother had had a (probably) similar eruption two or three times.	First attack, two months; present one, about two weeks.	One crop.	The first attack was not nearly so severe as this one.	Face, ears, backs of hands and wrists; a few on neck, front of one wrist, and back of one forearm. Red papules, many of which go on to vesicles; the vesicles vary in size from a pin's head to a fourpenny-piece, the large ones being flat and irregular. On the fingers is general erythema, with indistinct papules.	No history of rheumatism in patient or his brother.
8	54 .. M. Case VIII, p. 546.	Early spring.	None.	None.	About eight days.	One crop.	..	The eruption almost covers him; it is especially marked on his face, neck, shoulders, fronts of arms, fronts of thighs and legs. Mucous membrane of lips and soft palate "inflamed and excoriated"; uvula oedematous.	Felt unwell and "bilious" for a day or two before eruption came out; some chilliness, but no definite rigor. Is now feverish.
9	37 .. F. E. Morgan. Case IX, p. 546.	Spring.	None.	None.	About one month.	One crop.	..	Face and backs of hands; on the tongue were some "doubtful appearances". Papules, which in a few days became vesicles; at a later date each spot consisted of a patch of erythema surmounted by a central scab, around which was a ring of vesications. No tendency to ulceration.	She had aortic and mitral <i>bruit</i> , but said she had never had rheumatic fever.
10	20 .. F. Florence S. Case X, p. 547.	Early winter.	None.	None.	From ten days to one month.	She had several relapses in a period of seven months; she was not quite well when last seen.	..	On the extremities, chiefly at their posterior aspects. A few on face. Bullæ varying in size from a pin's-head to a threepenny-piece; some containing purulent fluid, others bloody matter. The skin at the bases became inflamed at a later stage, and the vesication in many cases spread at the margin, while the centre of the bulla collapsed; in this way, an appearance resembling Hebra's plate of herpes iris was produced.	Free effusion into one knee, but little pain. Severe febrile disturbance; confined to bed.
11	19 .. M. J. McCarthy Case XI, p. 547.	Winter.	None.	None.	About one week.	A slight relapse a few days after the former attack had passed off.	..	Face, and one side of neck. On face it occurs on cheeks, eyelids, forehead. Patches of erythema, with more or less vesication; the vesicles are small, and occur, for the most part, at the margins of the patches; in one or two patches the centre does not differ much from healthy skin (erythema marginatum).	Slightly feverish while the eruption was out.

Table showing the Principal Points in Cases of Hydroa (continued).

No.	Age, sex, and name.	Seasons at which attacks occur.	Number of previous attacks.	History of the disease in relations of the patient.	Usual duration of an attack.	An attack consists of a crop or of several successive crops.	Attacks are becoming more or less severe with age.	Chief Seats of Eruption in Present Attack: Characters of Eruption.	Remarks on Previous History, and "Rheumatic" Complications.
12	25 .. F. E. W. Case XII, 1870, vol. ii, p. 86.	Early summer.	None.	None.	About four weeks.	Eruption came out (according to the patient's account) in successive crops.	..	Forearms (backs of), neck, face, shoulders, legs (fronts of), slightly on backs of hands, throat. The eruption was partly erythema nodosum, partly erythema papulatum, with vesicles. On the legs it had all the characters of erythema nodosum, and some patches on the arms were nearly as characteristic of that condition. Most of the patches on the arms, however, and all those on the face, neck, etc., were composed of papules, either solitary or in groups, on erythematous bases, and in many cases surmounted by white heads, caused by separation of the epidermis by a small quantity of fluid (vesicles). The occurrence of a distinct corona of vesicles on the soft palate showed the connection between this case and the others.	Had suffered for a month before the eruption appeared from rheumatic pains in the ankle and shoulder. The eruption began on the legs. Throughout the attack she had some feverishness, and her ankles were somewhat swollen and tender; while in hospital several vesicles appeared on the <i>right</i> conjunctiva; in the <i>left</i> eye she suffered an attack of iritis a few days later; posterior synechiæ were formed, and her sight considerably impaired. No reason to suspect syphilis.
13	24 .. M. B. Grout. Case XIII, p. 86.	Early summer.	One each year since childhood.	None.	About one week.	One crop.	More severe of late years on his hands; less so on his face.	Forearms (backs of), backs of hands and of elbows, face, fauces, tongue and buccal mucous membrane, feet. Patches of erythema, surmounted, in most cases, by more or less vesication; sometimes the vesication had dried in the centre of a patch, and continued to spread at the margins (like herpes iris). There were also many small single bullæ.	Has had one attack regularly every year for many years. Has never had anything like rheumatism. Does not feel in the least unwell in any way when the eruption is out.
14	14 .. F. E. Boseley. Case XIV, p. 86.	Early summer and early winter.	Three.	None of them known to have it.	About two months.	Fresh spots come out as the old ones die away.	Seems to be getting more severe; present attack is her worst.	Backs of wrists and hands only. Vesicles come out on patches of erythema; the vesicles are either single or placed in groups on single patches of reddened skin.	Has had two attacks each year for two years. Never has sore throat when the eruption is out. Never feels at all unwell during the attacks. Has not yet menstruated.
15	26 .. M. Aug. 20, 1869.	First attack.	None.	None.	First attack.	First attack.	First attack.	The backs of the fore-arms and of the hands. A few on the fronts of the fore-arms, on the side of the neck, on the cheeks, and on the chest. Chiefly papules, with slight vesication. He said that some of the spots had watery heads, and were moist.	He had always had excellent health. The rash had come out suddenly the day before. He had never suffered from rheumatism; but his father had, he said. He did not apply again.
16	36 .. M.	First attack.	None.	None.	First attack.	First attack.	First attack.	The face, fore-arms, backs of hands, fronts of legs. A few spots on the abdomen and on the back. In parts like a papular syphilide; in others like small-pox. One spot on the uvula. Mostly distinct papules.	He had had small-pox. There was very little constitutional disturbance. The eruption had begun five days previously, and was beginning to subside. He was not seen again.
17	4 .. M. Patrick Haffenie, July 17, 1870.	First attack.	None.	None.	First attack.	First attack.	First attack.	Fronts of legs and thighs. None on hands. One group on the fore-arm. One spot on the side of the neck. His throat was said to have been sore. No spots on fauces. Patches on fronts of legs like erythema nodosum. The patch on fore-arm like "herpes iris". A papular and vesicular eruption.	Had been ill and fretful. The rash had come out one week previously. One week later, the whole had disappeared.
18	15 .. M. W. Lynn.	No special season.	Two every year (sometimes three or four) since infancy.	None.	On face, three weeks; on hands about one week.	One crop.	Have become more severe. For years it was confined to face, but of late has affected hands.	Cheeks, ears, hands. Erythematous patches, with irregular vesicles, "just like those of erysipelas."	The first eruption was "a blush of redness", like the present eruption, but without vesicles; this was at the age of four months. The next year he had a rash like the present on his face, and since then has had it twice a year.

CASE XV. *A Papulo-Vesicular Eruption on the Backs of the Hands, Fore-arms, and Face (Hydroa).*—A man, aged 26, applied at the Hospital for Diseases of the Skin, Blackfriars, August 20, 1869, with a vesiculo-papular eruption. On the backs of the fore-arms and on the backs of the hands was a symmetrical eruption of papules with an abortive attempt at vesication. He said that some of the spots had "watery heads" and were moist. Most of them when seen were without fluid contents. There were a few spots also on the fronts of the fore-arms, on the side of the neck, on the cheeks, and on the chest. The rash had come out suddenly the day before he came under care, and this was his first attack. He had never previously had any skin-disease at all, as far as he knew. He was robust and in good health. When asked as to rheumatic affections, he said he had never suffered in any way, but his father had had rheumatism. He did not apply again.

CASE XVI. *An Eruption resembling Small-pox occurring on the Face, Fore-arms, Backs of Hands, and Fronts of the Legs: first attack.*—An Irishman, aged 36, was attending as an out-patient, under the care of Dr. Sutton, at the London Hospital, for pain in the back of three months' duration, when an eruption appeared, for which he was trans-

ferred to the care of Mr. Tay. It occurred copiously on the face, fore-arms, the backs of the hands, and the fronts of the legs, and there were a few spots on the abdomen and on the back. On the face the eruption was merely papular, and looked not unlike a syphilide. On the fore-arms, hands, and legs were a number of distinct papules, each having an inflamed base, and on the summit either a vesicle or a pustule. In some, the crust on the apices had fallen in in the middle, giving an appearance of depression not at all unlike that of small-pox. Dr. Sutton called attention to this, but remarked that the position of the eruption on exposed parts was the reverse of what occurred in small-pox, and the man had no premonitory symptoms, and was not ill enough. On examining the throat, there appeared to be one pustule on the uvula, but it was not very definite. The man stated, August 1, that he had noticed the first spots on the fore-arms four days previously. He did not admit so much disturbance of digestion as patients suffering from this malady generally do. This was his first attack. He had never had any "rash on his skin" before. He had had small-pox. The case seemed clearly one of hydroa. The position and character of the eruption agreed with the cases previously described. Though only

the sixth day of the outbreak, the fluid in the vesicles was evidently drying up, and the whole eruption just beginning to subside.

CASE XVII. *Hydroa in association with Erythema Nodosum in a Child: Eruption chiefly on Lower Extremities.*—Patrick Haffenie, aged 4, was brought as an out-patient to the Hospital for Diseases of the Skin, Blackfriars, July 17, 1870. On the front of each shin was a patch of redness of skin, with slight œdema and very painful to the touch, exactly resembling patches of erythema nodosum. Scattered over the legs and thighs were numerous papules, and papules with more or less vesication on the surface. Each spot was quite distinct from its neighbour, and there was no tendency for any to coalesce. The spots were much fewer on the backs of the legs and thighs than in front. There were no papules, etc., on the hands, but there was one group on the back of the right fore-arm, below the elbow, resembling the so-called "herpes iris." There was one vesicle on the side of the back. There was no eruption to be seen on the fauces, but his mother said that his throat had been sore. The eruption began the week previously. He had been noticed to be rather ill and fretful before it came out, and he seemed decidedly ill and feverish when seen, and he had lost his appetite. One week later (July 26) the rash had quite disappeared, his appetite had returned, but he still looked pale. He had simply been ordered a little alkaline medicine.

FOREIGN BODY IN NASAL CAVITY: REMOVAL AND SUBSEQUENT RHINOPLASTY.*

By J. H. BARTLET, M.D.,
Surgeon to the East Suffolk Hospital.

HENRY GOODMAN, aged 29, sailor, living at Chelmondeston, was admitted into the East Suffolk Hospital on January 5th, 1864. He was shooting on the river Orwell, when his gun burst and smashed in a portion of the frontal bone; and a large piece of the gun-barrel lodged in the frontal sinus between the orbits. He was then attended by Mr. Bullen, who extracted two pieces of metal weighing five ounces. For some days his life was despaired of; but at the end of five weeks his health so much improved that he was able to leave his bed. During the seventeen weeks that he was in the hospital, seven pieces of bone came out of his head.

He left the hospital on May 3rd, 1864; but he was unable to commence work until December. From that date he continued to work with a handkerchief over the opening between the orbits until December 8th, 1869, when he was readmitted to the hospital for the purpose of having the remaining portion of dead bone removed. On admission, the supposed dead bone could be felt, quite movable, both through the opening between the orbits and through the nostril. There was a small quantity of purulent discharge from the nostril, which kept up constant irritation. The sight of the left eye was quite destroyed by the accident. Through the frontal opening, which was about one inch in diameter, the substance was easily grasped by a pair of forceps; but all attempts at removal failed. It was decided, upon consultation with my colleagues, to attempt to crush the substance, which, to the astonishment of all, we found, upon drilling, to be a piece of iron.

On January 10th, 1870, chloroform was administered, and the opening between the orbits was enlarged; but, it being found that the foreign body could not be extracted, a V-shaped portion of the nasal bone was sawn through, and the opening still further enlarged by bone-forceps. The substance was then grasped by a pair of very strong forceps, and was extracted. It proved to be the breech and screw of a large duck-gun, and which weighed three ounces and six grains. The man went on well after the operation, and was discharged.

On April 13th, 1870, he was readmitted in order to have the opening in the nose closed by a rhinoplastic operation. His general health had much improved since he left the hospital.

On April 16th, the shape of the flap was marked out upon the forehead with tincture of iodine, in an oblique direction, to avoid twisting the neck of the flap. Chloroform was administered; a thick flap was dissected from the forehead, and secured to the pared edges of the opening by half a dozen sutures; the edges of the wound on the forehead were brought together by two hare-lip pins; and the whole was dressed with lint covered with cotton-wool slightly carbolised. The room was kept at an even temperature night and day. The patient was supplied with beef-tea, brandy, eggs, sherry, etc. On the sixth day, the pins were removed from the forehead; and the wound had healed by first intention. Some of the sutures were removed from the flap, which was warm, healthy, and uniting. From this time all went on well, with the excep-

* Read before the East Anglian Branch.

tion of one side, which soon healed, after having been touched with a hot probe. The patient was discharged from the hospital with the aperture completely closed. He is now in better health than he had been for the six years since the accident.

CLINICAL MEMORANDA.

FRACTURE OF THE SKULL: TREPHINING: RAPID RECOVERY.

WM. H. CLAYTON, aged 8, a factory operative, in passing through a passage in a mill on July 11th, 1870, climbed up a ladder and put his arm around a shaft (as if to ride on it) which revolved rapidly at about eight feet from the ground and three from the ceiling. He was quickly spun round it, and must have described two revolutions at least, when he was dashed with great force against the flags beneath. When I saw him, about twenty minutes after the accident, he was completely insensible, bleeding from the nose, and the right side of his body was violently convulsed. The pupils were dilated. The surface of the body was cold and beginning to assume a livid appearance, but presented no wound. On examination of the head, I found a fracture (without any wound of the scalp) in the left side, running through the parietal bone and extending forwards as far as the root of the nasal bone; how far backwards I could not exactly trace, but the superior middle portion of the parietal bone, through which the fracture ran, gave a sensation as of a depressed spot; and, on pressing this with the fingers, the convulsions were very much increased. I shaved the affected side of the head, and raised a V-shaped flap of the scalp directly over the point of depression. The bone was not at all depressed, although convulsions still presented themselves on pressure. I proceeded to trephine; and when the bone was removed I replaced the flap, fixed it with a few interrupted points of silk suture, and applied cold water dressing. I left with orders to be informed if any change occurred before the time appointed for my return. Four hours afterwards, I found him sleeping, but uneasily. The convulsions had ceased a quarter of an hour after the operation. The pupils were less dilated. He spent a restless night, and was still unconscious next morning. He passed a quiet day, sleeping most of the time. After this, he gradually improved, and on July 16th was allowed to get up at his own request. From this day he continued to improve so rapidly, that on the 21st he wished very much to walk a distance of five or six miles. To this I would not consent. In about three weeks, he resumed his work in the mill, and has continued at it, in good and unimpaired health, up to the present date, October 16th.

REMARKS.—This case is remarkable for the positive symptoms of compression pointing decidedly to a certain spot, where, on laying bare the bone, no depression of it was found, either in the external table or in the internal table after trephining, nor was there any extravasation of blood beneath it to account for such symptoms. That the boy might have recovered without the operation, I am led to think, from the appearances presented by the parts operated on. But what surgeon would not be induced to operate under such circumstances on a patient almost moribund, with a view to relieve symptoms so significantly pronounced?

CHARLES W. THORP, Todmorden.

FORMATION OF UREA IN THE LIVER.—Dr. Cyon of St. Petersburg has published in the *Centralblatt für Medizin. Wissenschaft* an account of some researches made by him, from which he infers that urea is formed in the liver. Blood withdrawn from the carotid arteries of dogs was rapidly defibrinated; part of it was placed in an apparatus arranged for propelling it through the liver by mechanical pressure. Three cannulae were introduced, one into the inferior vena cava, a second into the hepatic vein, and a third into the portal vein. The first of these was connected with an aspirator consisting of two cylinders partly filled with mercury; the other two were connected with the vessels containing blood. The blood was now allowed to flow through the liver; and, after it had flowed through the organ several times, the quantity of urea was determined by Liebig's method, and compared with that in the ordinary blood of the animal. The blood which had passed through the liver was found to contain the larger quantity of urea. In 100 cubic centimètres of blood sent twice through the liver of a moderate sized dog, there was 0.14 gramme of urea; in the same quantity of blood not so treated, the amount was 0.09 gramme. When the blood was sent through the liver four times, the amount of urea in 100 cubic centimètres was 0.176 gramme; that in a similar quantity of the ordinary blood of the animal being 0.08 gramme.—*Wiener Medizin. Wochenschr.*, October 29th, 1870.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 28TH, 1870.

JOHN GAY, Esq., President, in the Chair.

Treatment of Nævus.—Mr. WEEDEN COOKE exhibited drawings of a child aged two years, having a nævus on its upper lip. Treatment by caustics had been tried in India, to no purpose. Mr. Cooke removed the nævoid mass by means of two small ecraseurs; and by careful dressing and attention, good cicatrisation was obtained, as could be seen in the photograph which was handed round.—Mr. BRUDENELL CARTER spoke of the great danger of injecting nævoid growths with the perchloride of iron. He had published a case where the injection of about three minims was instantly fatal, and the blood was found coagulated as far as the heart.—Mr. CRISP, of Swallowfield, had been informed of a case fatal in a similar way.—Dr. BRUNTON had seen the injection of perchloride of iron into a nævus cause instant death.—Dr. ROUTH said, that if no more than one drop of the solution was injected there was no danger.—Mr. W. ADAMS said that, fifteen years ago, he had, at the suggestion of the president, tried the injection of the perchloride of iron to cure an aneurism of the posterior tibial artery; he injected two or three drops, and the result was most satisfactory. It had been shown that one drop of perchloride of iron was enough to coagulate an ounce of blood.—Mr. STREETER said it would be interesting to know at what period of life, or how early in life, it was right to operate for nævoid cases. He remembered a case of nævus of the eyelid cured by Mr. Travers by the application of hydrochloric acid; he himself would prefer sulphuric or nitric acid.—Dr. TILBURY FOX mentioned a case of nævus covering the upper third of the arm and some portion of the mammary region, that was in University College Hospital under Mr. Quain. One drop at a time of the perchloride solution was injected; in time, the patient was discharged quite cured.—The PRESIDENT said that, fifteen years ago, he had made a communication to the Society, received from M. Larrey, advocating the use of the perchloride injection for the cure of small aneurisms. He himself often cut out nævi just as he would any other tumour, and had every reason to be pleased with the result of this method.—Mr. SPENCER WATSON treated nævi of the eyelid by cauterisation with a hot needle.

Operation for Strabismus.—Mr. SPENCER WATSON read a paper on the Causes of Failure in the Operation for Squint. He placed in the hands of the Fellows a copy of the results of an analysis of 103 cases of convergent strabismus. The causes of failure were enumerated under the following heads. 1. The pathological conditions were in some cases misapprehended. Squint had been supposed to depend in ordinary cases upon mechanical obstructions to the movement of the muscles, or to bands of fascia. But, from the free mobility of the squinting eye, when the other was closed, this was evidently an error. In two-thirds of the cases, hypermetropia was one of the conditions present in squint. At the same time, retinal changes had a material influence in determining the permanent character of the squint. 2. The operation might fail in improper cases; for instance, where there was eccentric fixation, an apparent strabismus was seen, and here an operation would give rise to diplopia, and would not probably produce improvement in the patient's condition unless the other eye were much impaired in visual power. Or, again, strabismus might be apparent where one eye was very much larger than the other from progressive myopia in one, the other being normal. The cornea of the smaller eye appeared nearer the inner canthus than that of the larger eye, and this appearance might mislead the surgeon. 3. The operation might fail from not being properly performed; the tendon might be missed, or divided too far from the sclerotic insertion. 4. The after-treatment might be improper; the patient might object to a second operation, or to the wearing of spectacles; or, the refraction not having been ascertained, the surgeon might neglect to order the necessary glasses, or might cover up the eye too long. In certain cases of periodic squint, apparent squint, and squint in very young children who could not wear glasses, as well as in cases due to brain-disease, the operation should not be performed. Mr. Watson remarked on the importance of adapting the kind of operation to the size of the squint, and the advantage of using the strabismometer before operating. The strabismometer of the late Mr. Zachariah Laurence was the most convenient and effective.—Mr. BRUDENELL CARTER said it was always well to prepare the patient to submitting to two or three operations. In cases of squint from paralysis of the external rectus, division of the internal rectus and faradisation of the external one had proved a good way of treat-

ment. Squint sometimes had its seat in a faulty direction of the roots and cones of Jacob's membrane. Something might be done by training the eyes, by accustoming them to blend into one two wafers placed in the stereoscope.—Mr. JABEZ HOGG had never seen any signs of congestion of the internal eye in squint; he believed the condition to be one of anæmia. Sometimes, but by no means always, hypermetropia and strabismus went together. Mr. Hogg still pursued the method of operation by a director and bistoury introduced by Dieffenbach, and never saw any bad results follow a free division of the conjunctiva. Squint in children was often due to worms, and could be cured by purgatives.—Mr. HOLTHOUSE said that, in his experience, retraction of the caruncle and granulations often followed a free division of the conjunctiva by the old plan of operation. He noticed that often, when the internal rectus had been divided, vision improved at once greatly; this showed that the nutrition of the internal eye was not materially interfered with.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, DECEMBER 7TH, 1870.

J. MATTHEWS DUNCAN, M.D., Vice-President, in the Chair.

Mr. ANNANDALE showed the bones of a spine which had been fractured by a fall of fourteen feet.—He showed also a portion of Intestine which had been constricted by a Band of False Membrane. He had performed gastrotomy, but too late to be of permanent benefit.—He showed also some fragments of Calculi which he was removing by lithotrixy.

Dr. WATSON showed a boy from whose right foot he had, some months ago, excised the Astragalus and the ends of the Tibia and Fibula. The result was remarkably good; the patient being able to stand on the foot, which was shapely, had considerable powers of flexion and extension, and was shortened not above half an inch.—Dr. Watson also showed a case of Epithelial Cancer of the Pterygoid Muscles and mucous membrane above them, which he had removed along with a portion of the lower jaw; also another from the Legs with affected glands; two Testicles—one removed for Cystic Disease of the Epididymis, the other for Malignant Disease; fragments of Calculi removed by Lithotrixy; a large Calculus removed from the Female Bladder by rapid forced Dilatation of the Urethra.

Dr. MATTHEWS DUNCAN showed a large rough Calculus, weighing 800 grains, which he had removed by rapid dilatation from the Bladder of a lady who had been seen by a distinguished surgeon, and sent to him for uterine disease. No bad results followed the rapid dilatation in either case.

Dr. HANDYSIDE read a paper, entitled Notes of an Encysted Filaria within the Muscle of Codfish.—Dr. PEEL RITCHIE made remarks on the subject.

Dr. JOSEPH BELL read a paper on Excision of the Mamma. In it he directed attention specially to two points: 1. The absolute necessity of complete excision not only of the whole tumour, but the whole breast, and the various forms of incisions by which this might be best managed; and 2. The question of granting or refusing operation in cases where the axillary glands also were affected. He strongly supported the advantages of giving the patient the chance of an operation in cases where the skin was not infiltrated, the constitution not evidently affected, and the tumour of slow growth, even where glands were affected. The whole of the diseased contents of the axilla must be carefully dissected out, the cortical fibres of the great pectoral muscle divided if necessary; the whole line of lymphatics through which the infection had passed from breast to axilla must also be removed.—Dr. P. H. WATSON remarked that the paper was an important one, and he believed its appearance was opportune, as surgeons in Edinburgh had been gradually feeling their way to a mode of treatment very different from that recommended in the surgical text-books. In his own practice, he now frequently cleared out the whole axilla by a careful dissection, and found that the cases in which he did so recovered more rapidly, as a rule, than the ones did in which this was not done.—Mr. ANNANDALE also agreed with the principles expressed in the paper.—Dr. MATTHEWS DUNCAN remarked on the importance, in doubtful cases, of preliminary incision and examination of the tumour, so as to be satisfied of its character before proceeding to the more formidable operation of excision of the whole breast.

Dr. MILLER read a brief account of the symptoms, so far as they had been observed, in the case of Obturator Hernia, the preparation of which had been shown to the Society by Dr. Chiene at a recent meeting.—Dr. CHIENE made some remarks.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, DECEMBER 9TH, 1870.

ALBERT J. WALSH, President, in the Chair.

MR. KELLY exhibited a hand, of which the index-finger, after amputation for a severe injury, showed on dissection the process of Regeneration of the Bone.

Dr. WHARTON, Vice-President of the Society, showed the hand of a young man which had sustained a complicated injury from being caught in a machine. The lesion consisted in the Dislocation forwards of all the first phalanges at their articulations with the metacarpal bones.

Mr. CROLY presented a Calculus which he had extracted from the bladder of a young child. The stone, though not large, was removed with difficulty, owing to the existence of some anatomical peculiarities in the walls of the bladder.

Mr. MORGAN made a communication in which he advanced arguments which went to prove the unity of the Syphilitic Poison, as opposed to the generally received theory of its *duality*. In his experience of cases at the Westmorland Lock Hospital, Dublin, such a thing as a *hard* chancre is scarcely known, whereas this form of sore is by no means so rare among the men who are infected by the same class of women as is received into that Hospital. Mr. Morgan also mentioned several individual instances in which he was enabled to trace the communication of the disease, showing itself by the *hard* chancre in the *male*, from that manifesting itself by the *soft* chancre in the *female*. The author's views were also borne out by the result of his investigations as to the effects of the inoculation of syphilitic discharge upon patients previously diseased.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, DEC. 10TH, 1870.

JAMES STANNUS HUGHES, M.D., President, in the Chair.

MR. J. S. CHARTRES, Surgeon 8th Hussars, presented a case of Aneurism of the Thoracic Aorta, in which extensive erosion of the vertebræ had occurred without any accompanying boring pain. The diagnosis of the disease, in the absence of physical signs, depended altogether on the rational symptoms, caused by pressure of the tumour on neighbouring parts. No alteration was noticed in the state of the pupil. On examination after death, an aneurism of the size of an orange, springing from the posterior and right aspects of the aorta, was found in the posterior mediastinum. The aneurismal sac was almost filled with dense fibrinous coagula, and thus the non-existence of pulsation in the tumour was explained.

Dr. SWANZY exhibited some beautiful drawings, for which he was indebted to Dr. C. E. Fitzgerald, and which illustrated a case of Tumefaction of the Optic Disc. The disease was the result of intracranial pressure, and was an instance of what Von Græfe termed "congestion papilla of the optic disc." In the present instance, the autopsy revealed the existence of a large sarcomatous tumour, engaging the anterior and middle lobes of the cerebrum on the left side. The cavernous sinus had been pressed on, and consequent distension of the retinal veins had taken place.

Mr. MAYNE brought forward an interesting specimen of Senile Prostatic Enlargement, in which death had resulted from acute peritonitis. The prostate gland was enormously hypertrophied, and in the posterior wall of the bladder was found an abscess, containing between seven and eight ounces of pus. It communicated with the cavity of the peritoneum through a narrow opening, and so gave rise to inflammation in the serous membrane.

Mr. TYRRELL showed a cast and drawing of an immense Cystic Sarcoma. The tumour had commenced to grow on the lower end of the humerus some time after the patient, a groom, aged 22, had met with an injury of that bone. The growth of the swelling was rapid, and at last engaged no less than three-fourths of the affected bone. The forearm and hand were atrophied, and large veins ramified over the tumour. After removal, extensive clots of blood were discovered in its centre, and the lower extremity of the humerus was flattened out into a fan-like expansion. The radius and ulna were in every respect normal.

Dr. HAYDEN detailed a case of what he regarded as one of Idiopathic Cellulitis. The patient, aged 30, three weeks after her first delivery, was admitted to hospital complaining of general hyperæsthesia, obstinate constipation, and considerable emaciation. No feverish symptoms existed. On attempting to insert the long tube, an impassable obstruction was met with about four inches up the rectum. For a month, little change occurred in the patient's state. Then the abdomen rapidly en-

larged, and finally the umbilicus gave way, and great quantities of pus escaped through the opening thus formed.

Dr. JAMES LITTLE presented the Liver and Stomach of a man aged 32, of very intemperate habits. Loss of appetite and a persistent diarrhoea were the symptoms which ushered in disease in this case. In about two months, the urine became scanty, high coloured, of specific gravity 1030, and a copious precipitate was thrown down on the addition of nitric acid. The precipitate was crystalline and consisted of nitrate of urea. The liver after death weighed ninety-six ounces, and was extremely fatty. The presence in so great excess of urea in the urine bore evidence to the very acute character of the hepatic disintegration.

Mr. H. G. CROLY exhibited a Mulberry Calculus which he had removed from the bladder of a boy aged 5. During the operation, considerable difficulty was experienced in attempting to seize the stone from the existence of two pouches in the walls of the bladder, one just behind the undeveloped prostate gland, and a second above the pubes. From one to the other of these, the stone slipped backwards and forwards, an occurrence which gave rise to some little delay in the operation.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, DECEMBER 7TH, 1870.

J. O. FLETCHER, M.D., President, in the Chair.

Gas-Cautery.—MR. WHITEHEAD showed a new mode of applying Bruce's Blow-pipe Gas-Cautery. He had found the presence of the flame always inconvenient, but showed that, after the platinum disc had once been brought to the required heat, this might be maintained by putting out the flame, and then allowing the gas and air to play gently on the disc.

Glaucoma after Reclination of Cataract, etc.—Dr. SAMELSON showed a case, and related another, likewise recently observed by him, of glaucomatous excavation, with atrophy of the optic papilla, consequent upon reclination or depression of cataract, performed about twelve years since.

Sarcoma of the Eyelid.—Dr. SAMELSON showed a little girl, nearly 2 years old, from whose left lower eyelid, when she was ten months old, he had removed a diffuse tumour, of the nature of which Mr. Hulke, of London, had furnished him with the following account. "The fleshy mass consists of a homogeneous interstitial substance pervaded by fine fibrillæ, and containing imbedded in it numerous small round corpuscles. I should class it with the small round-celled sarcomata, and I think it not unlikely to be the product of a proliferating tarsal cyst—although it is most unusual to find such a thing in so young an infant."

Intermittent Tetanus of the Superior Recti Muscles.—Dr. SAMELSON related the case of a girl, 16 years of age, who was present, and who, until the menstrual function had become regulated, for almost a year had suffered from extreme and daily recurring tonic spasm of the superior recti of both eyes, each time attended with very severe headache. The mother of the patient is said to have died from tubercular phthisis; and some, if not all, of her four sisters and brothers that are dead, to have presented symptoms of tubercular meningitis.

Taliacotian Operation.—Dr. HARDIE showed a girl who had suffered from severe cicatricial contraction of the arm and neck, the result of a burn received two years previously. He had treated the former by extensive division of the tissues, and by then adapting a flap of skin from the side of the chest to the resulting raw surface. The flap united perfectly, and was completely detached from the chest in a month. The neck was treated similarly by sliding a flap from over the deltoid. The deformity had not yet been satisfactorily removed in either situation, and would require further treatment, which Dr. Hardie proposed to effect partly by flap-transplantation, and partly by the method of Reverdin.

Imperforate Anus.—Dr. HARDIE exhibited the dissections of two specimens. In both, the bowel communicated with the vagina, and in one case there was also patent foramen ovale. Both infants had died rather suddenly; and the concurrence of different malformations and the apparent diminished liability of such subjects were remarked upon.

Sinuses of Leg.—Dr. HARDIE brought forward a young woman who had suffered from extensive sinuses of the leg for nine years. Amputation had been proposed, but they were soundly healed by free incision.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 31ST, 1870.

ON MEDICAL EXAMINATIONS AND EXAMINING BOARDS.

VIII.

On the Times at which Examinations should be held.

THE next and last matter in relation to examinations to which we are desirous of drawing attention is the time at which they should be held ; and the importance of this part of the subject will be acknowledged by all who have to do with students during their hospital career.

At present, the distance in time between the commencement of professional study and the first examination at which a student is compelled to present himself, is too great ; or, perhaps, one ought rather to say, the time between entry at a hospital medical school and the first compulsory examination is too great, and the examinations are not frequent enough. It may seem strange that, notwithstanding the present number of examinations, there are to be found those who would still further increase them ; but this conclusion has been arrived at after much consideration and no small experience of the ways of that much-misunderstood man, the modern medical student—misunderstood, because it seems as if there never would come the time when medical students will be reckoned at their proper worth ; namely, just that of other youths of the same education and social position—neither more nor less. It is a mistake, for example, to suppose that their occupation is so different from that of other people that they must necessarily, if they like it at all, become enchanted with it, and fall in love with it at first sight, and devote themselves to it with no other stimulus than the “love of science”. Why should not a youth begin to study “physic” with an honest purpose to get his living thereby, without being supposed to enter from the first with the deepest interest into the mysteries of the art of healing ? The chances are that he will find his studies at first more or less irksome and difficult. The road to knowledge—knowledge, for instance, of the little holes and crannies of a temporal bone or of the exact whereabouts in the skull of the edges of a palate bone, or knowledge of the lines on a fibula—will not be much smoothed by his having had dinned into his ears previously the assertion that anatomy is intensely interesting. A student of medicine wants just the same help or compulsion that everybody else needs when work is hard and perhaps distasteful. With some, with many—just as many or few as in other professions—work is, for various reasons, more pleasant than idleness : it may be from a sense of duty, or from ambition, or from the absence of other tastes, or from necessity ; and such men may safely enough be left to take care of themselves. But a large number of medical students are idle—with infinite individual differences, however, in the degrees of idleness, simply because in the early part of their career there is no particular reason why they should be anything else.

Take the case of the average student when he begins his hospital career, and for the first time in his life is, at least for a few months, “his own master”—that is to say, with no mastery over himself, to speak of, at all. He has lately parted from his friends, we may suppose, with their good wishes, and plenty of pocket-money ; and, with vigorous health and no troubles, he regards cheerfully the prospect before him. An interminable time, as he is inclined to think—at least eighteen months or two years—must elapse before his first compulsory examination ; not a great time, it may be hinted, in which to become proficient in anatomy, physiology, chemistry, materia medica, and a

few other matters ; but a very long time, nevertheless, to a youth hitherto accustomed to measure out his life by terms of imprisonment at school. However, he may work a little, but it will not probably amount to much : and now comes the question, “Why should he work more, or why should he work at all ?” There must always be a reason or motive, good or bad, for everything that one does ; and in this particular instance there is positively none whatsoever. Suppose a man devoid of ambition to distinguish himself by getting prizes, or, what is more common, devoid of the necessary “pluck” ; suppose him to have no particular liking for bones or ligaments, oxygen or hydrogen, endogens or exogens, the action of the heart or the structure of the stomach ; suppose him fond of pleasures (not necessarily bad in themselves) ; suppose every temptation to be idle, and the absence of any motive for work, why are we foolish enough to expect that work will be done ?

To a man of the kind to which reference is here made, the only compulsion exercised is the being obliged to pass certain examinations, and in the disgrace and general disagreeables attendant on being plucked. And if a compulsory examination be so far distant that it seems unnecessary to begin to work for it immediately, there is absolutely no efficient motive for work left. Did ever an idle man work seriously when even the *certain* punishment of idleness was eighteen months ahead ? “Besides”, a student may argue, “there may be no punishment at all. A. and B. passed after three months’ work ; C. passed without working at all—at least he was never seen working ; D. was plucked, certainly, but he was reckoned exceptionally stupid, and, therefore, this need not disquiet one who may not be a Solomon, but is certainly no fool.” Moreover, every man, how idle soever, always *means* to work some time or other, or thinks that he means to do so.

It may be said that, after all, no great harm results, because even if the first twelvemonth of a man’s hospital career be wasted, he can still, by six months’ hard work, make up for lost time—at least he can pass his first examination at the proper period. But in this reckoning there is left out the consideration of the effect on the student himself of twelve months’ idleness, which not only will make hard work an impossibility without gradual training, but may lead to evils less easily remedied. Those who have had opportunities of taking examples from large numbers of students will not need to be reminded of this.

But it may be said, also, that men would be idle, if so inclined, were the examination only six months ahead, instead of eighteen months or two years ; and for some this would be true enough. But it would not hold good for all. A certain number would begin to work at the commencement of their first hospital session, after the same fashion that now they observe at the beginning of their second, and with the advantage, before referred to, of not having been spoiled by twelvemonths’ indolence. And for the very idle and the bad, for those who would be idle in any case, there would be this great advantage, that they would be “found out” at the end of six, instead of eighteen months or two years ; and any treatment brought to bear on them would be very much more likely to be effective for good. And here may be forestalled two objections which will at once arise in the mind of one who has had no particular personal experience of these matters. The first is, that the argument used will hold good only for such unlucky youths as are left entirely to their own devices, and have no supervision exercised over them ; and the second is, that the argument involves the assumption that teachers neglect their duty to parents and guardians in not keeping them advised of what is going on ; for, of course, they must be conscious of the fact that lectures and classes, and work generally, are neglected, or, at least, they ought to know if they do not.

The two objections may be answered together, because it may be readily admitted that supervision should be exercised over students (as well as over everybody else, in some form or other) ; and that if this be not done, so far as possible, a grave fault lies at the doors of those to whose care students are entrusted. It may also be admitted that well-timed advice, encouragement, or warning, may do much good. But, supposing every care and every kind of supervision, something else is still needed ; for we are not concerned here with only the small

minority of thoroughly idle and bad men of a school. We have to do quite as much with men who are "good fellows" in every respect but one, and that is in their invincible repugnance to steady or hard work.

Suppose advice to be given to a man beginning to be idle; and at this stage some little time will have been already wasted. The advice, very likely, is well taken, makes an impression, and for a day or a week, possibly a fortnight, in different cases, is followed; or, at least, the advised believes he is following it. Then there is a relapse; more time is wasted, and at last comes more advice, with a warning. The same thing is repeated. Almost without knowing it, the man is more careful in showing his indolence, and perhaps deceives himself as much as his teachers about the amount of work he is really doing. Perhaps he does improve—considerably in some cases, tolerably in others; say he does a half, a quarter, or twentieth of what he ought to do, in different cases. But, even so, the matter is not satisfactory; and yet, what can be done when a student tells his teacher he has done his best, and really believes it?

But a volume might be written about all these things. It will be well, perhaps, to conclude this paper, already too long, by stating in what way some of the evils referred to may be corrected. And we venture to think that the remedy lies in some such direction as the following.

1. A *compulsory* examination at the end of each session, summer and winter.

2. Such examination to be *really compulsory*, inasmuch as a refusal to attend it should be equivalent to a rejection.

3. The penalty of rejection to be that the rejected should not present himself again for, say three months; and that his "time" should not continue to be reckoned until he had passed the examination. The punishment would, by these means, amount to a loss of three months for a single rejection; and a present great evil would be avoided, namely, that of deferring examinations from one session to another, so that winter work is mixed with summer work, ward work (not *attendance* merely—which cannot be began too early) with dissecting-room work, and so forth; everything more or less muddled, and nothing done well. The rule that hospital periods of time should not count until corresponding examinations have been passed in their due order, involves a principle that might be extended in its operation with much advantage.

To recapitulate the benefits of some such plan as the above:—1. A *really compulsory* examination, six months after their entrance upon hospital work, would oblige all but the very idle men of a school to work almost, or quite, from the beginning. He is a rarity who would not dread being plucked at the end of his first session.

2. A student who did not pass, or who did not present himself for examination at the end of the first session, would practically show (in all but exceptional instances) that he was idle or incapable; and in either case, the knowledge he thus gave to his friends, and it may be to himself, would be of incalculably greater service to them and to him after six, than after eighteen months' trial; eighteen months, because, from various circumstances, the examinations at the College of Surgeons have become those by which the great majority of men's time is first regulated; and it is only for a small number comparatively, that any examination is due before the lapse of this period.

3. The penalty attached to "rejection" would be of such a kind as to oblige the friends of the rejected to do something more than passively allow a troublesome youth to choose his own times for examination. For, notwithstanding the fact that for most students their first examination is due either eighteen months or two years after their entrance at a hospital medical school, they can always defer their examination to avoid a pluck, for three, six, or more months, without of necessity appearing to have lost time ultimately.

So, when the idle man reckons that, first, no questions will be asked of him about his examinations for at least eighteen months or two years; secondly, that there will probably be no great disturbance on the subject for another three or six months, especially if he "does his

best" and is plucked with a good grace; and, thirdly, that even if his first examination be deferred for six months or so, there will be still a year or two left for his final examination; after being able thus to reckon up the account, it cannot be said that he has no encouragement to follow his own devices.

THE POOR-LAW MEDICAL SERVICE OF IRELAND.

EVERY man who has watched the progress of legislation in relation to the Irish Poor-law Medical Service, knows how conspicuous, energetic, and successful, have been the services of Dr. D. T. Maunsell of Dublin. His admirable papers have summed up, clearly and forcibly, the history of this department, the services of its officers, and their claims. These writings have been the basis of the public speeches which have insured a parliamentary success for the Superannuation Bill; and by his skill, energy, and public spirit, he has contributed largely and in many places to the improvement of the position and remuneration of the medical officers of unions. Nor has the effect of his labours been confined to Ireland, for their value was largely felt in the efforts which resulted in the passage of a Superannuation Bill for the Poor-law Medical Service of England. The testimonial presented to him this week is the natural expression of the thanks of his fellows; and it will be certainly valued by him especially as a symbol of the feelings which inspired it. It has had the effect of encouraging him to fresh and more completely organised efforts to enable the Irish Poor-law medical officers to exert their full influence and take their proper place in the profession and in the State, of the nature of which our readers are already partly acquainted, and to which we shall frequently have occasion to refer. It is with us equally a duty and a pleasure to second these efforts in the most effectual manner.

IN order to find space for matter of scientific importance, and to utilise our space to the utmost, we shall spare our readers of this number the formal review of the occurrences of the past year, which no doubt dwell sufficiently in their memory. We shall be enabled to make sufficient reference to them in the first number of the new year, in which we shall also take the opportunity of announcing the general programme for the year, and of referring to some arrangements which we are in course of completing, and which will, we anticipate, have the effect of yet further aiding the extension and usefulness of the Association.

THE annual meeting of the Harveian Society, for the election of officers, will be held on Thursday, January 5th, at 8 P.M.

ON Tuesday, Dr. Johnston, Physician to the Queen's Hospital, was elected Physician to the Children's Hospital, Birmingham, to fill the vacancy caused by the lamented death of Dr. Earle.

SOME of the leading inhabitants of Sutton have presented to Dr. Waring-Curran a very handsome testimonial, on the occasion of his leaving that place for Mansfield Woodhouse.

AT Leicester, Dr. Barclay entreats or challenges those interested in the fever-hospital project, who differ with him as to site, to adopt the suggestion we recently made, of referring the question to some special authority named by Mr. Simon. Nine hundred pounds have been subscribed towards a hospital.

SMALL-POX IN LONDON.

THE applications for admission to the Asylum Districts' Temporary Hospital have been as numerous as ever; but as patients can only be received there as vacancies occur, the admissions afford no index to the prevalence of the disease in London. It seems still to infest chiefly those ill-vaccinated districts in which it has from the first been prevalent. Additional wards will be open early next week in the new building.

THE GENEVA CONVENTION.

It is remarkable how freely the Geneva Convention is discussed by hosts of writers who are evidently ignorant of its capital stipulations. The red cross by no means confers the privileges of neutrality without enforcing corresponding duties. The French are far more deeply to blame for leaving masses of their wounded behind without surgeons or ambulance material, than the Germans for being unable, in an enemy's country, to make adequate provision for them. The Geneva Convention neutralises the surgeons and ambulance stores, as well as the wounded; and the neglect of the French to leave these with the wounded, whom they throw in masses upon the hands of the victorious Germans, seems to have escaped attention; while the invaders are blamed for not providing what it is really beyond their means to provide in an enemy's country.

SMALL-POX AT SOUTHPORT.

THE guardians of Ormskirk have, we find, been scandalously neglecting vaccination, with the usual result. A case of small-pox being imported from Liverpool, the disease spread like wildfire. Up to the middle of this month, there had been thirty cases, of which seven had already terminated fatally. These cases had occurred in the neighbouring village of Crossens; and a local paper expresses a hope that visitors will not be deterred from coming to the beautiful town of Southport. We do not concur in this wish. For the present, at least, visitors ought not to be invited to place themselves in the immediate proximity of an epidemic of small-pox; and, if the townspeople suffer somewhat in purse for the gross and illegal neglect of the guardians in administering the vaccination and other sanitary laws, it will be the more clear that, even from the lowest point of view, such a policy is pound foolish, if it be penny wise. This is a rough but wholesome method of creating a sound public feeling, where other appeals to reason and duty have obviously failed.

PATHOLOGICAL SOCIETY.

THE annual general meeting for the election of officers and Council will be held at the Society's rooms, on Tuesday, January 3rd, 1871, at eight o'clock. The following is the list proposed. *President*: J. Hilton, Esq., F.R.S. *Vice-Presidents*: E. Crisp, M.D.; Herbert Davies, M.D.; R. Quain, M.D.; S. Wilks, M.D.; J. Cooper Forster, Esq.; J. Gay, Esq.; T. Holmes, Esq.; J. Simon, Esq., D.C.L., F.R.S. *Treasurer*: C. Murchison, M.D., F.R.S. *Honorary Secretaries*: W. H. Dickinson, M.D.; J. W. Hulke, Esq., F.R.S. *Council*: F. E. Anstie, M.D.; H. Charlton Bastian, M.D., F.R.S.; W. H. Broadbent, M.D.; W. Cayley, M.D.; W. Cholmeley, M.D.; W. S. Church, M.D.; C. Hilton Fagge, M.D.; T. H. Green, M.D.; W. Marcet, M.D., F.R.S.; R. Martin, M.D.; F. Robinson, M.D.; T. J. Ashton, Esq.; J. Couper, Esq.; J. Croft, Esq.; A. E. Durham, Esq.; G. Lawson, Esq.; C. F. Maunder, Esq.; T. P. Pick, Esq.; W. Potts, Esq.; W. Squire, Esq.

MEDICAL SCIENCE IN PARIS DURING THE SIEGE.

DR. J. A. FORT, writing from Paris on November 24th to Professor Pacini of Florence, says that the Surgical Society attempted to resume its weekly meetings on November 7th. Seven members only were present. M. Boinet spoke of some cases of tetanus which he had observed among the wounded in the Palace de l'Industrie; he attributed the disease to cold—the wards being badly warmed. M. Giraldès had also seen some cases of tetanus in the Val-de-Grâce Hospital. Both these surgeons spoke in praise of chloral, the use of which had been followed by recovery in two-thirds of the cases. The amount given varied from eight to ten *grammes* in twenty-four hours; it was dissolved in simple syrup, and given in doses of a spoonful. The Academies of Medicine and of Science were also meeting, and were occupied in discussing the existing state of affairs. The Session of the School of Medicine had commenced, and the professors had begun their lectures. Dr. Fort had commenced giving a course of surgical anatomy.

A HINT TO SCHOOLMASTERS.

Now that all the schools have broken up for the Christmas holidays, and that juvenile parties and entertainments prevail as well as that scourge scarlet fever, Mr. T. L. Read suggests to us that it would be well for all heads of schools to adopt the following regulation, and in some degree thereby prevent the possible outbreak not only of this dreaded epidemic, but of other minor ones in their schools. Let every child returning to school take a certificate of state of health from the family medical attendant. Should the said certificate indicate that either the child or any member of the family had been suffering from any contagious disease, then the child should be subjected to a certain term of quarantine before being admitted into the school. This course would in all probability check the repeated outbursts of epidemics which medical men are constantly observing in schools and large families. Unless some such precaution be taken, people will feel justifiable nervousness in sending their children back to a gathering of little people brought from all quarters, and bringing with them unknown sources of risk.

CHRISTMAS IN HOSPITAL.

It will interest the public to hear of the Christmas doings in some of our large London hospitals, showing that even in hospital Christmas can be remembered, and efforts made to render it cheerful and pleasant to the sick and suffering.

At King's College Hospital, the decorations of the wards are this year particularly pretty and varied. They are the handiwork of the resident medical officers, the sisters, and nurses of the hospital. The arches of the large doors opening into the wards are surmounted by crimson cloth, with white letters in wool, which have quite a snowy appearance. The doorways into the double wards are covered with wreaths of evergreens; and devices of all kinds in holly and ivy, enlivened by the *immortelle*, brighten the walls of the wards. The decorations were all finally completed late on Christmas-eve; the eleven wards being all decorated in various styles, according to the various tastes of those at work. The children's ward was, as usual, especially successful. Christmas morning appeared, and with it the patients opened their eyes upon the cheerful and pleasant sight. A plentiful dinner of roast beef and plum pudding was provided for them by the hospital authorities, and a tea with cakes and fruit in the evening by the Sisters of St. John, both of which gave great satisfaction—all who were able sitting at the table in the centre of the ward, which, laden with flowers, fruit, and cakes, made them feel that, even in a hospital, Christmas was a cheerful season. The resident medical officers gave pipes and tobacco to the men, and liberty to smoke in the evening. Later in the evening, the sisters and nurses of St. John's House working in the hospital went round the wards, singing Christmas carols in each. The sound of the voices as they wound round the grand staircase to the different wards was very effective; and the singing seemed to give the patients particular pleasure, many of them joining in the carols with great zeal. As all was managed with as much discretion as goodwill, everybody seemed the better next day, and no one any the worse.

Christmas Day, coming on Sunday, was kept at Guy's Hospital on Monday, the 26th. The fare, as usual, was roast beef and plum-pudding—large joints of beef to each ward, some weighing forty-one pounds; and puddings in proportion. Auxiliaries, such as cheese, celery, and an ample dessert, are generously supplied by the students, who kindly make a collection amongst themselves for the annual treat. This year, it amounted to nearly £17. Some of the physicians and surgeons also make presents to their wards. The wards are tastefully decorated with flowers, evergreens, and mottoes. A large party of ladies and gentlemen, headed by the Treasurer, went through the wards at the dinner-hour, ostensibly to look at the pudding, etc., but in reality to speak a few kind and cheering words. After dinner, the men were allowed to smoke, which was highly appreciated; songs were sung, and tales told. The women sang, and otherwise amused themselves. Christmas-trees are

in most of the wards; dolls and toys for all the children and many of the women patients. The usual number of children under twelve years old in the hospital is fifty. Several ladies kindly gave their help in decorating the chapel, which fully rewards their trouble.

At St. Thomas's Hospital, on Christmas Day, in accordance with the good old English custom, the patients were liberally regaled with roast beef and plum-pudding, followed by dessert. Many tuneful and appropriate hymns were very nicely sung during the evening; and the chapel and wards, being tastefully decorated with flowers and evergreens, gave to the whole a bright and homelike appearance. A generous Governor has kindly sent to the Matron dolls and other toys for the children; and the Chaplain and some of the medical staff have also assisted with contributions for the purchase of other small presents, to be distributed on New Year's Day.

At St. George's Hospital, besides other preparations on the evenings of Monday and Tuesday, the 26th and 27th, the patients had a lecture on "the Overland Route" to India (illustrated with dissolving views), given by the Chaplain.

At Westminster Hospital, the chapel is prettily and tastefully decorated; the wards, also, are bright with abundance of evergreens, kindly supplied from the gardens of members of the Royal family and others interested in the institution. In addition to a very handsome gift of game from His Royal Highness the Prince of Wales, poultry, pudding, mince pies, cakes, tea, sugar, etc., were sent in and distributed with discretion among the patients. The Dean of Westminster and Lady Augusta Stanley, in accordance with their annual custom, visited the chapel and all the wards on Christmas evening, bringing toys for the children, and speaking words of sympathy and kindness to the suffering people. Some illustrated papers were also received from a lady visitor for the patients. Just before Christmas, a lecture on the Eclipse was delivered before the convalescent patients in the Lecture Theatre, by the Chaplain, the Rev. M. Davis, at which the Dean of Westminster, Lady Augusta Stanley, and other visitors and officers of the institution were present; and an entertainment by a conjurer is promised.

At St. Mary's Hospital, a Christmas entertainment for the patients consisting of music and reading, in which friends and officers of the Hospital took part, was held in the Board Room, on Wednesday evening. The programme, which is before us, is of the most approved fashion, and includes some excellent music.

At the Middlesex Hospital, the wards have been decorated with numerous and very handsome illuminated texts and banners. Evergreens, more or less profuse according to the taste of the sister of the ward, also adorn the walls. On Christmas Day, the patients were treated to a hearty tea, an abundant supply of cake forming an important feature in the repast. A Christmas-tree was given for the amusement of the children on the female side of the house; and a similar treat is in store for the boys. The nurses and sisters are to be entertained at supper in a few days, and the Christmas season will probably be brought to a close by a musical or similar entertainment.

At Charing Cross Hospital, the patients had for dinner pheasants and plum-pudding, etc.—the pheasants kindly presented by His Royal Highness the Prince of Wales. There will be a Christmas-tree entertainment for the children on the 2nd or 3rd of January.

At University College Hospital, the Christmas entertainments have not yet taken place. The Christmas-tree for the patients generally will be held on the evening of the 3rd proximo, and a small tree for the children on the 7th. A ball in aid of the funds is to take place in January.

At the Consumption Hospital, Brompton, the Committee have, with kindly wisdom, for some years had in operation various devices and entertainments for employing and amusing the patients, which is especially necessary there. Brompton Hospital has a Christmas-tree, fifteen feet high, in addition to the rest of its Christmas provision of music, seasonable fare, game, graciously presented by the Queen, and decoration. Most of the Christmas gifts are provided by the patients, who are hap-

pily at work for weeks before; but friends came also spontaneously in aid, with pretty, useful, and welcome gifts.

When first we noticed and applauded these efforts at a few hospitals to keep Christmas in a merry and wise fashion, we hardly expected that the results of our advocacy would be so quickly and widely satisfactory.

OBSTETRICAL SOCIETY OF LONDON.

THE election of officers for 1871 will take place on Wednesday, January 4th, at 8 P.M. The following is the balloting-list recommended by the Council. *Honorary President:* Sir C. Locock, Bart, M.D. *President:* J. Braxton Hicks, M.D., F.R.S. *Vice-Presidents:* H. Gervis, M.D.; C. Holman, M.D.; J. C. Langmore, M.B.; G. C. P. Murray, M.D.; D. Lloyd Roberts, M.D.; J. Scott, F.R.C.S. *Treasurer:* E. J. Tilt, M.D. *Honorary Secretaries:* W. S. Playfair, M.D.; J. J. Phillips, M.D. *Honorary Librarian:* A. Wiltshire, M.D. *Honorary Members of Council:* W. Tyler Smith, M.D.; H. Oldham, M.D.; R. Barnes, M.D.; J. Hall Davis, M.D.; Graily Hewitt, M.D. *Other Members of Council:* J. Brunton, M.D.; E. Copeman, M.D.; J. B. Curgenvin, M.R.C.S.; G. Gaskoin, M.R.C.S.; S. Day-Goss, M.D.; T. Taylor Griffith, F.R.C.S.; E. Head, M.B.; J. Hutchinson, F.R.C.S.; W. E. Image, F.R.C.S.; D. Mackinder, M.D.; A. A. F. Rasch, M.D.; W. R. Rogers, M.D.; H. Savage, M.D.; W. J. Smith, M.D.; L. W. Sedgwick, M.D.; C. Taylor, M.D.; H. W. Sharpin, F.R.C.S.; A. Wynn Williams, M.D.

MEDICAL FEES.

A CORRESPONDENT in Sunderland, writing to us concerning the tariff of fees of the Shropshire Ethical Branch, which we recently printed at length, says:

"Good as it is, it appears to want more explanation. For instance, it is stated that 'the income is the true principle on which to found a tariff'; yet income is almost lost sight of, and patients are divided into three classes, according to house rental. I think it would have been much better to divide patients into classes according to their incomes; and, when the income cannot be estimated, to charge according to house rental. If the tariff had stated that the three classes and their house-rent represented certain amounts of income, the tariff could more easily be applied. For example, a patient of mine lives in a house of £30 rent, and I know his income is at least £1,200 a year from land. Cases like this are common, and in such the tariff is of no use. Then, again, take the fees for an ordinary visit"—Class 1, 2s. 6d. to 5s.; 2, 3s. 6d. to 7s.; 3, 5s. to 10s. 6d. I cannot understand why Class 2 should begin lower than Class 1 ends. I have never charged for medicines, except when patients have got them between visits; and here I would direct your attention to explanatory note No. 15 in the tariff. Does it mean that as much is to be charged, say, for an eight-ounce mixture as for advice at practitioner's house? If so, that is the same as for an ordinary visit (medicine included, I suppose), which is absurd. Should any fee be charged for administering chloroform in midwifery?"

The tariff seems to us to invite further discussion than it has yet received. It has been framed with great care and trouble by Dr. Styrap and the Council of the Shropshire Ethical Branch; and the advisability of a general base of remuneration, and something like an authoritative moveable and voluntary standard of reference, is, we believe, generally admitted, and by some practitioners keenly felt.

THE COMPARATIVE ENERGY OF DISINFECTANTS.

WE published last week a note on a series of experiments by Dr. Crace Calvert on this subject. Mr. Bollman Condry writes:—

Among the bodies enumerated was permanganate of potash (Condry's fluid). This circumstance has constrained me to venture to direct your attention to the fact, that that substance is not an antiseptic at all; nor, so far as I am aware, had it been patronised as such by those having an interest in saying most in its favour; at any rate, I can vouch for this being so in my own case. I have always been careful to point out that Condry's fluid is not an antiseptic or preserving agent, but a disinfectant, in the same sense wherein fresh air is one. You will, I think, agree with me that the latter agent; namely, air, which is the one whereby ventilation operates as a disinfectant, is no antiseptic. One of the great aims in the preservation of food, for instance, is the exclusion of air. It would therefore seem to me that to class the perman-

ganates with antiseptics, and to experiment with them as such, is much the same thing as to class in that category pure air and experiment with it in the apparent expectation that it might prove capable of preserving from decomposition organic bodies. I cannot see that any good would arise from proving that free air has no antiseptic value; but, on the contrary, believe that only misapprehension as to the value of that essential to health would thereby be engendered in the public mind, which is not yet sufficiently instructed to distinguish between antiseptics and disinfectants. In the same way, experiments undertaken to prove that permanganates are destitute of antiseptic properties, which every one qualified to experiment already knows, instead of being of any service to sanitary science, must, on the contrary, when published, be detrimental thereto, by erroneously leading popular opinion to conclude that they are therefore inefficient disinfectants, which is exactly the contrary of the truth. The disinfecting virtues of those agents depend precisely on the same principle as that whereon the efficacy for disinfection of ventilation hangs; namely, the essential element oxygen, which plays the main part in all true sanitation.

RATING OF HOSPITALS.

IF all hospital authorities showed as much vigour as Dr. John Charles Hall in disputing the rating of their buildings, they might be as successful as he has been at Sheffield in getting the hospital there struck off the rating-list. In the course of an appeal, he appeared personally, and contended vigorously that, having no beneficial occupation, the trustees and weekly board were not liable. The institution had been rated at £152; but his contention was admitted, and the hospital, which has never paid rates, once more escaped.

SMALL-POX IN LONDON.

THE Registrar-General's Returns show that, during the first five weeks of the current quarter, the weekly average of deaths from small-pox was 20; in the succeeding six weeks, the deaths averaged 49 per week; last week, the actual return was 82, being equivalent to an annual rate of 13 deaths to every 10,000 persons living. It is long since so high a small-pox mortality has been recorded in London. Of the 82 fatal cases, 20 were registered in the North Districts, 13 of which occurred in the Small-pox Hospitals at Islington and Hampstead; in the sub-district of St. John, Westminster, there were 5 deaths; 38 were registered in the East Districts, exclusive of 4 belonging to those districts registered in the Hampstead Small-pox Hospital. The district of Shoreditch alone returned 18 fatal cases, Whitechapel 6, Mile End Old Town 5, Bethnal Green 4, St. George-in-the-East 3; and Poplar, which has hitherto been almost entirely exempt from the disease, owing, it is said, to a careful administration of the law, returned last week two fatal cases. The registrar of the Mile End Old Town eastern sub-district, which has suffered very severely from small-pox, remarks, in reference to the death of a child (ten months old) who had not been vaccinated, that "the father now regrets the neglect".

DISEASE AT LEEDS.

WHILE the death-rate of the whole country averages 24 per 1,000, that of Leeds for 1870 is 28. Next year, the Social Science Association meets at Leeds. Meantime, Mr. Radcliffe has been conducting an inquiry into the causes of this excessive mortality, for the Privy Council. It is naturally felt that this is far from complimentary to the public spirit and good sense of the rulers of the town. At a meeting last week of the Sanitary Association, a very good report was read by Mr. Ikin, in which it was pointed out that, in the Corporation councils, the interests of the owners of the poorest kind of property had been allowed to counteract the representations of the health-officer. The fever-nests are well known; and Mr. Radcliffe, who had visited them years ago, went straight to them now, and found them but little changed. In one respect, the authorities have done well; they have carried out the vaccination law, and Leeds is almost wholly free from small-pox. In others, they have done ill, partly from ignorance, partly from selfishness, and partly from the inherent difficulties of their task. The high death-rate and the mass of costly sickness and mortality avenge their fault. Unhappily, it is not they who suffer most, or such a state of

things would long since have been remedied. Motives of humanity, economy, and pride should urge them to give fuller play to the energies of their health-officer, and to restore to the population its just proportion of health and vigour.

SCOTLAND.

REFERRING to the iniquitous political pressure brought to bear by the Duke of Buccleuch to oust Dr. Macaulay of Canonbie from his public medical appointments, the *New York Tribune* says that petty despotism such as this is enough to drive free men to insanity or rebellion.

HOSPITAL FOR FRASERBURGH.

It is proposed to erect a hospital for Fraserburgh and the surrounding districts, and a committee has been formed to carry out the scheme. The origin of the movement was chiefly due to the inadequate accommodation at farm-houses for sick servants, and the overcrowded condition of the town during the herring fishing season.

IRELAND.

A TESTIMONIAL was on Saturday last presented to Dr. Maunsell of Dublin by the members of the Poor-law medical Service. We shall defer till next week our report of the proceedings, which were of great professional interest.

CHAIR OF NATURAL HISTORY, BELFAST.

MR. E. RAY LANKESTER is a candidate for the Chair of Natural History at Belfast. It is seldom that any naturalist has had the like advantages of early love for, and early and complete training in, all the natural sciences and lettered handmaids of science. Born and bred a naturalist, Mr. Lankester has had the advantages of a singularly complete university education, and has displayed a love and capacity for research and a variety of power which promise a very brilliant career.

SMALL-POX IN IRELAND.

AN important and seasonably instructive official inquiry into the extent and causes of a recent outbreak of small-pox in Belfast has just been concluded. So remarkable a success has attended the careful administration of vaccination-laws in Ireland that it has been described as being altogether stamped out. The recent outbreak at once demonstrates the efficacy of complete vaccination, and the danger of relaxing the administration of the laws. Small-pox has, we learn from the official documents, been repeatedly imported from England and Scotland into Ireland; but it has either not spread or quickly died out in the well-vaccinated districts. In Belfast, vaccination is very defective, and the sanitary state of the town otherwise dangerous. The result of this is shown in an outbreak following upon recent importations; and from this special inquiry it appears that seventy-seven cases have been recorded since March 1870, resulting in nine deaths. The lesson both of immunity and of the tenure on which it is held is complete; and we trust that neither the Guardians of Belfast nor those of our English towns will continue criminally to neglect the administration of the vaccination laws.

ASSOCIATION INTELLIGENCE.

CAMBRIDGE AND HUNTINGDON BRANCH.

A MEETING of the above Branch will be held at Huntingdon in the month of April next, at which Michael Foster, Esq., has been requested to preside. This is to meet the wishes of those members who cannot conveniently attend the combined meeting with the East Anglian Branch, to be held at Norwich in the summer.

Dr. P. W. Latham has retired from the office of Honorary Secretary, the duties of which are now undertaken by Dr. Bradbury, Cambridge.

CORRESPONDENCE.

THE ASSOCIATION AND THE COUNCIL.

SIR,—Although I had no intention of continuing the discussion respecting medical reform, there are two or three statements in the last reply of Dr. Waters, which, with your permission, I will notice, once for all, as briefly as possible.

1. I feel bound to correct Dr. Waters's most erroneous account of the reception of the late Medical Bill by the Council. He says: "The consternation of the Council on its examination was overwhelming; a majority unhesitatingly decided that it could not be accepted, etc." And you, sir, naturally relying on Dr. Waters—as he possibly may have relied on some one else—have accepted this audacious *canard* as a "fact" (BRITISH MEDICAL JOURNAL, p. 658.) Now, I have unquestionable authority for stating that it is "the very reverse of a fact". There was no consternation at all, nor any feeling exhibited in the smallest degree justifying such a report. The impression was that the measure was, on the whole, a good one, deserving the support of the Medical Council, the profession, and the public. The opinion of the Council may be seen plainly expressed in their "minutes" of May 4th, 1870. By a majority of fifteen to three, they declared "their general approval of the Bill, and their earnest hope that it may become law during the present session"; and they unanimously resolved—"That the best thanks of this Council be respectfully offered to Lord De Grey for the great kindness and courtesy with which he has attended to all the representations of the Council, and for the great trouble he has taken in preparing the Amending Medical Bill." This story about "overwhelming consternation" is another of those reckless mis-statements which, being repeated and being addressed to members of the profession who are too busy to inquire for themselves, have so grossly prejudiced them against the Medical Council. The whole of the last paragraph of Dr. Waters's letter is incorrect. It misrepresents the proceedings by which the medical measure of last session was brought before Parliament. It is of a piece with a statement reported by Dr. Waters at Newcastle; viz., that the expense of a select committee of inquiry, offered by Mr. Forster for the session of 1871, would have fallen upon the Association. This has been publicly contradicted, on authority, by Dr. Lyon Playfair, who recently informed the St. Andrew's graduates that the expense of the inquiry would have been borne by the Treasury (BRITISH MEDICAL JOURNAL, p. 633). Dr. Waters, as I showed in my last, carefully avoids any admission of the fact that the Council has really effected a vast improvement in all matters confided to it; and that where the improvements have fallen short of what we all desire, the fault has not been in the Medical Council, but in the imperfect powers conferred by the Act of 1858.

2. Dr. Waters asserts that I maintain that the results of certain meetings "are not conclusive evidence of the will of the Association." I simply deny that I maintain any opinion whatever about the "will of the Association" in this matter. It is enough that I have exposed the fallacy of assuming that the vote of an impulsive majority in any meeting of that Society expresses the deliberate opinion of "the whole profession."

3. A sentence of mine, quoted by Dr. Waters (at the bottom of page 670), is to him "unintelligible", he says, if it does not refer to the British Medical Association.

It is impossible to account for the difficulty which some persons feel in understanding that which to others, not more intelligent, is transparently clear. But I should have thought that no one, reading that passage without a foregone conclusion, could fail to perceive that it applied solely to a possible future Medical Council—a body proposed to be constituted, as far as might be, by direct representation of medical practitioners. Such alone could be my meaning when I suggested that Parliament might hold that "the trades-union proclivities of a *body so formed*" would either unfit it for wielding executive powers, or require the counteracting influence of a large addition of representatives of the public interests. That so clear-headed a man as Dr. Waters did not see the meaning of the sentence, is surprising. That he should attempt to justify his misinterpretation, is still more unaccountable.

In conclusion, as regards the ethics of controversy, I venture to call attention to the duty of ascertaining fairly the literal and obvious meaning of what may have been said by one's "learned brother on the other side," and then of shunning scrupulously the temptation to strengthen one's own position, and to damage his, by any perversion of the terms of his proposition or argument.

I am, etc., H. W. RUMSEY.

December 20th, 1870.

SIR,—I desire, once for all, to declare, though I disapprove of the constitution of the General Medical Council, and hold that no new Medical Act should pass which does not remodel it, that I have never spoken nor written against it. In June 1868, when the members of the Direct Representation Committee waited on the General Medical Council, the *Medical Times and Gazette* remarked that the speeches of the deputation were, if anything, too laudatory. The report of the same Committee at Newcastle was referred to as a vote of censure on the General Medical Council, although it did not contain one word reflecting on it; in fact, it did not once name it. The British Medical Association and the Direct Representation Committee have carefully avoided aspersing the Council. I would therefore gently remind Dr. Rumsey, as a member of the Council, of the trite French proverb, *Qui s'excuse s'accuse*; and recommend him to cease defending it, as I am quite willing to admit that the labours of the General Medical Council have benefited the profession, though not to the extent the Association could desire.

To make the Council more powerful for good, the Association desires to enlarge the basis of its construction, "so as to make it the representative, not only of the official classes, but of the entire body of the profession, and then give it full power to enforce its decisions."

With reference to Dr. Rumsey's correction of what he is pleased to term my "most erroneous account of the reception of the late Medical Bill by the Council", I must trouble you with the following data.

On July 1st, 1869, in reference to the amendment of the Medical Acts, a letter was read from Mr. Simon to the President of the General Medical Council, which commenced thus:—"Sir,—With reference to the Draft Bill, which you recently brought under the Lord President's notice, as proposed by the General Council of Medical Education and Registration, for amendment of the Medical Act, 1858, his Lordship directs me to inform you that, with every wish to assist the Medical Council in accomplishing its important duties, he does not feel that he could undertake to bring the proposals of the Draft Bill separately before Parliament, as a measure recommended by the Government, unless he regarded them as covering all the ground where amendment of the Medical Act is wanted."

Further on, the letter states:—"There is one point which his Lordship would wish to bring specially under your attention. His Lordship is advised that the Act is seriously defective, as not providing for a satisfactory and uniform minimum standard of admissibility to the Medical Register, and as not enabling the General Council to issue regulations in this respect. The state of the law in the United Kingdom (unlike that which obtains generally in Europe in the same matter) allows a minimum qualification in surgery to be registered without any qualification in medicine, and, similarly, a minimum qualification in medicine to be registered without any qualification in surgery. . . . Cases are not infrequently brought under his Lordship's official notice where persons possessing only such half-qualifications undertake, nevertheless, to act in all departments of professional practice. . . . The Lord-President regards this state of things as open to serious objection, and he doubts whether Government could sanction any amendment of the Medical Act which should leave so great an existing evil undealt with. . . ."

"His Lordship further directs me to suggest that the opinion of members of the Council should be solicited whether, if new legislation is to take place, it would be desirable to change in any respect the constitution of Council which the Act of 1858 established."

So much as throwing light on the omissions of the Draft Bill submitted to the Government by the General Medical Council. The letter makes it clear that such Draft Bill did not forbid, in the interest of the public, the registration of half-qualifications, and did not provide the "one portal" examination, in comparison with which all the other amendments in the withdrawn Act of last session were trivial.

On April 28th, 1870, at a special session of the General Medical Council, summoned to consider the proposed Medical Act of the Government, Mr. Cæsar Hawkins called attention to the important difference between the suggestions of the Council and the Act, in that "a man might thus be registered without belonging to any corporation." To obviate this, Mr. Hargrave seconded him in proposing—"That in Clause III it is desirable that the word 'License' be omitted, and the words 'Certificate of competency' be inserted." Dr. Fleming and Dr. R. Bennett, with the same object, dwelt on the necessity of doing away with the use of the word "Licentiate." Dr. Christison stated that the provisions in the Bill "involved great danger to the corporations." Dr. Alexander Wood said that the clause was not in accordance with the discussions which had taken place in the Council, nor with the resolutions then passed. The Bill disfranchised all the present licensing bodies. . . . The proposal of the Bill might be right, but the licensing bodies should not be called on to perform the "happy despatch" on

themselves without knowing it. Dr. Andrew Wood complained that the Bill had been brought into Parliament without having been previously submitted to them, as it ought to have been; and held that every one should join one of the existing corporations, as well as obtain the new licence, thus enforcing two sets of examinations and two sets of fees. Dr. Allen Thomson referred to the difference between the Bill and the resolutions of the Council, and would like to know by what means the opinion of the Lord-President had been modified. Dr. Risdon Bennett stated that the Government, after receiving the suggestions of the Council, had framed its own Bill. He also thought that it would be very objectionable if those who entered the profession were to be registered merely on the license of the Central Board. Dr. Aquilla Smith stated that the College of Physicians in Ireland were opposed to the Bill on the same point. Dr. Stokes maintained that the examination by the Central Board should follow, and not precede those of the Universities and Corporations. Dr. Macrobin thought all should be required to join some Corporation. Mr. Cooper urged that the Bill would inflict a great injustice on the Apothecaries' Society. Dr. Humphry believed that the Council could not accept the proposal of the Government, that the passing of one general examination should, *ipso facto*, give admission to practise.

These, sir, are a portion of the minutes which induced me to state that the Bill of the Government alarmed the Council. I did not declare that a majority voted that it could not be accepted, but that a majority so decided. I made this statement in consequence of the resolution passed to submit the objections of the Council to the "one portal system" to the Government. Representations in this sense were accordingly made; and on the following day (April 29th) the Council was informed that Lord De Grey would not attempt any amendment of the Medical Acts on any basis different from that which Clause XIII of the Bill represented. A discussion followed, in which Sir D. Corrigan referred in strong terms to the exclusion of the reporters as evidence that the Council was ashamed of giving its reasons for reversing its decision. In consequence, he said, of communications, partly private and partly not so, it was gravely proposed to the Council forthwith to reverse its decision and to conceal its reasons for doing so. No Council was ever placed in a more humiliating position. . . . The Council was called on to give up its independence. Dr. Apjohn regretted that Mr. Hawkins had changed his mind. "If the Bill were carried as it stood, the Corporations would be ruined."

I will not prolong these extracts. I have, I believe, justified by the words of the members of the Council, all I have stated. Five members of the Council were opposed to reversing the decision of the previous day; viz., Dr. Alexander Wood, Dr. Smith, Dr. Apjohn, Sir D. Corrigan, Bart., and Dr. Stokes. I have now given the grounds on which I stated—

1. That the Bill of the Government was not the Bill of the General Medical Council.

2. That the Bill was regarded with alarm by the Council, and was disapproved of by a majority of its members on the first day of the special session of the General Medical Council held for its consideration.

3. That on the following day, in consequence of a communication from the Government to the effect that it would not abandon the main principle of the Bill, the Council reversed its decision and agreed to accept it.

Whether I was right or wrong in my statement at Newcastle, that the expense of the Committee to be applied for by the British Medical Association next session, if the Medical Bill had been allowed to pass, would have been a heavy charge on the Association, I am not, after Dr. Lyon Playfair's disclaimer, prepared absolutely to maintain. I gave the reasons for my belief at Newcastle; and it was within the power of any of those then present to correct me if they had thought me wrong. I have been informed that the expenses of the witnesses in support of direct representation would have fallen on the Association.

"The will of the Association", though ignored by Dr. Rumsey, is everything to me; and I have done nothing in the matter of medical reform except under the firm conviction, which has been in no way altered, that I was acting in accordance with it.

Impulsive individuals one need never go far to seek: they are, alas, too common; but impulsive majorities formed from a select body of medical men, such as the members of the British Medical Association, it would be hard to gather on any subject. Nothing could have been more deliberate than the proceedings at Newcastle; the question of direct representation had been before the profession for years. Dr. Lush, M.P., who gave notice of his intention to delay the second reading of the Medical Act, stated that he had known the profession at Salisbury for thirty years, and had never known them united on any other subject. At Newcastle, direct representation was made the basis

of an amendment on the fourth report of the Direct Representation Committee.

Had the Committee erred in refusing to accept the Medical Bill of last session because it did not embody this provision? Such was the issue raised. The report was read one day, was then ordered to be printed and placed in the hands of the members, and was not discussed for four and twenty hours. Every one having thus had ample time for its consideration—then, and not till then, was the opinion of the Association, as represented at an important annual gathering, courted by Dr. Rumsey and his friends. The decision being adverse to them, we hear of an impulsive majority. Now, supposing the meeting, on the other hand, to have been swayed by the weight, tact, and eloquence of the distinguished members of the General Medical Council—with whom Dr. Rumsey on that occasion acted—and the decision to have turned against the Direct Representation Committee, would Dr. Rumsey then have called his supporters an impulsive majority? would he have permitted me and those with whom I acted to have done so uncontradicted? The question needs no answer.

I have not hitherto touched on the ethics and amenities of controversy, though in this correspondence I have encountered the phrases: "*Suppressio veri*; audacious canard; pledged partisan; foregone conclusion; any demand more irrational than simply for direct representation could hardly have been made; if it should be granted to popular clamour." I have not, however, the less strongly felt that, to apply the term popular clamour to the efforts of medical men seeking to obtain what they regard of essential importance to the public, as well as the profession—to stigmatise as irrational the demand for direct representation, when our President and late President, our President of Council, Sir Dominic Corrigan, Professor Hughes Bennett, Dr. Sibson, Dr. A. P. Stewart, Professor Haughton, Dr. Andrew Wood, and other members of the General Medical Council, with a host of eminent men deem it just and expedient, simply because others, be they many or be they few, do not approve of it—is not argument.

Dr. Rumsey, I regret, still attributes to me misrepresentation in the interpretation of his use of the term "trades' union proclivities." I equally with him refer "solely to a possible future Medical Council—a body proposed to be constituted, as far as might be, by direct representation of medical practitioners." A Council such as this, including direct representatives of the registered members of the profession, is the aim of the Association; and to me it appears that in seeking this great object, the Association is, according to Dr. Rumsey, striving for the formation of a body which will, as I understand him, be marked by trades' union proclivities. Your readers, however, are in possession of Dr. Rumsey's own words, and will doubtless put their own interpretation upon them.

In conclusion, I have to correct an inadvertence on your part in designating me Chairman of the Reform Committee. For three years I acted as Chairman of the Direct Representation Committee, and, as a matter of necessity, became thoroughly acquainted with the views of all my colleagues, and on this account felt no difficulty in replying to Dr. Rumsey when you forwarded me his letters. At Newcastle, the Direct Representation Committee was superseded by the appointment of a Reform Committee with enlarged powers. This Committee, yesterday only, accorded me the high honour of appointing me its Chairman.

I am, etc.,

EDWARD WATERS.

Chester, Dec. 28th, 1870.

MEDICAL NEWS.

STREET ACCIDENTS.

THE following accidents were admitted at St. Thomas's Hospital, caused by vehicles and horses in the streets, in the month ending Saturday, December 17th.

James Morris, injury to head and chest—run over by an omnibus in Newington.

George Stockes, fractured femur—knocked down by a cab in Peckham.

Henry Beale, injury to back—fell from a cart in Old Kent Road.

Frederick Smith, scalp wound and wound of knee—fell off a tramway omnibus in Kennington.

W. James Clarke, scalp wound concussion—thrown out of a cart by collision with another in Newington.

William Wales, fractured fibula—Thrown out of a cart; wheel came off, in Newington.

Henry Watson, fractured humerus and scalp wound; William Burgess, scalp wound—thrown out of a cart by the wheel coming off at a collision; both men being drunk.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 22nd, 1870.

Deane, Robert Edmund, Batley, Yorkshire
Evans, Ernest Richard, Eveline Hospital, S.E.
Hughes, Evan Thomas, Anglesea
Longhurst, Alexander Keene, Farnham, Surrey
Netherclift, William Henry, Whitchurch, Hants
Wykes, Edwin, Birmingham

The following gentlemen also on the same day passed their first professional examination.

De Lisle, Frederick Irving, Guy's Hospital
Elliot, Norman Bruce, Guy's Hospital
Kindon, Joseph, Guy's Hospital
Lithgow, Robert Alexander, Guy's Hospital
Llewellyn, George Joseph, Guy's Hospital
Whittington, Charles Edward, Guy's Hospital
Younger, Edward George, Guy's Hospital
Penkivil, John Hughes, St. Bartholomew's Hospital
Renton, William, Leeds Hospital
Spencer, Francis Henry, King's College
Ward, Walter Alfred, St. Bartholomew's Hospital

As Assistants in compounding and dispensing medicines.

Brown, James, Rugby
Chitty, Frederick, Titchfield, Hants
Hackett, John Henry, Tallington, Stamford
Spong, Douglas Morton, Biggleswade
Wilkes, John Sanders, Leicester
Woolstencroft, Joseph, Northwich, Cheshire

MEDICAL VACANCIES.

The following vacancies are announced:—

ALDERBURY UNION, Wiltshire—Medical Officer and Public Vaccinator for District No. 3: applications, Jan. 5th; election, 6th.
AUCKLAND UNION, Durham—Medical Officer for the Crook District.
BOWDEN CLOSE, BEECHBURN, WOODFIELD, COLD KNOTT, WHITE LEE, PEASIS WEST, WATER HOUSES, and ESH COLLIERIES, co. Durham—Surgeon.
CHARING CROSS HOSPITAL—Assistant-Physician; Assistant-Surgeon: applications, Jan. 10th.
CLONMEL DISTRICT LUNATIC ASYLUM—Assistant Resident Physician: applications, Jan. 25th; election, Feb. 2nd.
COOTEHILL UNION, co. Cavan—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Tullyvin Dispensary District: Jan. 3rd.
COUNTY DOWN INFIRMARY, Downpatrick—Resident Surgeon's Assistant and Registrar: election, Jan. 10th.
DENTAL HOSPITAL OF LONDON—Assistant Dental Surgeon: applications, Jan. 12th.
EAST WARD UNION, Westmoreland—Medical Officer and Public Vaccinator for the Workhouse at Kirkby Stephen: applications, Jan. 14th; election, 16th.
FEVER HOSPITAL AND HOUSE OF RECOVERY, Cork Street, Dublin—Temporary Physician: applications, Jan. 4th.
GLENNAMADDY UNION, co. Galway—Medical Officer for the Workhouse; and Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Glennamaddy Dispensary District: Jan. 6th.
HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Resident Clinical Assistant: applications, 31st; Medical Committee, Jan. 2nd.
KERRY DISTRICT LUNATIC ASYLUM, Killarney—Resident Medical Superintendent: applications, Jan. 4th.
KING'S COLLEGE, London—Demonstrator of Chemistry.
MIDDLESEX HOSPITAL—Medical Registrar and Superintendent of Post Mortem Examinations; Resident Obstetric Assistant: applications, 31st.
MONMOUTH HOSPITAL AND DISPENSARY—Surgeon.
MONMOUTHSHIRE GAOL—Surgeon.
NORTH EASTERN RAILWAY—Surgeon for the Crook District.
PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY—House-Surgeon: applications, Jan. 2nd; duties, Feb. 7th.
QUEEN CHARLOTTE'S LYING-IN HOSPITAL—Medical Officer: Jan. 2nd; election, 9th.
ROYAL HANTS COUNTY HOSPITAL, Winchester—House-Surgeon and Secretary: applications, Jan. 11th.
ROYAL SURREY COUNTY HOSPITAL, Guildford—Medical Officer: Feb. 23rd.
SALOP INFIRMARY, Shrewsbury—Dispenser: applications, 31st.
STAMFORD AND RUTLAND GENERAL INFIRMARY—Apothecary and Secretary: applications, 31st; election, Jan. 10th.
UCKFIELD UNION, Sussex—Medical Officer for the Framfield District.
WEST KENT GENERAL HOSPITAL, Maidstone—Resident House-Surgeon: election, Jan. 3rd; duties, 28th.
WEST WARD UNION, Westmoreland—Medical Officer for the Morland District.

BIRTHS.

LANG.—On December 24th, at The Mount, Southport, the wife of *John Lang, M.D., of a daughter.
STEELE.—At 12, Meridian Place, Clifton, on December 23rd, the wife of *Charles Steele, Esq., F.R.C.S., of a daughter.
THURSFIELD.—At Leamington, on December 25th, the wife of *T. W. Thursfield, M.D., of a son.
WILLIAMSON.—On December 27th, at Clarendon Villa, Mildmay Park, the wife of *James Williamson, M.D., of a daughter.
WORTHINGTON.—On December 25th, at West Worthing, the wife of *G. F. J. Worthington, L.K.Q.C.P., of a daughter.

DEATHS.

OLIVE.—On December 23rd, at Northampton, aged 5 months, Emily Katharine, daughter of *Eustace Henry Olive, Esq., Surgeon.
TOOGOOD, Jonathan, M.D., at Torquay, aged 86, on December 7th.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Gay (President), "On Glanders in the Human Subject": Illustrations of the Disease in the Horse, by Mr. Roalfe Cox (adjourned from Dec. 19th); "Clinical Experiences of the War", by Dr. Thudichum.

TUESDAY.—Pathological Society of London, 8 P.M. General meeting for the Election of Officers. The following specimens will be exhibited:—Dr. Heywood Smith, Diseased Kidney; Dr. Hilton Fagge, Dilatation of Stomach; Mr. Hulke, Rodent Ulcer of Face; Mr. Hulke, Sarcoma of Lower Jaw; Mr. Hulke, Fibroma of Fascia Transversalis Abdominis; Dr. Murchison, Renal Calculus concurring with the passage of Gall-stone by a Biliary Fistula; Dr. Murchison, Gall-stone passed by a Biliary Fistula; Dr. Murchison, Mediastinal Tumour (Lymphadenoma); Dr. Greenhow, Sputa from cases of Bronchitis in Operatives; Dr. Crisp, Ulcer of Stomach; Dr. Crisp, Cancer of Tongue, etc.; Mr. James Adams, Fracture of Head of Radius; Mr. Croft, Popliteal Aneurism.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Dr. C. Kidd, "On Chloral Hydrate and Chloroform in Obstetric Practice"; Dr. W. S. Playfair, "On Irritable Bladder in the latter months of Pregnancy." 9 P.M.: Annual Meeting, Ballot for Officers, and President's Address.

THURSDAY.—Harveian Society of London, 8 P.M. Election of Officers.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

To PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Western Morning News, Dec. 24th; The New York Medical Gazette, Dec. 10th; The New York Medical Record, Dec. 15th; The Boston Medical and Surgical Journal, Dec. 15th; The Madras Mail, Oct. 17th; The Shield, Dec. 24th; The Leicester Advertiser, Dec. 24th; The Mansfield Reporter, Dec. 23rd; The Leeds Mercury, Dec. 24th; The Midland Gazette, Mansfield Times, and North Midland Advertiser, Dec. 24th; The Philadelphia Medical Times; etc.

MR. PITT's (Norwich) wish shall be attended to.

DR. EASTWOOD's (Darlington) paper, which was only recently forwarded to the JOURNAL, shall receive very early insertion.

A NOTICE of vacancy in the office of Ophthalmic Surgeon to the Great Northern Hospital was inserted by mistake in last week's JOURNAL. The post is still occupied by Mr. E. C. Hulme.

ANSWERS to advertisements, addressed K. B.; Locum; L.R.C.P.; A. B. C.; D. C., No. 2; and Epsilon, have now been lying at the office of this JOURNAL for some time; and their safety cannot be guaranteed, if they are not applied for within a month from this date.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. C. Murchison, London; Messrs. A. and K. Johnston, London; The Secretary of the Royal College of Surgeons of Edinburgh; Mr. Edward Wyllie, London; Mr. J. P. Daniel, Beamster; The Secretary of the Westminster Hospital; Mr. J. J. Ellis, Silloth, Carlisle; Mr. R. R. Cave, Newcastle-upon-Tyne; Mr. E. Crossman, Hambrook; Mr. O. J. Long, Portarlington; Mr. Furneaux Jordan, Birmingham; Dr. Balthazar Foster, Birmingham; Dr. Rumsey, Cheltenham; Mr. T. H. Bartleet, Birmingham; Mr. T. G. Fitzgerald, London; Dr. Miller, Eye, Suffolk; The Secretary of the Obstetrical Society; The Matron of St. Mary's Hospital; Dr. Ogle, Derby; Dr. J. D. Thomas, London; Mr. F. H. Gervis, London; Messrs. Letts and Co., London; Dr. Collis, Dublin; Dr. Tessier, Tyne-mouth; Dr. Silvester, London; Mr. Pitt, Norwich; Mr. Hulme, Guildford; Dr. Eastwood, Darlington; Dr. Kidd, Dublin; Dr. Lowe, King's Lynn; The Matron of the Westminster Hospital; Dr. Treutler, Kew; Mr. Olive, Northampton; Dr. Duplex, London; Mr. W. B. Whitmore, London; Mr. T. Magor, London; Dr. Worthington, West Worthing; Mr. C. W. Thorp, Todmorden; A Correspondent, Sheffield; Dr. Phillips, London; etc.

LETTERS, ETC (with enclosures) from:—

Dr. George Johnson, London; Mr. Alfred Haviland, London; Mr. Jonathan Hutchinson, London; Our Liverpool Correspondent; Mr. Marrant Baker, London; The Secretary of the Bath and Bristol Branch; Mr. Jessop, Leeds; Our Dublin Correspondent; Mrs. Butler, London; Dr. Gwynne Harries, Pembroke Dock; Dr. E. Symes Thompson, London; Mr. H. Dobbin, London; The Matron of Guy's Hospital; Dr. C. Handfield Jones, London; Mr. Pridgin Teale, Leeds; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar of the Medical Society of London; Our Dublin Correspondent; Mr. W. Mac Cormac, London; Dr. Mapother, Dublin; Dr. Waters, Chester; Dr. Lang, Southport; Mr. I. Lennox Browne, London; Mr. Gillman, London; Mr. H. Moody, London; Mr. J. Beck, Leamington; Messrs. Smith and Sons, London; Mr. Steele, Bristol; Mrs. Baines, London; Mr. J. B. Curgenvin, London; Dr. M. Douglas, Sunderland; The Secretary of the Pathological Society; Mr. Swain, Devonport; Dr. H. Barnes, Carlisle; Dr. Waters, Chester; Dr. H. Simpson, Manchester; Mr. G. Ward, Coventry; Dr. Williamson, London; Mr. J. White, Nottingham; Dr. Fuller, London; etc.

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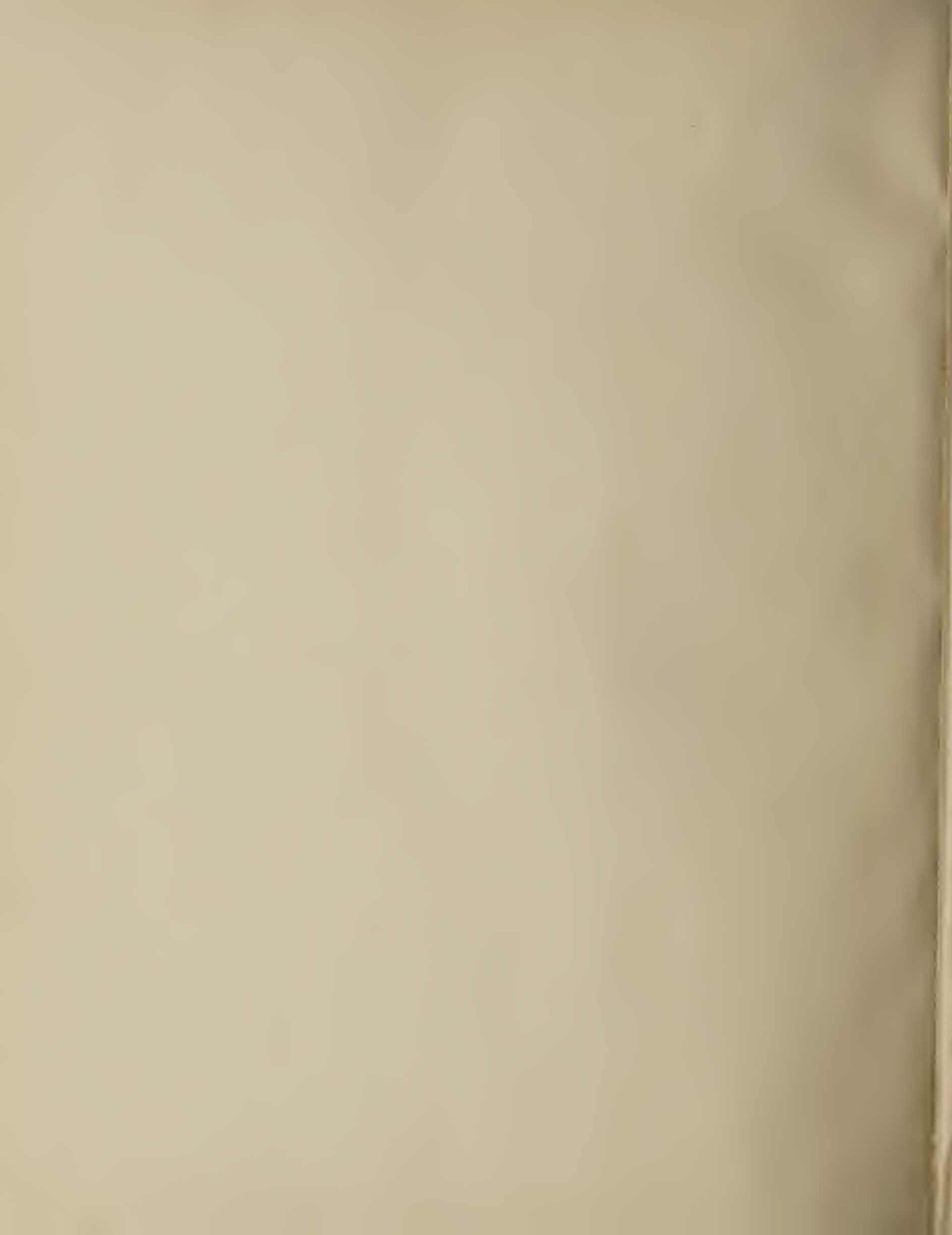
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